ISPsy 2025

Proceedings of the 7th International Seminar on Psychology
Universitas Muhammadiyah Purwokerto

Purwokerto, Central Java, Indonesia
29th May 2025

EDITORS

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Hazalizah Hamzah
Zahro Rohmadani

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Preface

All praise and gratitude are due to Allah SWT, the Most Merciful and Compassionate, whose boundless blessings and guidance have enabled the successful organization of the 7th International Seminar on Psychology held at Universitas Muhammadiyah Purwokerto, with the theme "Religiosity and Human Flourishing: Psychological and Humanistic Approaches to Well Being." This esteemed international seminar provides a crucial forum for an extensive and diverse group of psychologists, scholars, and humanistic thinkers from various parts of the world to convene and engage in meaningful dialogue about the complex interplay between religiosity and human well-being.

The primary aim of this seminar is to deepen the scholarly understanding of the ways in which spiritual and religious factors contribute to human flourishing, explored through psychological theories and humanistic principles. In today's fast-evolving social and cultural environment, investigating these spiritual dimensions is essential, as they often serve as fundamental sources of resilience, purpose, and overall life satisfaction. By combining empirical research with reflective humanistic inquiry, this seminar aspires to advance an integrative framework that not only enriches academic discourse but also provides applicable insights for enhancing the well-being of individuals and communities.

We extend our sincere appreciation to the keynote speakers, presenters, participants, and organizing committee members, as well as the invaluable guidance and oversight provided by the Steering Committee, chaired by Retno Dwiyanti, Ph.D. Their collective dedication, expertise, and collaborative efforts have been instrumental in the success of this seminar, greatly enriching the quality of discussions and knowledge exchange throughout the event.

It is our hope that this seminar will foster the expansion of knowledge in both psychological and humanistic fields and stimulate ongoing international partnerships that encourage innovation and excellence in research and applied practice aimed at promoting global human well-being.

Tesa Nurul Huda

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Fathers Who Stay Involved: The Key to Psychological Well-Being in Emerging Adulthood?

Ulayya Diva Devina[1], Hazhira Qudsyi[2*]

{ulayya.devina@alumni.uii.ac.id[1], hazhira.qudsyi@uii.ac.id[2*]}

Psychology Study Program, Faculty of Psychology, Universitas Islam Indonesia, Yogyakarta, Indonesia[1,2]

Abstract. This study aims to empirically examine the relationship between father's involvement in parenting and the psychological well-being of emerging adults. This study involved 263 respondents who were in the emerging adulthood phase. The data were collected using a purposive sampling technique through a Google Form questionnaire. The measuring instrument for psychological well-being was the Indonesian version of the Psychological Well-Being Scale, which consists of 29 items based on Ryff's theory. Father involvement was measured using the Perceived Father Involvement (PFII) scale, consisting of 36 items based on the theory of Saliha and Jayan. Data were analyzed using the JAMOVI application with Spearman's rho correlation technique. The results of the analysis indicate a positive and significant relationship between father involvement and psychological well-being in emerging adults. Furthermore, father involvement in parenting explains 18% of the variance in psychological well-being.

Keywords: Emerging adulthood, Father involvement, Psychological Well-Being

1 Introduction

Emerging adulthood is a transitional period between late adolescence and early adulthood, focusing on individuals aged 18–25 [1]. During this transition, individuals can no longer be considered adolescents, yet they are also not fully recognized as adults. Ambiguity, identity exploration self-focus, emotional turmoil, and instability are five distinctive characteristics that differentiate emerging adulthood from other developmental stages [2].

These unique characteristics make emerging adulthood a crucial developmental stage because individuals are developing the capacities, skills, and character qualities needed to complete the transition into adulthood [3]. The developmental process to reach adulthood can be formed through the accomplishment of developmental tasks, which include living independently from parents, advancing career or academic goals, building meaningful relationships, making autonomous decisions, and attaining emotional maturity [3]. If an individual fails to accomplish at least one of these developmental tasks, they become more vulnerable to anxiety, social alienation, loneliness, and even a quarter-life crisis [4].

Individual differences in how people address life's problems are related to their level of psychological well-being [4]. Psychological well-being is a psychological concept that reflects

how well an individual functions, marked by self-acceptance, a sense of life purpose, autonomy in decision-making, positive relationships with others, effective life management, and ongoing personal development [5] [6].

In reality, emerging adults still tend to experience low psychological well-being. This is evidenced by research conducted by Kurniasari, Rusmana, and Budiman [7], showing that 64.44% of emerging adults feel anxious when expressing opinions, 53% experience shame, fear, and confusion, 51% are afraid of not meeting parental expectations, 42.2% often daydream or hallucinate, 44.44% feel inferior, and 33.33% are not open to others. Another study by Trihastuti and Anindya on 50 guidance and counseling students at Unika Atma Jaya revealed that 54% of students were categorized as having low psychological well-being, 26% moderate, 18% very low, 2% well-being, and none reported high psychological well-being [8].

This reality reflects that many emerging adults still experience anxiety about the future, confusion about life purpose, poor interpersonal relationships, and low self-acceptance, marked by feelings of inferiority, shame, and self-doubt. This aligns with Ryff's [5] statement that a person's level of psychological well-being can be observed through indicators such as self-acceptance, positive relationships, autonomy in life decisions, a clear life purpose, openness to criticism, and the ability to grow continuously.

A person's psychological well-being is influenced by various complex factors such as life meaning, spirituality, personality, parental involvement, and demographic factors like age, gender, and cultural differences [5] [9]. According to Davis, parental involvement refers to a set of mental activities accompanied by contribution and responsibility [10]. Epstein outlines six types of parental involvement, including activities to improve parental understanding of their children, active communication, volunteering to support the child, helping with home learning, decision-making, and collaboration with the community [11].

A closer look reveals that parental involvement includes both mother and father involvement. However, parenting responsibilities have historically been more heavily placed on mothers [12]. In Indonesia, the belief that fathers are only responsible for earning income while mothers handle all domestic affairs still persists [13]. Yet, research by Palkovitz shows that father involvement actually has a more significant impact on a child's psychological well-being compared to mother involvement [14]. Doherty et al. also note that father involvement, including warmth, supervision, gender role modeling, playtime, and encouraging bravery, is essential for a child's development [15].

Research conducted by Nurjanah, Jalal, and Supena illustrates the negative impact of a father's absence in daily life [16]. These include a lack of attachment between father and child, underdeveloped independence, behavioral control issues, low emotional intelligence, the formation of negative personality traits, difficulty in establishing or maintaining healthy relationships, and low psychological well-being [13].

The researcher acknowledges that studies on psychological well-being and father involvement have been widely conducted to help explain various contemporary issues. These include the studies from Ramadhani [17], Hannani [18], and Prihandini and Boediman [19]. These studies share similarities with this study, namely, they both used the variables of father involvement and psychological well-being. However, Ramadhani's study focused on adolescents [17], Hannani's study on women in emerging adulthood [18], and Prihandini and Boediman's study focused on early adolescence by adding the variable of self-esteem [19]. Unlike these studies, this study focuses on fulfilling psychological well-being from childhood to adolescence through

father involvement in parenting. Therefore, this study provides a novel contribution in explaining how early father involvement can prepare individuals to better face the developmental tasks of emerging adulthood.

Based on the background description above, this research problem is formulated as a study of the relationship between father involvement and psychological well-being in emerging adulthood.

2 Literature Review

Parenting involvement in children is still largely burdened on mothers. This is evidenced by interviews conducted by Asyâ and Ariyanto with several fathers who have elementary school-aged children [12]. The results showed that in their families, childcare responsibilities are still placed on the mother. The fathers cited their work obligations, lack of experience, and limited knowledge—often inherited from their own parents—as reasons for only being minimally involved in childcare. They also expressed the belief that a father's role is limited to being the breadwinner, which reinforces the notion that Indonesia is still in a state of "father emergency," where fathers should in fact play a crucial role in the growth and development of their children throughout life [12]. In fact, Indonesia is often referred to as a 'fatherless country' because the level of father involvement in childcare is still very minimal [20]. The literature also shows that research on father involvement tends to focus on Western cultural contexts and rarely examines this phenomenon in depth in the Indonesian context [21]. This statement further demonstrates that Indonesia is in a state of 'father emergency,' where the continuity of children's development—from childhood to early adulthood, requires more substantive father participation.

Garcia, Sanchez, and Parra state that a father's involvement in parenting can foster emotional support and a sense of security, both of which contribute to an individual's level of psychological well-being [22]. When a father provides attention and support to his child and builds warm, close interactions, it can generate feelings of being accepted, valued, and reliable. This, in turn, improves psychological well-being, particularly in aspects of self-acceptance and social growth [23] [24]. Furthermore, when a father takes an active role in introducing, teaching, and encouraging the child to engage with the outside world, it helps the child recognize that beyond the home environment, there is a broader social environment they will eventually have to face.

A father's responsibility in disciplining the child is also a critical aspect of parental involvement. When fathers set boundaries and encourage responsible behavior, children learn to differentiate between right and wrong. This discipline and accountability help children control their behavior and environment, enabling them to function effectively in society. Such paternal involvement in discipline contributes to a child's psychological well-being and reduces delinquency and the prevalence of behavioral issues during adolescence [25].

Additionally, a father's involvement in academic aspects can motivate children to complete their studies, which positively impacts their psychological well-being. Research by Partasari, Lentari, and Priadi supports this, showing that paternal involvement in daughters influences their achievement motivation, while paternal involvement in sons affects the development of their motivation and aspirations for higher education [26]. The drive to achieve and pursue higher education can enhance children's psychological well-being, especially in terms of personal growth.

Fathers also serve as important role models, particularly for sons [27]. Fathers model both positive and negative behaviors, which children can easily imitate. For instance, when a father demonstrates the qualities of a responsible man, sons are likely to emulate these behaviors. For daughters, the father figure can influence their readiness for future romantic relationships or marriage [28]. The various influences of a father, as described, can support the development of children's cognitive, social, and creative capacities, as well as their psychological well-being [27].

An equally important aspect of father involvement is the harmony between father and mother. A family consists of the father, mother, and child, and if any part of this unit is misaligned, it may result in family dysfunction. Parental involvement, support, and the quality of family relationships have been shown to impact the psychological well-being of emerging adults [22]. Parental attachment, such as spending quality time together, showing affection, and listening to the child's stories and concerns, can enhance the child's ability to build positive relationships with others [29]. These positive relationships are key contributors to the development of psychological well-being.

In conclusion, the role of each parent is not limited to simply raising the child, but also includes being actively involved in the process. When a child's growth and development are adequately supported, all aspects of their psychological well-being are likely to function optimally, helping the child navigate each developmental stage successfully.

After knowing the background of the problem and theoretical review, the researcher proposed a hypothesis in the form of a positive relationship between father involvement and psychological well-being in emerging adulthood. The higher the level of father involvement in parenting, the higher the psychological well-being that emerging adulthood will have. Likewise, the lower the level of father involvement in parenting, the lower the psychological well-being they will have.

3 Method

Participant

This study uses the following criteria: (a) Male or Female (b) Aged 18-25 years. Researchers chose this age range because according to Arnett, a person experiences the emerging adulthood phase when they are in the age range of 18-25 years [2]. During this period, there is a transition between the adolescent phase and the adult phase so that in this development phase there are still characteristics of late adolescent development and characteristics of the early adult development phase begin to appear. Individuals who experience increased developmental tasks or responsibilities will be susceptible to mental disorders [4]. This is supported by the results of a study conducted by Trihastuti & Anindya which found that 54% of students were classified as less prosperous, 26% were classified as quite prosperous, 18% of students were classified as very less prosperous, 2% were classified as prosperous and no students had high psychological well-being [8].

(c) Having a father during childhood and adolescence. Researchers chose respondents who had fathers during childhood to adolescence because the theory underlying this study uses the perspective of children in the past regarding their parents, especially the behavior of fathers' parenting patterns that influence their behavior in the future [30]. Therefore, respondents who did not have a father since they were in the womb or did not have a picture of a father figure could not participate in this study. After collecting participant data from 263 respondents

according to the predetermined criteria, the following are the details of the results of the description of the research participant data that have been obtained:

Table 1. Description of Research Participants

Gender	% Male = 26.6 (n=70)
	% Female = 73.4 (n=193)
Age	% 18 years old = 6.1 (n=16)
	% 19 years old = 5.3 (n=14)
	% 20 years old = 10.3 (n=27)
	% 21 years old = 36.1 (n=95)
	% 22 years old = 21.3 (n=56)
	% 23 years old = 10.3 (n=27)
	% 24 years old = 6.5 (n=17)
	% 25 years old = 4.2 (n=11)

Measurement

The scale used to measure psychological well-being in this study is the Indonesian version of the psychological well-being measuring instrument that has been evaluated by Fadhil [31] referring to Ryff's standard scale [5]. The purpose of measuring this scale is to see the level of a person's psychological well-being. This scale consists of 29 items (15 favorable and 14 unfavorable) and uses 5 answer choices, namely Very Appropriate (5), Appropriate (4), Neutral (3), Not Appropriate (2), Very Not Appropriate (1). The reliability of the psychological well-being scale based on the Cronbach alpha coefficient is 0.865 and is declared valid.

The scale used to measure the level of father involvement is the Perceived Father Involvement Inventory (PFII) developed by Saliha and Jayan [30]. Then the author modified it to form a short form - Perceived Father Involvement Inventory (PFII) with the aim of reducing the level of respondent saturation when filling out the scale. This scale is built on the assumption that children's perspectives in the past regarding their parents, especially their father's parenting behavior, will affect children's behavior. If children's perceptions as teenagers that their fathers are very or less involved in parenting, it will greatly contribute to children's behavior in the future [30].

The researcher modified the item count to reduce respondent saturation during the scale filling process. This was achieved by ensuring that the KMO and Bartlett's test met the requirements. The KMO value obtained in this study was 0.861, or a KMO value >0.5, while the Bartlett's test value was <0.001, or a Bartlett's test value <0.05, thus meeting both requirements. Afterward, the researcher selected three items with the highest factor loading values among all available items in each aspect using EFA (Exploratory Factor Analysis) to form a short form.

The Perceived Father Involvement Inventory (PFII) initially had 72 items (68 favorable and 4 unfavorable) which were summarized in 12 aspects, namely aspects of care, protection and provision, acceptance, understanding, guidance for the outside world, providing support, being responsible, academic assistance, discipline, spending time together, role models and aspects of the relationship with the mother. Next, it was modified into a short form - Perceived Father Involvement Inventory (PFII) which has 36 items where each aspect contains 3 items. This scale

uses 6 answer choices, namely Very Strongly Agree (6), Agree (5), Somewhat Agree (4), Somewhat Disagree (3), Disagree (2), Strongly Disagree (1).

The reliability of each aspect on this scale is based on the Cronbach alpha coefficient, namely the parenting aspect of 0.818, protection and provision of 0.829, acceptance of 0.813, understanding of 0.845, guidance for the outside world of 0.738, providing support of 0.896, being responsible of 0.876, academic assistance of 0.778, discipline of 0.810, spending time together of 0.876, role model of 0.893 and the aspect of relationship with the mother of 0.886.

4 Result

The assumption test is conducted before conducting the correlation test to determine whether the research data includes parametric statistics or non-parametric statistics. Therefore, an assumption test is conducted which includes a normality test and a linearity test as requirements that must be met. This analysis will be conducted using the help of the JAMOVI statistical program.

Table 2. Data Normality Test

Variable	p	Category
Father involvement	0.000	Not Normal
Psychological Well-Being	0.952	Normal

Based on the results of the normality test above, it is known that the variable of father involvement has a p value = <0.001 (not normal) and the variable of psychological well-being has a p value > 0.05 (normal) so it can be concluded that the data of this study can be said to be not normal because if the p value <0.05 then the data is stated to have a not normal distribution.

Table 3. Data Linearity Test

Variable	p	Category
Father involvement* Psychological Well-Being	<.001	Linear

Based on the results of the linearity test above, it can be concluded that the distribution of data from the independent variable (father involvement) has a significant and linear relationship with the dependent variable (psychological well-being). This is because the results of the analysis have a p value = < 0.001, which means that if the p value <0.05, the linearity assumption is met.

Hypothesis testing is carried out using analysis techniques to prove whether the research hypothesis is acceptable or not. Based on the results of the previous normality test, it is known that the data distribution is included in the data distribution that is not normally distributed so that this correlation test uses a nonparametric test with the Spearman's rho technique. The hypothesis is accepted if the significance level or p value is <0.05. The results of the correlation test can be seen in the table below:

Table 4. Correlation Test

Variable	r	R^2	p	Note

Father involvement* Psychological Well-Being	0.470	0.180	<.001	Positively Correlate d

In Table 4, the results of the correlation test show that father involvement has a positive and significant correlation with psychological well-being in emerging adulthood. This is because the level of significance is <0.001 or p-value <0.05 and has a positive correlation coefficient value of 0.470 so that the higher the father's involvement in parenting, the higher the psychological well-being of emerging adulthood. In addition, from the data above, it is also known that father involvement can explain 18% of the variation in psychological well-being significantly.

Table 5. Correlation Test of Aspects of Father Involvement and Aspects of Psychological Well-being

Independent Variable	Dependent Variable	R^2	r	p	Note
Parenting		0.122	0.364	< .001	Significant
Protection and provision		0.133	0.384	< .001	Significant
Acceptance		0.209	0.489	< .001	Significant
Understanding		0.221	0.459	< .001	Significant
Guide to the outside world		0.221	0.438	< .001	Significant
Providing support	Psychological Well-Being	0.232	0.486	< .001	Significant
Responsibility		0.234	0.393	< .001	Significant
Academic assistance		0.234	0.354	< .001	Significant
Discipline		0.234	0.438	< .001	Significant
Spending time together		0.235	0.396	< .001	Significant
Be a role model		0.235	0.426	< .001	Significant
Relationship with the Mother		0.243	0.416	< .001	Significant

Description: R^2 = coefficient of determination; r = correlation coefficient; p = level of significance

The results of the intercorrelation test analysis above show that each aspect of father involvement has a significant and positive correlation with psychological well-being. The aspect of the relationship with the mother provides the largest effective contribution to the child's psychological well-being, which is 24.3%. Then followed by the aspect of spending time together and the aspect of being a role model which has the same determination coefficient value, which is 23.5%.

Then the third aspect that provides the largest effective contribution to the child's psychological well-being is the aspect of academic assistance and the aspect of discipline with a determination coefficient of 23.4%. While the aspect that provides the smallest effective contribution to psychological well-being is the parenting aspect with a determination coefficient value of 12.2%.

Table 6. Correlation Test of Father Involvement and Psychological Well-being of Women's Group

Variable	r	R^2	p	Note
Father involvement* Psychological Well-Being	0.531	0.251	<.001	Positively Correlated

The results of the correlation test above show that father involvement has a positive and significant correlation with psychological well-being in the female group. This is because the level of significance is <0.001 or p-value <0.05 and has a positive correlation coefficient value of 0.531. In addition, from the data above it is also known that father involvement in the female group can explain 25.1% of the variation in psychological well-being significantly.

Table 7. Correlation Test of Father Involvement and Psychological Well-being of Male Group

Variable	r	R^2	p	Note
Father involvement* Psychological Well-Being	0.290	0.0347	0.015	Positively Correlated

In Table 7, the results of the correlation test show that father involvement has a positive correlation with psychological well-being in the male group. This is because the positive correlation coefficient value is 0.290 and has a significance level value of 0.015 or a p value <0.05 so that it can still be said to be significant even though it is low. In addition, from the data above it is also known that father involvement in the male group can explain 3.47% of the variation in psychological well-being.

5 Discussion

This study aims to empirically examine the relationship between father involvement and psychological well-being in emerging adulthood. A total of 263 participants were involved in this study. The correlation test used a non-parametric method with Spearman's rho technique, resulting in a correlation coefficient of 0.470 and a p-value of <0.001, indicating a positive and significant relationship between father involvement and psychological well-being. The positive relationship suggests that the higher the level of father involvement in parenting, the higher the psychological well-being of individuals in emerging adulthood.

Furthermore, based on the coefficient of determination through regression analysis, it was found that father involvement contributed 18% to psychological well-being, while the remaining 82% was attributed to other factors or variables not examined in this study.

These findings are consistent with several other studies, such as the research conducted by Utami [32], which found a positive and significant relationship between father involvement in parenting and psychological well-being, with an influence of 4.88%. Additionally, research by Ramadhani revealed that father involvement contributed 18.3% to a child's psychological well-being. More recent research by Hannani also reported a relationship between father involvement and psychological well-being among women in the emerging adulthood phase [18].

When the correlation test between father involvement and psychological well-being was conducted separately for male and female groups, it was found that the female group had a higher correlation between father involvement and psychological well-being compared to the male group, with correlation coefficients of 0.531 and 0.290, respectively. The higher correlation in the female group may be due to women having a greater need for their father's emotional and psychological support, which helps foster independence, resilience, and risk-taking abilities, thereby strengthening the correlation. Other studies have suggested that women tend to have higher psychological well-being than men, but they also require greater father involvement [5] [33].

An intercorrelation test between each aspect of father involvement and psychological well-being revealed that the aspect of "relationship with the mother" in the father involvement variable contributed the most significantly to the child's psychological well-being, at 24.3%. A positive, close, and harmonious relationship between the mother and father creates a strong family foundation and a positive family environment. Such an environment tends to help children develop better social skills, build healthy relationships, and cope with social pressures more effectively [34]. These social skills, relationships, and coping strategies are indicators of an individual's development of good psychological well-being in the future.

The aspects of the father as a role model and spending time with the child were the second most significant contributors to the child's psychological well-being. In Indonesia, the father, as the head of the family, is expected to be a role model for his children. A role model in this context means someone who teaches moral values and sets moral standards for their children [35]. Additionally, a father is responsible for spending time with his child, whether through play, interaction, or other activities, which can enhance the child's psychological well-being, especially in the future. Culpin et al. stated that the absence of a father during early or later childhood is associated with an increased likelihood of depressive symptoms at age 24, which indicates poor psychological well-being [36].

The aspect of discipline, responsibility, and academic support was the third most significant contributor to the child's psychological well-being. When fathers acknowledge their responsibility to ensure the child's life, instill discipline, and provide academic support, children learn self-regulation through the discipline given. They also become aware of their potential and continuously strive to develop it through the support and facilities provided by their father. Furthermore, they begin to understand the importance of taking responsibility for their life choices, modeled by their father's own sense of responsibility. These early life experiences will influence the child's psychological well-being in adulthood [37].

However, the aspect of caregiving had the smallest contribution to the child's psychological well-being, with an effective contribution of only 12.2%. This aspect includes how the father nurtures the child, expresses love, and maintains a close and warm relationship. Its relatively small contribution may be due to patriarchal cultural norms, where caregiving and household responsibilities are primarily seen as the mother's duty. As a result, the presence or absence of the father in the home may not be significantly perceived by the child [13].

Although this study shows that father involvement contributes 18% to psychological well-being, it is important to note that 82% of the variance is explained by other factors not examined here. Previous studies have demonstrated that psychological well-being in emerging adulthood is influenced by multiple variables, such as maternal involvement and the quality of family relationships [38], social support from peers [2], and self-esteem [39]. Other research also

highlights the role of religiosity and spirituality as protective factors in psychological well-being [40], as well as socioeconomic status and educational attainment [41]. Therefore, while father involvement is a significant predictor, psychological well-being in emerging adulthood is shaped by a complex interaction of family, personal, social, and cultural factors. Future studies are encouraged to incorporate these variables to provide a more comprehensive understanding.

The researcher acknowledges that this study is far from perfect and still has several limitations. One limitation is that the Perceived Father Involvement Inventory (PFII) lacks a clear time context and does not specify the subjects it is intended for, making it less suitable for measuring father involvement in emerging adulthood. Moreover, there were inconsistencies in the development of the PFII short form, such as the unmet KMO requirement and insufficient sample size (300–720 respondents) for its development. Additionally, the item statements in the PFII do not align well with the emerging adulthood population, reducing its accuracy in measuring father involvement in this age group.

6 Conclusion

Father involvement in parenting during childhood to adolescence has a positive and significant correlation with the psychological well-being of emerging adulthood. Then the aspect of father involvement that has the first largest effective contribution to the psychological well-being of the child is the aspect of the father's relationship with the mother. Then the aspect that provides the second largest contribution is the aspect of role models and the aspect of fathers spending time with their children. The third aspect that provides an effective contribution to psychological well-being is the aspect of discipline, academic assistance and the aspect of responsibility. While the aspect that has the lowest effective contribution to father involvement is the aspect of parenting.

In addition to these findings, this study highlights the urgent need to strengthen father involvement in Indonesian families, particularly within a cultural context where caregiving is often placed on mothers. Practically, the results can be implemented in family education programs, school-based parenting workshops, and policy initiatives that promote active father participation in caregiving, emotional support, and academic guidance. Strengthening father involvement may help address social issues such as the lack of paternal engagement, intergenerational transmission of parenting roles, and the increasing prevalence of psychological distress among young adults.

For future studies, it is recommended to examine other predictors of psychological well-being, such as maternal involvement, peer relationships, religiosity, socioeconomic factors, and self-esteem, to provide a more comprehensive understanding. Longitudinal studies are also needed to explore how father involvement across different developmental stages contributes to psychological well-being over time. Furthermore, refining measurement tools such as the PFII to better capture the experiences of emerging adults will improve the accuracy of future research.

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The Role of Family Functioning in Shaping Meaning in Life Among Children of Divorced Parents

Finelia Amanda Putri[1], Fitra Kurniadi[2], Nida Muthi Annisa[3], Cahyaning Widhyastuti[4]

{allfineliaapdraff@gmail.com[1], fitrakurniadi23@gmail.com[2], nidamuthiannisa@unibi.ac.id[3]}

Faculty of psychology, Indonesian University of Informatics and Business, Indonesia[1,2,3]

Abstract. Life after parental divorce is interpreted differently by each child depending on the quality of family functioning. This research aims to explore how family functioning influences the meaning of life for children of divorced parents. The study involved a sample of 176 participants, selected through purposive sampling based on the criterion that they had divorced parents. A non-experimental quantitative regression analysis was employed as the research method, utilizing the Family Assessment Device ($\alpha=0.828$) and the Meaning in Life Scale ($\alpha=0.720$). The results indicate that family functioning significantly impacts children's sense of meaning in life, with an R^2 value of 34.3%. These findings suggest that children's perceptions of parental interactions particularly affection, social support, and communication contribute to their sense of life's meaning after divorce.

Keywords: Children of Divorced Parents, Family Functioning, Meaning in Life

1 Introduction

Marriage is a significant and sacred stage in human life that establishes a binding connection between individuals. It unites not only a man and a woman as husband and wife, but also their families. According to Burgess and Locke, several criteria can measure the success of a marriage, including the longevity of the union, the happiness of both partners, marital satisfaction, sexual adjustment, marital adjustment, and the overall unity of the couple [1]. Differences in background, age, and education should not serve as barriers, provided both individuals are willing to accept and adapt to the dynamics of domestic life. This adaptability is crucial for building a strong and quality family [2].

According to Indonesia's Law No. 1 of 1974, marriage is defined as an inner bond between a man and a woman, within the context of husband and wife. The law defines marriage as a means to build a happy, lasting family grounded in spiritual values. Marriage also provides emotional closeness and access to economic and social resources. Additionally, marriage offers emotional and physical closeness as well as access to various economic resources. According to Shahabdi and Montazeri, marriage is an important event in a person's development [3], this is because marriage can help individuals in terms of emotional maturity, especially in terms of self-control and how to express emotions. So that this emotional maturity can help married couples to adapt during marriage. While many people perceive marriage as a sacred bond meant to endure for a lifetime, the reality of married life often does not align with these expectations. Many couples face various challenges that can lead to the breakdown of their relationship. Common factors

contributing to divorce include economic stress, infidelity, and incompatibility between partners [4]. This highlights that a healthy marriage requires effort and commitment from both individuals.

Divorce is the result of a court ruling that ends the marital bond at the request of one of the parties in the relationship. Etymologically, the "divorce" derives from the Latin word meaning "to separate." In a legal context, divorce refers to the formal termination of marriage. According to Law Number 7 of 1989 concerning Religious Courts and the Compilation of Islamic Law, there are two forms of divorce: talaq divorce and contested divorce. Talaq divorce occurs when the husband submits a petition to the Religious Court to divorce his wife. In contrast, contested divorce happens when the wife files a lawsuit in court to end the marriage [5].

In Indonesia, divorce has become a pressing social issue in recent years. According to the Central Statistics Agency (BPS), the divorce cases in Indonesia reached 408,347 in 2023, marking an 8.88% decrease compared to 2022, when there were 448,126 cases. In 2024, divorce registrations fell by another 2.06%, with West Java recording the highest number of cases 88,985 [6]. Most divorces stem from ongoing disputes and quarrels, which remain a significant factor behind divorce in 2024. This trend raises concerns about family resilience in Indonesia, as dissatisfaction in marriage can also motivate couples to divorce even in the absence of conflict [1].

The impact of divorce extends beyond the couple; it also profoundly affects their children. Just as married couples often dream of a harmonious family life, children hope for a stable family environment where they receive the love and attention they need from their parents. A harmonious family environment is crucial for a child's emotional well-being [7]. Moreover, changes in family structure and the dynamics of family interactions can significantly impact children when their parents divorce. According to Kisworowati, when a family transitions to a single-parent household, that parent must adapt to their new responsibilities as the family leader [8]. Therefore, both mothers and fathers need to foster healthy communication with their children after a divorce. Through effective communication, children can feel loved and supported, even in the wake of their parents' separation. This interaction is what, in a functioning family, is often referred to as positive interaction.

Family functioning, according to the McMaster Model of Family Functioning (MMFF), occurs when each family member fulfills their basic responsibilities effectively. With the support of normative values, communication, and social support, this can create a positive environment for every family member [9]. However, children respond differently to their parents' separation. Those who initially felt loved and appreciated due to their parents' roles may experience new feelings when faced with the decision to live with one parent after a divorce. Each child interprets life after their parents' separation in unique ways, a process known as finding meaning in life. Finding meaning in life refers to how a child interprets and appreciates the painful events they have experienced, such as their parents' divorce. This concept encompasses the child's ability to respond to the divorce and changes in family dynamics, their efforts to achieve meaningful life goals, and their ability to think positively and adaptively after encountering difficulties stemming from their parents' divorce.

Children experiencing their parents' divorce often feel as though they are carrying emotional burdens that are not their responsibility. They need to learn to let go of guilt and reassure themselves that their situation will improve over time. Research by Afdall et al. indicated that some teenagers were able to find gratitude in these challenging experiences, which helped them

stay motivated and discover new meaning in life [10]. However, not all children respond positively to divorce. Research by Musifuddin and Aturrohmah shows that parental divorce can lead children to feel a loss of meaning in life, emptiness, and a lack of direction [11]. Children in this situation tend to be more sensitive, irritable, and struggle with emotional regulation. Therefore, the process of restoring meaning in life after a divorce often requires significant time and strong emotional support from the surrounding environment.

Given these observations, researchers are interested in exploring how family functioning influences the meaning of life for children with divorced parents. This study is important because, despite numerous discussions on these two variables, there has not yet been specific research focusing on the impact of family functioning on the meaning of life for children of divorced parents. This research aims to provide deeper insight into how the external environment after a divorce can affect children's search for meaning in life. Thus, this study hypothesizes that family functioning significantly influences the meaning in life among children of divorced parents.

2 Literature Review

2.1 Family functioning

Family functioning according to The McMaster Model of Family Functioning (MMFF) is a condition where the mother, father, and child can effectively perform their basic roles and responsibilities. These basic tasks are such as the role of the father as the breadwinner and protector of the family, the role of the mother in caring for and guiding the child, and the child's duty to respect and obey their parents. With the help of normative values and communication and social support obtained, it can create a positive life for each family member [9].

From here, it can be concluded that family functioning is an important factor that must be possessed by a family, this is because it can affect individual development. This influence often manifests in the transmission of cultural, religious, and ethical values that come from different environments that can help individuals adapt in society. According to Bell, Dubas & Petersen, these instilled values are expected to have a long-term influence on individuals, especially during emerging adulthood [12].

2.2 Aspects of family functioning

Based on The McMaster of Family Functioning theory family functioning consists of six dimensions and one General Functioning scale that assesses the overall level of family functioning [13]. The 7 main dimensions of family functioning are;

a. Problem Solving. Refers to a family's ability to resolve problems (those that threaten its integrity and functional capacity) at a level that maintains effective family functioning. In this context, how children resolve problems after their parents' divorce will influence their relationship with their parents.

b. Communication. Communication serves as a solution to problems faced. Communication serves as a way to convey attitudes and feelings to family members. The willingness of both parents to communicate with their children, such as speaking honestly with them and listening to their concerns, can influence how children communicate with others, whether peers or extended family.

c. Roles. Family roles refer to the behavioral patterns established by family members to fulfill family functions. Each family member has clear roles and responsibilities within the family, including the child. A healthy family is one with a clear and appropriate process for distributing and implementing responsibilities. This means that the willingness of the father and mother to fulfill their roles, such as loving, providing for, and accepting the child, will influence the child's relationship with their parents.

d. Affective Responsiveness. Effective families are able to freely express and demonstrate their emotions. One example is the ability of parents to respond appropriately to various stimuli and feelings expressed by children after their parents' separation, whether they respond appropriately or not. A well-functioning family means that all family members have the ability to express a variety of emotions, and the emotions displayed are appropriate to the context of the situation.

e. Affective Involvement. Affective involvement refers to the level of attention and concern family members have for various activities and other matters between them. Affective involvement among family members is the extent to which parents show interest and appreciation for their children's activities and interests after their parents' divorce. It focuses on how much and in what ways parents demonstrate their interest.

f. Behavior Control. Behavioral control refers to the various ways in which behavior is controlled in different family situations. This behavior focuses on standards and values within the family, regarding patterns or habits for handling the behavior of family members in the following three areas, namely, physically dangerous situations where the family needs to maintain and control the behavior of its members, situations that include educating psychological needs and drives such as eating, drinking, and sleeping, and the last situation that involves the interpersonal socialization behavior of family members and with others. In this case, it means that both parents must provide extra supervision to their children even though they live in different places, this is done so that children do not do bad things that may be caused by the child's emotional desires after the separation of their parents.

g. General Functioning. Refers to how children assess the overall health conditions or problems in their family after their parents' divorce.

2.3 Meaning in life

King et.al explains that meaning is a condition where an individual views his life as having a purpose and meaning that is not trivial or momentary [14]. Meaning in Life according to Viktor Frankl is a condition where an individual shows attitudes and behaviors that reflect how he can understand and accept the painful conditions that have been experienced according to his personal perspective [15]. When individuals have difficulty finding the meaning of life, it is usually associated with emptiness and apathy [16] Furthermore, Schnell explains that meaning in life is a search for goals that must be carried out by individuals, so that it can give rise to subjective assessments of the presence or absence of meaning in life that the individual has [17].

2.4 Aspects of meaning in life

Meaning In Life according to Frankl has three dimensions [18], namely :

a. The Freedom of Will. The child's ability to take a stand against divorce situations and changes in family dynamics. This attitude reflects the child's freedom of will in determining emotional and social responses to these changes.

b. The Will to Meaning. Children's efforts to achieve meaningful life goals, despite facing difficulties. They seek meaning in the experience of divorce and maintain hope for the future. With this effort, children will find meaning after their parents' divorce.
c. The Meaning of Life. Children's ability to show the meaning of their lives through positive and adaptive thinking in managing emotions and building healthy relationships after facing various difficulties in their parents' divorce.

3 Method

This study employed a non-experimental quantitative design. This study aims to examine the influence of family functioning on the meaning in life among children of divorced parents. The sample in this study amounted to 176 people who were obtained using a purposive sampling technique with the criteria being that participants were aged 15 to 46 years and were individuals whose parents had legally divorced. The data obtained were then analyzed using a simple linear regression test.

The family functioning variable in this study was measured using the Family Assessment Device Scale developed [13]. This scale consists of 35 items presented in a 4-point Likert scale format, ranging from 1 (strongly agree) to 4 (strongly disagree). The validity test was carried out using the Corrected Item-Total Correlation technique, with the results of the validity coefficient ranging from 0.153 to 0.588, which indicates that all items are declared valid. Furthermore, the reliability test was carried out using the Cronbach's Alpha coefficient and obtained a value of (α = 0.828) which indicates that this measuring instrument has good reliability. This scale consists of 22 favorable items (for example: "We can handle all family problems well") and 13 unfavorable items (for example: "Our family finds it difficult to plan an activity because there are always misunderstandings between us").

For the meaning in life variable, the researcher developed an instrument based on Viktor Frankl's Meaning in Life theory, by following the scale construction stages according to Azwar. First, the researcher decreased from the conceptual definition to the operational definition of each aspect of Meaning in Life. Furthermore, from each aspect, the researcher developed two indicators. After obtaining 6 indicators, the researcher then formulated six question items for each indicator, consisting of three positive items (favorable) and three negative items (unfavorable). Thus, the total items generated were 36.

Furthermore, these items were tested through expert judgment by experts in the field of psychology to ensure content suitability. After obtaining approval from the experts, the researcher conducted data distribution testing, after obtaining the desired participants the researcher used SPSS to analyze the validity and reliability of the instrument. After testing the data using the corrected item correlation technique, the validity coefficient ranged from 0.186 to 0.461. Based on these results, only 28 items meet the validity criteria and are declared suitable for use in research. The reliability test on the meaning of life scale also uses the Cronbach's Alpha coefficient with a value of (α = 0.720) which consists of 17 favorable items (for example: I always get social support from my extended family) and 11 unfavorable items (for example: I feel hopeless facing my parents' divorce). With these results, it can be concluded that the two measuring instruments in this study meet the valid and reliable criteria that are suitable for data in analyzing the influence between variables, using parametric analysis methods.

This scale consists of 28 items presented in a 5-point Likert scale format, ranging from 1 (strongly disagree) to 5 (strongly agree). Like the Family Assessment Device Scale, the Meaning in Life Scale has also been tested for validity using the corrected item correlation technique, with validity coefficient results ranging from 0.186 to 0.461, indicating that all items are declared valid. The reliability test on the meaning in life scale also uses the Cronbach's Alpha coefficient with a value of ($\alpha = 0.720$) consisting of 17 favorable items (for example: I always get social support from my extended family.) and 11 unfavorable items (for example: I feel hopeless in dealing with my parents' divorce.). With these results, it can be concluded that both measuring instruments in this study meet the valid and reliable criteria which are worthy of being used for data in analyzing the influence between variables, using the parametric analysis method.

4 Result

The results of this study involved 176 respondents with the criteria for children who have divorced families. The characteristics of the research respondents were grouped based on gender, age, and duration of their parents' divorce, as shown in the table:

Table 1. Respondent characteristics

Category	Subcategory	N	Percentage
Gender	Famale	137	77.8 %
	Male	39	22.2 %
Age	Adolescent	46	26.1 %
	Early Adulthood	129	73.3 %
	Middle Adulthood	1	0.6 %
Length of Parental Separation	0-5 Year	80	45.5 %
	6-10 Year	61	34.7 %
	11-15 Year	18	10.2 %
	16-20 Year	10	5.7 %
	21-25 Year	7	4.0 %

The sample was then subjected to Kolmogorov-Smirnov normality test analysis with sig results. 0.083 (n>0.05) so the data obtained by the researcher can be normally distributed. Next, the researcher carried out an analysis to ensure the data was linear, namely by using a simple linear

test analysis. The results of this test obtained a linearity value of sig. 0.00 (< 0.05) therefore the data is declared to be linear, as seen in the following table:

Table 2. Normality Test Results

N	176
Asymp. Sig. (2-tailed)	0.083

Table 3. Linearity Test Results

Linearity	0.000

Based on the analysis of this study, a hypothesis test was conducted to determine the effect of Family Functioning on Meaning in Life in children with divorced parents. The F-test results indicated that the regression model used in this study was statistically significant, with a calculated F-value of 90.686, greater than the F-table value of 3.89 at a significance level of 0.05 (90.686 > 3.89). Furthermore, the significance value (Sig.) of 0.000 (<0.05) further strengthens the conclusion that the regression model used is appropriate and can explain the relationship between the two variables.

Furthermore, the coefficient of determination (R^2) test results showed a value of 0.343, meaning that 34.3% of the variation in Meaning in Life can be explained by Family Functioning, while the remainder is influenced by other factors outside this study. Referring to Chin criteria, this R^2 value falls into the moderate category because it falls within the range of ≥ 0.33 and ≤ 0.67 [19]. Thus, it can be concluded that Family Functioning has a significant and quite strong influence in providing meaning to life for children with divorced parents.

Table 4. Results of hypothesis testing

R Square	Sig	F	Sig
0.343	0.000	90.686	0.000

5 Discussion

Based on simple linear regression analysis that examines the relationship between family functioning and the meaningfulness of life of children of divorced parents, there is a significant influence of 34.3%. According to Chin, the R^2 value in this study is included in the moderate category, this is because the R^2 value is in the range ≥ 0.33 and ≤ 0.67 [19]. Meanwhile, the remaining 65.7% can be influenced by other factors such as religiosity, relationships with extended family, and support from peers. With an influence of 34.3%, this finding supports the research hypothesis that family functioning has an impact on the meaningfulness of life of these children. This is in line with research conducted by Ramadhany, Soeharto, and Verasari, which indicated that adolescents' perceptions of family functioning can be influenced by various factors, including the environment, individual characteristics, and personal experiences. When

adolescents perceive their family functioning positively, they are more likely to discuss their problems and work together to find solutions, resulting in more productive ways to overcome challenges without having to argue [20].

While there are no studies that directly examine the impact of family functioning on the meaning of life for children with divorced parents, the results of this study are consistent with established theories. For instance, the McMaster Model of Family Functioning (MMFF) suggests that a well-functioning family can foster a positive outlook for each of its members [9]. In the context of divorce, strong social support and effective communication are crucial in helping children cope with feelings of loss and confusion following their parents' separation. These elements enable children to discover a positive meaning in life, even in challenging circumstances. Additionally, how parents manage their emotions plays a significant role in shaping their children's emotional experiences. Parents who struggle to process and respond appropriately to emotions be it joy, fear, or frustration may raise children who have difficulty understanding their own emotions. Conversely, the closeness between parents, children, and family members can significantly enhance an individual's ability to understand and express feelings [21].

The family functioning when children with divorced parents receive emotional support, they still feel appreciated and loved, despite their parents' separation. This support can strengthen their ability to find a positive meaning in life, as Frankl discusses in "Meaning in Life." These children can adaptively re-evaluate painful experiences without being trapped by trauma, enabling them to pursue their future life goals. Conversely, low family functioning—such as ongoing conflict, poor communication, or neglect of children's roles—can lead to identity confusion, low self-esteem, and a lack of direction and meaning in life. Research by Musifuddin and Aturrohmah (2019) indicates that parental divorce can cause children to feel empty and adrift. Such children may become more sensitive, easily angered, and struggle with emotional regulation. Therefore, restoring meaning in life after divorce often requires substantial emotional support from those around them [11].

Individuals are considered to have a high purpose in life when they have a clear understanding of their goals, can reflect on their past experiences, and possess strong determination [22]. This applies to children of divorced parents, who can realize and accept their painful experiences, transforming them into the foundation for a meaningful life. A desire to live not only signifies an urge to engage in useful activities but also leads these children to experience happiness and a sense of purpose, despite their parents' divorce. However, if this desire remains unfulfilled, feelings of meaninglessness may prevail [23]. According to Frankl, the lives of children with divorced parents can be deemed meaningful when three components are met: first, freedom of will children have the right to set goals and change their life circumstances; second, a desire for a meaningful life this desire drives them to turn painful experiences into challenges that enrich their lives; and third, the meaning of life this provides direction and value for their existence [23].

The results of Afdal et al.'s (2021) study support this study, which shows that some adolescents are able to interpret parental divorce as a turning point for personal growth [10].They find gratitude, independence, and motivation to improve themselves. This suggests that with sufficient support, even traumatic events can be reframed as experiences that contribute to a more mature character and outlook on life. However, it is important to note that the R^2 value of 34.3% indicates that around 65.7% of other variables outside of family functioning also

influence the meaning of life for these children. This suggests the need for further research to explore additional factors that may contribute to understanding how family dynamics shape the meaning of life for children of divorced parents.

In addition to further research being recommended to export other factors, future research should also improve the limitations of this study. One of them is the potential for participant bias, considering that all data collection was carried out online, therefore the research was worried that respondents gave inaccurate answers, did not reflect their true conditions and were too hasty in filling out the questionnaires given. Nonetheless, the findings of this study are expected to provide relevant practical implications, for parents, counselors and educational personnel. So that it can help children to rise after the divorce of their parents.

6 Conclusion

The results of this study indicate that family functioning significantly influences the meaning of life for children with divorced parents, accounting for 34.3% of the variance. This finding is in line with other studies showing that adolescents' perceptions of family function can be influenced by various factors, including the environment, individual characteristics, and personal experiences. However, while family functioning does play a role in shaping the meaning of life for these children, other factors also contribute, as evidenced by the R^2 value of 34.3%. Therefore, the author recommend that future research incorporate additional variables to strengthen the findings of this study.

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The Relationship Between Individual-Parent Career Goal Discrepancies and Life Crafting

Marsha Melani Putri[1], Adelia Nur Octapiani[2], Cahyaning Widhyastuti[3], Nida Muthi Annisa[4]

{marsha.melani04@gmail.com[1] , adelnoct@gmail.comi[2], cahyaning@unibi.ac.id[3]}

Faculty of Psychology, Universitas Informatika dan Bisnis Indonesia

Abstract. Family plays an important role in shaping a person's career path. However, differences between an individual's career goals and their parents' expectations can create psychological pressure that hinders life crafting. According to Self-Determination Theory, these discrepancies can reduce autonomy and intrinsic motivation, making it more difficult for individuals to develop meaningful goals. This study employed a correlational survey design involving 205 active undergraduate students in Indonesia (79% female, aged 18–23 years, from semesters 1–8) selected through purposive sampling. Data were collected using the Individual-Parent Career Goal Discrepancy Scale ($\alpha = 0.866$) and the Life Crafting Scale ($\alpha = 0.834$). Spearman's rho analysis revealed a significant negative correlation between individual-parent career goal discrepancies and life crafting ($r = -0.440$, $p < 0.05$). These findings suggest that greater discrepancies between individual career goals and those of parents are associated with a lower ability to plan a meaningful life

Keywords: Career, Career Discrepancies, Life Crafting, Students.

1 Introduction

Higher education is an important stage in the development of academic potential, skills, and career direction. However, many students face confusion when determining their major or field of study, especially due to the differences between personal career goals and parental expectations. Data from the Ministry of Research, Technology, and Higher Education indicates that out of 2.4 million high school graduates, only 1.5 million continue on to higher education, with some of them experiencing uncertainty about their career direction [1].

There are three main factors that influence an individual's decision to continue their education beyond high school: family environment, community environment, and individual factors. The family environment plays a crucial role in shaping learning motivation. Family support can motivate individuals to plan for their future. Conversely, excessive pressure or indifference toward a child's career choices can hinder personal development. Therefore, it is important to maintain a balance between support and freedom in decision-making [2]. In addition to family, the community environment also influences educational direction through social norms, environmental expectations, and access to educational and career information. Internal factors such as motivation, interests, and the desire to develop skills in both academic and non-academic fields also play an important role [2].

One of the main challenges students face in choosing a major and faculty is the mismatch between personal desires and parental expectations. Many students hesitate to choose a major due to the discrepancy between their personal interests and family expectations [3]. Differences in career goals between individuals and their parents can create psychological pressure that hinders personal development. There are three main dimensions to this discrepancy: ability discrepancies (the mismatch between ability and parental career expectations), choice discrepancies (differences in career choices), and enthusiasm discrepancies (low motivation to pursue the career goals set by parents) [4].

Many students experience stress and even depression due to parental pressure to continue their studies in a particular major or university [5]. This condition can negatively impact mental well-being, especially if individuals feel they have no control over major decisions in their lives [6]. Such pressure can also cause discomfort due to the numerous demands that must be met to fulfill parental expectations [7]. Excessive involvement in decision-making can potentially trigger significant psychological pressure. Individuals facing constant demands from their parents tend to experience psychological pressure, fear of failure, and a loss of interest in activities they previously enjoyed [7].

One approach that has the potential to help alleviate this pressure is life crafting, which is a conscious process of building meaning in life through changing perspectives (cognitive crafting), seeking social support, and challenges seeking to encourage personal development [8]. Life crafting interventions have been shown to improve academic performance by 22%, even without explicitly setting academic goals [9]. According to Self-Determination Theory, external pressure that hinders autonomy can reduce intrinsic motivation, thereby obstructing individuals from engaging in the life crafting process [10].

However, research on the relationship between differences in individual-parent career goals and life crafting behavior in the context of Indonesian students remains limited. This research gap is important to address, given Indonesia's collectivist culture, which places family as a dominant factor in career decision-making.

Based on this background, this study aims to examine the relationship between differences in individual-parent career goals and life crafting behavior among students. The proposed hypothesis is: there is a significant negative relationship between differences in individual-parent career goals and life crafting behavior among students.

2 Literature Review

Social Cognitive Career Theory

Social Cognitive Career Theory (SCCT) explains that career development is influenced by the interaction between personal factors, such as self-efficacy and outcome expectations, and contextual factors, such as social support or environmental barriers [9]. In the context of the relationship between students and parents, a mismatch in career goals can serve as a factor influencing the formation of self-beliefs related to career interests. This factor has the potential to influence students' behavior in directing, adjusting, or engaging in life crafting.

Individual-Parent Career Goal Discrepancies

Individual-Parent Career Goal Discrepancies refer to the differences between students' career aspirations and their parents' expectations [4]. These discrepancies encompass several aspects, including an individual's belief in their ability to meet their parents' career expectations (ability), differences between the career choices of individuals and those of their parents (choice), and low motivation among individuals to pursue their parents' career expectations (enthusiasm).

Life Crafting

Life crafting is defined as a conscious effort to shape a meaningful life by adjusting one's perspective, building social support, and seeking challenges that encourage personal growth [7]. Life crafting encompasses several aspects, including an individual's ability to rearrange the meaning and perspective of life (cognitive crafting), the actions taken by individuals to seek support in achieving personal goals (social support seeking), and the pursuit of challenges as an active effort to hone one's abilities through learning experiences (challenge seeking).

Based on this theoretical foundation, this study aims to examine the correlation between individual-parent career goal discrepancies and life crafting behavior among university students, positing that differences in career goals can influence students' strategies in life crafting.

3 Method

This study involved 205 active undergraduate students in Indonesia who were enrolled in semesters 1 to 8. The respondents consisted of 162 women (79.0%) and 43 men (21.0%), aged 18–24 years, from various majors. The sampling technique used was purposive sampling, with the criteria being active undergraduate students in Indonesia in semesters 1–8.

Data collection was conducted in March 2025 using an online questionnaire via Google Forms. The questionnaire link was shared through social media platforms such as X, Instagram, Telegram, and WhatsApp. Participation was voluntary, and the number of responses was monitored daily to ensure representation from various majors and semesters.

Individual-Parent Career Goal Discrepancies were measured using a scale constructed by the authors based on the framework of Sawitri et al. [4], covering three dimensions: ability, choice, and enthusiasm. The assessment was conducted using a 5-point Likert scale (1 = strongly disagree to 5 = strongly agree), with unfavorable items receiving reverse scores. An example of a favorable item is, "I feel I lack the ability in the field determined by my parents," while an example of an unfavorable item is, "I believe that the major chosen by my parents is the right choice for me." The reliability of the scale in this study was $\alpha = 0.866$.

Life crafting was measured using a scale also constructed by the authors based on the indicators from Chen et al. [7], which include cognitive reframing, seeking social support, and seeking challenges. This scale consists of 25 items (11 favorable and 14 unfavorable) with a 5-point Likert format (1 = never to 5 = always), where unfavorable items are reverse-scored. An example of a favorable item is, "I can accept changes in my life with a more open and positive attitude," while an example of an unfavorable item is, "I feel that my life has not changed even though I have tried to improve it." The reliability of this scale is $\alpha = 0.834$.

Both scales were constructed following the psychological scale construction procedure according to Azwar [10], which includes determining the measurement objectives, operational definitions, developing a grid, writing items, expert judgment, testing, and item selection.

Normality testing was performed using the Kolmogorov–Smirnov test. Since the data were not normally distributed, the relationships between variables were analyzed using Spearman's rho correlation test. All analyses were conducted using IBM SPSS Statistics version 26 at a significance level of $p < 0.05$.

4 Result

This study involved 205 respondents, consisting of active undergraduate students (S1) from various universities in Indonesia. The characteristics of the respondents were grouped based on gender, semester, and choice of major, as shown in the table:

Table 1. Respondent characteristics

Category	Subcategory	n	Percentage
Sex	Male	43	21 %
	Female	162	79%
Semester	1 – 2	6	2.9 %
	3 – 4	13	6.4 %

	5 – 6	33	15.6 %
	7 – 8	147	72.2 %
	Other	6	2.9 %
Suitability of Major	Chosen by Parents	135	65.8 %
	Chosen by Oneself	70	34.2 %

Data analysis was conducted to determine whether the data from each variable was normally distributed. This test was conducted using the Kolmogorov-Smirnov method. The results of the normality test are presented in the following table:

Table 2. Normality test

	N	Sig	Description
Individual-Parent Career Goal Discrepancies	205	0.003	Not normal distributed
Life Crafting	205	0.000	Not normal distributed

The Kolmogorov–Smirnov test indicates that the data for the Individual-Parent Career Goal Discrepancies variable are not normally distributed (p = .003), nor are the data for the life crafting variable (p < .001). With a large sample size (N = 205), even small deviations from normality can be detected significantly. Therefore, the analysis of the relationship between the variables was conducted using Spearman's rho correlation test, which is appropriate for non-parametric data. The results of the correlation test are presented in the following table:

Table 3. Spearman's rho correlation test

Correlation			
Spearman's Correlations			
		Spearman's rho	**P**
Individual-Parent Career Goal Discrepancies	Life Crafting	-0.44	< .001
*p > .01 **p < .001			

Note: The values shown are Spearman's correlation coefficients (ρ). p < .001. A correlation of −.44 indicates a moderate effect (11).

The results of the Spearman correlation analysis show a significant negative relationship between Individual-Parent Career Goal Discrepancies and life crafting (Spearman $\rho = -.44$, $p < .001$). This indicates that as Individual-Parent Career Goal Discrepancies increase, the tendency for individuals to engage in life crafting decreases.

5 Discussion

The results of the study indicate a significant negative correlation between Individual–Parent Career Goal Discrepancies and life crafting ($\rho = -0.44$, $p < 0.05$). This means that the greater the discrepancy between an individual's career goals and their parents' expectations, the lower the individual's tendency to engage in life crafting.

This finding can be explained through Self-Determination Theory, which emphasizes the fulfillment of basic needs for autonomy, competence, and relatedness [12]. External pressures, such as parental demands that are inconsistent with personal aspirations, can reduce feelings of autonomy and ultimately decrease intrinsic motivation. Additionally, according to Learned Helplessness Theory, prolonged goal mismatch can lead individuals to feel they have no control over the outcomes of their efforts [13], thereby hindering active engagement in life crafting, particularly in aspects related to seeking social support and challenges.

These findings align with previous research showing that the greater the discrepancy between students' and parents' career goals, the higher the stress levels experienced by students, especially those who lack clarity about their career goals [4]. Other studies also indicate that parental pressure in choosing a major can trigger psychological stress, fear of failure, and a decline in interest in previously enjoyable activities [5], [6].

Practically, these findings highlight the importance of the role of family and educational environments in providing autonomy support to students. Encouraging open communication between students and parents, as well as giving students the space to design their own career goals, may help enhance adaptive life crafting behavior.

This study has several limitations. First, the sample only included active undergraduate students in Indonesia, so the results may not be generalizable to a broader population. Future research is recommended to involve a more diverse sample, including students from various social and cultural backgrounds. Second, this study used a quantitative approach with questionnaires, which may introduce bias in the interpretation of participants' responses to the questionnaire items. Future research should explore other factors influencing students' academic achievement, as well as the role of family dynamics in supporting the life crafting process. A longitudinal approach could also provide deeper insights into how the gap between individual career goals and parental expectations evolves over time. Additionally, it is important to investigate how social support from family, friends, and the surrounding environment can help individuals overcome career goal gaps and build a more meaningful life overall.

6 Conclusion

The results of the Spearman correlation test in this study revealed a significant negative relationship between individual-parent career goal discrepancies and life crafting. The correlation coefficient value of r = -0.440 (p < 0.05) indicates that the greater the discrepancy between students' career goals and their parents' expectations, the lower their ability to find meaning and direction in life through life-crafting behaviour. Conversely, when the discrepancy is smaller, students tend to be more motivated and have greater clarity of life direction, allowing them to undergo the life crafting process more optimally. These findings confirm the importance of support and alignment between parents' expectations and students' personal goals in self-development and future planning.

Acknowledgments.

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The Influence of Marriage Perceptions on Decision-Making Among Early Adult Women

Sarah[1], Gisella Arnis Grafiyana[2]

{sarahkholid57@gmail.com[1], gisella.arnis@ump.ac.id[2]}

Department of Psychology, Universitas Muhammadiyah Purwokerto, Central Java, Indonesia[1,2]

Abstract. Marriage is seen as an important milestone in life. However, many young adult women choose to delay marriage for various reasons. This study aims to examine the influence of marriage perceptions on marriage decision-making among young adult women. Using purposive sampling, 302 women Indonesian citizens aged 25-39 years old in romantic relationships participated. Simple regression analysis showed a negative effect (t = -4.15, p = 0.001) with R^2 = 0.0544, indicating that marriage perception influenced decision-making by 5.44%. This small contribution suggests that other psychological, social or cultural factors may play a more dominant role. This study also has social implications in encouraging changes in society's perspective to be more open, empathetic and non-judgmental towards individuals who choose to delay marriage. Future research should incorporate a broader set of variables, including cultural, economic, and familial factors, to capture the multifaceted influences on delayed marriage decisions. Employing mixed-method approaches may also provide richer and more nuanced understanding of these dynamics.

Keywords: *Perceptions About Marriage; Marriage Decision Making; Early Adult Women*

1 Introduction

Marriage represents a significant developmental milestone within the human life cycle, reflecting an individual's transition toward maturity, enduring commitment, and the establishment of family structures that contribute to social stability (1). However, along with the times, the phenomenon of postponing marriage is increasingly widespread, especially among early adult women aged 20-30 years. Many of them choose to delay marriage in order to pursue education, career, financial independence, and emotional and psychological readiness [2, 3]. Two distinct patterns of thinking emerge in this context: some women no longer make marriage as central life goal, while others choose to postpone it for reasons of readiness and careful consideration [4, 5].

Data from the Central Statistics Agency [6] indicate a consistent decline in marriage rates in Indonesia, accompanied by an increase in the average age of marriage for women to 22.3 years [7]. In fact, the average age of women getting married in the province of DKI Jakarta has reached 22.54 years [8]. This phenomenon is known as "waithood", refers to a transitional phase in which individuals delay marriage despite being at the ideal age for marriage. This delay is closely related to individuals' perceptions of marriage, which is how thry cognitively and emotionally interpret, evaluate, and assign meaning to the institution of marriage [8, 9]. Such

perceptions shape how individuals weigh the perceived benefits and risks of marriage, influencing whether they approach it as a source of fulfillment or as a potential constraint on personal growth. When perceptions are positive and realistic, individuals are more likely to engage in deliberate and confident decision-making, whereas negative or ambivalent perceptions can contribute to avoidance, hesitation, or postponement of marriage [10, 11].

Within the Indonesian socio-cultural context, early adult women often face social pressures and expectations to marry in their twenties; thus, so delaying marriage is often viewed negatively [12, 13]. Consequently, many experience a psychological dilemma between personal aspirations and societal norms. Factors such as past experiences, education, religious values, economic conditions, and relationships quality all contribute to shaping perceptions of marriage and, consequently, influence the process of marital decision-making [1, 14]. Indeed, deciding to marry is a multifaceted cognitive–emotional process that involves personal beliefs, rational evaluations, and readiness to assume social and relational responsibilities [15, 16].

Despite increasing scholarly attention to the phenomenon of delayed marriage, there remains limited research examining how perceptions of marriage influence decision-making among early adult women, particularly those in committed relationships. Addressing this gap is essential for understanding the psychological and social dynamics that shape marriage-related decisions, as well as for identifying the value shifts occurring within modern society. Such understanding can also serve as a foundation for developing relevant interventions in the fields of family psychology and adult development [2, 17]. Therefore, this study aims to examine the relationship between perceptions of marriage and marriage decision-making among early adult women, with a particular focus on those in serious or committed relationships.

2 Literature Review

Decision-making is a complex process and is influenced by various psychological, social, and cultural factors. Theory of Planned Behavior emphasized the importance of intentions, attitudes, subjective norms, and perceived control in decision-making, which is particularly applicableto the context of the marriage decision [18]. There are five decision-making styles, namely rational, intuitive, dependent, avoidant and spontaneous [19]. These reflect variations in the way individuals consider choices, including in relational aspects such as marriage. Research by [20] also highlighted the importance of awareness of red flags in relationships and mature decision-making in determining long-term commitment. Furthermore, this process is seen as a risk-intensive act, where individuals weigh the alternatives and possible outcomes of available options [21].

In the context of marriage, these decision-making processes are shaped significantly by individual perceptions of what marriage entails. Perception is the process of filtering and interpreting information to form meaning about an object or situation, which in this case is the institution of marriage [22]. Individuals' perceptions of marriage are strongly influenced by past experiences, cultural values and social expectations, thus explaining why perceptions of marriage can differ significantly between individuals [23]. Study showed that positive perceptions of marriage correlate with intention to marry and realistic relational expectations, while negative perceptions, such as seeing marriage as an obstacle to personal freedom or emotional risk, tend to be associated with delay or avoidance of marriage [24]. Research by [25] also supports these findings by showing that family models, media representations, and personal experiences have a major influence in shaping marriage perceptions and decisions.

However, there is a gap in the literature regarding how perceptions of marriage influence decision-making in early adult women in romantic relationships, particularly in Indonesia. Most previous research has focused on marriage decision-making in general, without considering the psychological and social dynamics of specific age groups facing social norm pressures or personal value conflicts. This study aims to contribute both theoretically—by expanding the understanding of how personal perceptions shape marital decision-making—and practically, by informing educational and counseling strategies for young women navigating complex relational decisions.

3 Method

This study uses a quantitative approach using a correlational research design that aims to examine the extent to which perceptions of marriage influence decision-making to marry in early adult women. This approach was chosen because it allows to see the relationship between variables objectively and measurable through numerical data. Data collection was carried out using a survey method using a Google form that was widely distributed to respondents who met the research criteria on Telegram, X (Twitter), and WhatsApp. The instruments used in data collection consisted of two standardized psychological measurement tools that had gone through a validation and reliability process, namely the Based on the results presented in the table, the Perception of Marriage Scale (GATM) demonstrated satisfactory internal consistency, with a Cronbach's alpha of 0.836. This scale measures individuals' cognitive and emotional evaluations of marriage through subscales such as the meaning of marriage, expectations toward marital life, and readiness for marital commitment. Example items include statements such as "Marriage is an important phase of adult maturity" and "A good marriage requires emotional and financial readiness."

Meanwhile, the Marriage Decision-Making Scale (RDS) also showed high reliability, with a Cronbach's alpha of 0.883. This scale assesses the psychological processes involved in deciding to marry, consisting of subscales such as rational consideration, emotional readiness, and external influence. Example items include "I consider financial stability before deciding to marry" and "Family expectations affect my decision to marry." Both scales demonstrate adequate internal reliability, indicating that the items consistently measure their respective constructs.

Data were analyzed using simple linear regression was chosen to determine the predictive effect of marriage perception (independent variable) on marriage decision-making (dependent variable), as both variables are continuous and assumed to have a linear relationship. The analysis process was assisted by Jamovi statistical software. The study involved 271 participants who met the inclusion criteria: Indonesian women aged 25 to 39 years currently engaged in a romantic relationship. In addition, this study also paid attention to the principles of research ethics, including by providing clear information to prospective respondents regarding the objectives, procedures, and confidentiality of respondents, as well as obtaining voluntary participation approval through informed consent. This was done to ensure that participation in the study took place ethically and responsibly, and to guarantee the protection of the rights of research subjects.

4 Result

This study consists of normality, linearity, heteroscedasticity, and hypothesis tests. Respondents in this study were 302 women (Indonesian citizens) aged 25-39 years and in a romantic relationship. The following table shows the distribution of demographic data of the subjects involved in this study. Demographic data of the subjects are seen from age, region of origin, final education level, employment status, and parental marital status. The details can be seen in the table 1.

Table 1. Distribution of research subjects

Characteristics	Type	F	(%)
Age	25 years	213	70,53
	26 years	36	11,92
	27 years	19	6,29
	28 years	14	4,64
	29 years	9	2,98
	30 years	2	0,66
	31 years	1	0,33
	32 years	1	0,33
	33 years	2	0,66
	34 years	1	0,33
	35 years	3	0,99
	36 years	1	0,33
Region of Origin	Java	198	65,56
	Outside Java	104	34,44
Final Education Level	Not in College	106	35,10
	College	196	64,90
Employment Status	Not Working	66	21,85
	Employed	236	78,15
Parental Marital Status	Married	274	90,73
	Divorced	28	9,27

Based on the table above, it can be seen that the majority of respondents are in the age range of 25 years, which is 70.53%. Based on the area of origin, most respondents come from Java Island (65.56%). In terms of the last level of education, most respondents are college graduates (64.90%). Meanwhile, based on employment status, most respondents are individuals who work (78.15%). Based on the marital status of parents, the majority of respondents come from families with parents who are still married, which is 90.73%. The results of the data description can be seen in table 2.

Table 2. Data Description

Variable	N	Min	Max	Mean	SD
Perception of Marriage	302	10	59	34.2	9.82
Decision-Making to Marry	302	18	60	46.3	7.16

Based on the results of the data description, the scores of each variable were categorized into three categories, namely high, medium, and low. This can be seen in Table 3.

Table 3. Variable Score Categorization

Variable	Low	Medium	High
Perception of Marriage	17,2%	68,5%	14,2%
Decision-Making to Marry	14,2%	71,5%	14,2%

Based on the results of the normality test, it is shown that both variables are normally distributed. This can be seen in Table 4, where the normality test of both variables has a significance value of 0.058 > 0.05.

Table 4. Normality Test

Statistic Kolmogorov-Smirnov	p	Explanation
Perception of Marriage	0.058	Normal

The results of the linearity test of the variables of perception of marriage and decision making to marry fall into the linear category, meaning that the direction of the relationship between the two variables shows a linear direction if one variable is high or low, it will affect the other variable to be high or low as well. This can be seen in Table 5.

Table 5. Linearity Test

Variable		Perception of Marriage	Decision-Making to Marry
Perception of Marriage	Pearson's rho	-	
	p-value	-	
Decision-Making to Marry	Pearson's rho	-0.233	-
	p-value	< 0.001	-

Based on the results of the heteroscedasticity test, it can be seen that the data does not contain heteroscedasticity. This can be seen in Table 6, where the significance value is 0.740 > 0.05.

Table 6. Heteroscedasticity Test

	Statistic	p	Explanation
Breusch-Pagan	0.110	0.740	There is No Heteroscedasticity

Based on simple linear regression analysis, a significance value of 0.001 < 0.05 was obtained, indicating that the hypothesis was accepted. The coefficient of determination (R^2) value of 0.0544 indicated that perceptions about marriage contributed 5.44% to the variation in decision-

making to marry, while the rest was influenced by other factors outside this research model. The regression coefficient value (β) obtained was -0.170 with a t value of -4.15 and a p value of 0.001. These results indicate that perceptions about marriage have an influence on decision-making to marry with a negative relationship.

Table 7. Simple Linear Regression Test

| Model | R | R^2 | Overall Model Test | | | |
			F	df1	df2	P
1	0.233	0.0544	17.3	1	300	< 0.001

Table 8. The regression coefficient value

Predictor	Estimate	SE	t	P
Intercept	52.146	1.4571	35.79	< 0.001
Perception of Marriage	-0.170	0.0409	-4.15	< 0.001

This study also conducted a difference test to see if there were differences in perceptions about marriage and decision-making to marry based on the demographic characteristics of the respondents. Based on the results of the difference test using the independent sample t-test, it was found that there was a significant average difference (p < 0.05) in the perception of marriage between respondents from Java and outside Java. Respondents from outside Java tend to have a more positive perception of marriage compared to respondents from Java. On the other hand, there was no significant average difference (p > 0.05) in the perception of marriage based on final education level, employment status, or parental marital status.

Table 9. Difference Test of Marriage Perception and Marriage Decision-Making Based on Demographic Characteristics

| Factor | Marriage Perception | | | Marriage Decision-Making | | |
	N	p	M	N	p	M
General	302	< 0,001	34,2	302	< 0,001	46,3
Area of Origin						
Java	198	0,004	33,0	198	0,363	46,6
Outside Java	104		36,5	104		45,9
Final Education Level						
Not in College	106	0,767	34,0	106	0,880	46,3
College	196		34,3	196		46,3
Employment Status						
Not Working	66	0,511	33,5	66	0,225	45,8
Employed	236		34,4	236		46,5
Parent's Marital Status						
Married	274	0,116	33,9	274	0,861	46,3
Divorced	28		37,0	28		46,3

Furthermore, based on the results of the difference test on the variable of decision-making to marry, there was no significant average difference (p > 0.05) based on region of origin, final education level, employment status, or parental marital status. This indicates that the decision-making process related to marriage among early adult women in this study tends to be consistent across different backgrounds, suggesting that individual perceptions and psychological factors may play a more dominant role than external demographic influences.

5 Discussion

The results of this study indicate a significant negative influence between perceptions of marriage on marriage decision making in early adult women. This means that the more positive a woman's perception of marriage is, the more likely the individual is to delay making the decision to get married. This finding strengthens the results of previous studies conducted by [26] and [27], which revealed that individuals with positive views of marriage tend to delay marriage, because they have high expectations of the quality of married life and want to ensure their overall readiness, both in terms of emotional, financial, and psychological before actually making the decision to get married. Positive perceptions in this context do not mean an attraction that leads directly to the decision to marry, but rather reflect caution and a desire to wait for conditions that are considered ideal.

However, this study is not in line with the findings presented by [28], which show that positive perceptions of marriage actually encourage individuals to get married immediately, because they view marriage as valuable and urgent. This difference suggests that perceptions of marriage are complex and contextual, depending on the individual's background, values, and relationship dynamics. This study also reveals that a more positive view of marriage is not always accompanied by a real readiness to get married, but may be influenced by high expectations of a harmonious, idealized and conflict-free marriage relationship. These unrealistic expectations can make individuals feel hesitant and ultimately delay the decision to marry for fear that these expectations will not be achieved.

While these findings make an important contribution to understanding the dynamics of marriage decision-making in early adult women, it should be noted that the use of online survey methods in data collection has a number of limitations. Although the effect size was modest ($R^2 = 5.44\%$), the statistical significance suggests that perceptions of marriage do play a measurable role in influencing decision-making behavior, albeit alongside many other factors.

One of the main limitations is the possibility of representation bias as respondents who were able to access and complete the online questionnaire generally came from groups with good internet access, which may not reflect the social, economic and cultural diversity of the entire population of early adult women in Indonesia, especially those living in remote areas with limited digital access. Therefore, for further research it is recommended to use a mixed methods approach. This approach allows researchers to delve deeper into the subjective meanings of individuals' perceptions of marriage, as well as explore other factors that may influence decision-making.

6 Conclusion

The results of the data analysis indicate that perceptions of marriage significantly influence the decision to marry among early adult women. Quantitatively, the perception of marriage variable contributed 5.44% to marriage decision-making. Although the effect is statistically significant, the remaining 94.56% of the variance suggests that numerous other factors play a more substantial role. This finding underscores that the decision to marry is a complex, multidimensional process, shaped not only by one's perception of marriage but also by a constellation of factors such as emotional maturity, prior relationship experiences, social and cultural expectations, and economic considerations.

From a practical perspective, the findings offer valuable insight for early adult women in evaluating their emotional, psychological, and social readiness before committing to marriage. The study also highlights the need for supportive social environments—including family, partners, and community networks—that respect individual autonomy in marital decision-making. Fostering a nonjudgmental, empathetic, and understanding atmosphere may help individuals make choices based on personal readiness rather than external or societal pressure.

At a broader level, this study contributes to the ongoing discourse on shifting societal attitudes toward delayed marriage. It encourages families and communities to become open, compassionate, and non-stigmatizing support systems, enabling individuals to navigate marriage decisions with greater self-awareness and confidence. By promoting constructive dialogue and inclusive social understanding, societies can create conditions in which marriage decisions reflect genuine preparedness and mutual respect, rather than conformity to age norms or cultural demands.

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Partner Selection Process among Young Adults from Interfaith Family Backgrounds

Azalia Nur Khofifah[1], Nia Anggri Noveni[2]

{azalianurkhofifah2003@gmail.com[1], niaanggrinoveni@ump.ac.id[2]}

Fakultas Psikologi, Universitas Muhammadiyah Purwokerto[1,2]

Abstract. This study explores the partner selection process among emerging adults from interfaith family backgrounds in Indonesia's pluralistic society. Six participants were involved, including three individuals in interfaith relationships and three significant figures such as parents or close friends. A qualitative case study using thematic analysis was conducted through in-depth interviews to examine personal, relational, and social factors influencing partner choice. Findings show that emotional attraction, shared values, career support, and communication dynamics play central roles. Religious differences often trigger conflict, particularly within families and broader social contexts. Nevertheless, support from significant figures, open communication, and value negotiation help sustain these relationships. The study concludes that interfaith partner selection in emerging adulthood is shaped not only by personal preference but also by complex familial and societal influences, highlighting the importance of psychosocial support and inclusive perspectives in understanding interfaith couple dynamics.

Keywords: partner selection, interfaith families, emerging adulthood, muslim youth

1 Introduction

The diversity of interfaith families in Indonesia reflects tolerance and harmony within a pluralistic society. Family members who practice different religions such as Islam, Christianity, Hinduism, or Buddhism live side by side with mutual respect, embodying the national motto *Bhinneka Tunggal Ika* (Unity in Diversity). This phenomenon has become increasingly visible in modern society as interactions across diverse backgrounds grow more common [1]. Many interfaith couples choose to marry despite facing complex challenges related to differences in beliefs, traditions, and religious practices. Such marriages involve not only two individuals but also two families with potentially conflicting values, creating unique dynamics in family formation [2]. At the same time, interfaith families often encounter broader social challenges, including stigma from conservative communities and negative perceptions of interreligious unions. These stigmas can manifest as social discrimination, exclusion, or the belief that interfaith families violate cultural and religious norms, thus placing significant pressure on couples and their extended families [3]. In the context of individual development, early adulthood (ages 20–40) is a critical phase marked by identity formation, independence, and the pursuit of intimate, committed relationships. According to Erikson, the central developmental task at this stage is achieving intimacy rather than isolation. For individuals from interfaith families, this developmental task becomes more complex, as they must also consider values, beliefs, and family experiences when choosing a

partner. Problem statement is how do emerging adult Muslims from interfaith family backgrounds experience the process of partner selection within Indonesia's pluralistic sociocultural context?. The research objective is a

To understand the experiences of emerging adult Muslims from interfaith family backgrounds in choosing a life partner.

2 Literature Review

a. Definition of Emerging Adulthood

Emerging adulthood is a developmental stage that begins in late adolescence, around the early twenties, and extends into the thirties. During this period, individuals undergo various processes of establishing independence, both personally and economically, which serve as an important foundation in their lives [4].

b. Definition of Partner Selection

Partner selection can be defined as the process of seeking and evaluating potential partners who meet certain criteria to build a committed relationship [5]. It is an individual's effort to find someone with whom they can establish a meaningful committed relationship, eventually leading to marriage [6].

c. Partner Selection Model

The process of partner selection is described through three main stages: [1] forming preferences, in which individuals determine their ideal partner criteria based on values, experiences, and social influences; [2] integrating preferences, namely the process of prioritizing competing desires, such as choosing between personality traits or economic stability. This mechanism is illustrated in the diagram as a gray box, as it is not yet fully understood scientifically; and [3] navigating the dynamic partner market, where individuals make actual decisions amid changing social environments. This process is represented by a black box as a symbol of the current limitations in scientific understanding [7].
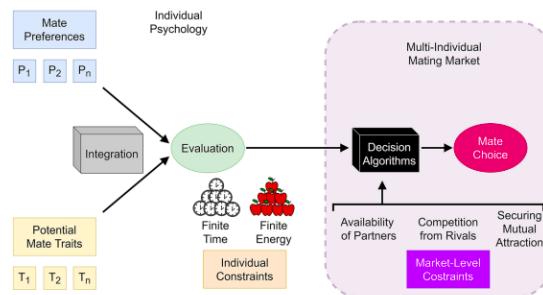
Figure 1. Partner Selection Model
Source: Conroy-Beam (2021)

3 Method

This study employs a qualitative method as its primary approach to explore and understand the meaning of social phenomena from the perspective of individuals and their social contexts [8]. Specifically, the researcher adopts Yin's typology of a *holistic single-case study design*, as the focus is on examining in depth one bounded case: the partner selection process among emerging adults from interfaith family backgrounds [9]. The study involves six participants selected through purposive sampling with assistance from key persons. The inclusion criteria were: [1] being in the early adulthood age range (20–28 years), a critical stage for relationship building and life decision-making; [2] being Muslim with an interfaith family background; and [3] having a dating experience of at least two years. Participants consist of three primary participants (N, H, and S), who are emerging adults currently in relationships, and three secondary participants (A, R, and NN), who are their significant others. To ensure consistency, the term *participant* is used throughout the study, with distinctions clarified in a demographic summary table (not shown here).

Semi-structured interviews were conducted using an interview guide developed from theories of partner selection and early adulthood development [6]. The interviews were held from March 8 to March 30, 2025, allowing for open-ended questions and probing follow-ups. Data sources include interview recordings and field notes, which were then transcribed verbatim. The data were analyzed using a theory-driven *thematic analysis*. The coding process followed three stages: [1] *open coding*, where meaningful units of data were identified; [2] *axial coding*, where codes were grouped into broader categories; and [3] *selective coding*, where core themes were refined in relation to the research objectives. This systematic approach ensured that emerging themes were both grounded in data and aligned with the theoretical framework.

To ensure rigor, the study applied criteria of credibility, transferability, and dependability. Credibility was enhanced through source triangulation (cross-checking between primary and secondary participants), member checking (participants reviewed their transcripts and interpretations), and peer debriefing with academic supervisors. Transferability was supported by providing thick descriptions of the context and participants, enabling applicability to similar settings. Dependability was maintained through an audit trail documenting all research procedures and decisions, allowing external reviewers to trace the consistency of the process [10].

4 Result

a. Choosing a Physically Attractive Partner

This reflects strong emotional drive and personal attraction, often linked to love and initial romantic interest. Such choices are typically based on liking, visual appeal, and a desire for physical intimacy. Choosing a physically attractive partner is a subtheme under *Love vs. Status Resource*, which emerged among participants N, H, S, A, R, and NN.

b. Choosing Based on Logical Stability

Individuals who emphasize this aspect usually prioritize partners who are financially stable, have steady jobs, higher education, or advantageous social backgrounds for building a secure future together. This reflects logical considerations in creating a stable life. Choosing Based on Logical Stability is a subtheme under *Love vs. Status Resource*, which emerged among participants N, H, S, A, R, and NN.

c. Uniting Through Emotional Connection

Strong love often grows from deep emotional bonds, such as trust, comfort in communication, and feeling understood. People with this preference build relationships based on inner compatibility rather than external factors. Uniting Through Emotional Connection is a subtheme under *Love vs. Status Resource*, which emerged among participants N, H, S, A, R, and NN.

d. Rationally Choosing a Dependable and Stable Partner

Some individuals are rational in partner selection, prioritizing traits such as responsibility, consistency, and emotional or financial stability. They believe a dependable partner is better equipped to face life's challenges and make important decisions. In the long term, such stability forms a strong foundation for a healthy, lasting relationship. This is a subtheme under *Dependable/Stability vs. Good Looks/Health*, found among participants N, H, S, A, R, and NN.

e. Prioritizing the Need for Security

Security is a basic need in relationships. A stable, reliable partner provides emotional comfort and protection from uncertainty in both personal relationships and social life. This need often outweighs physical attraction, as security is considered more important for creating harmony and peace. This is a subtheme under *Dependable/Stability vs. Good Looks/Health*, which emerged among participants N, H, S, A, R, and NN.

f. Career and Economic Support

A stable partner is also valued for their ability to provide economic support and encouragement in career development. Their presence becomes a source of motivation and psychological stability, strengthening independence, growth, and the pursuit of shared life goals. This is a subtheme under *Dependable/Stability vs. Good Looks/Health*, which appeared among participants N, H, S, A, R, and NN.

g. Considering Education

For those who prioritize education, partners with good academic backgrounds or high intelligence are seen as intellectually stimulating and equal discussion partners. Education is often associated with values, ethics, and broad perspectives, which are considered crucial in shaping mature, thoughtful relationships. This is a subtheme under *Education/Intelligence vs. Desire for Home/Children*, which emerged among participants N, H, S, A, R, and NN.

h. The Need to Build a Family

Conversely, some individuals prioritize the desire to establish a household and raise children. They seek partners ready to commit, willing to embrace parenthood, and who value family life. Warmth at home and emotional stability are their main priorities, even if the partner does not have a high educational background, as long as they are prepared to create a harmonious life together. This is a subtheme under *Education/Intelligence vs. Desire for Home/Children*, which emerged among participants N, H, S, A, R, and NN.

i. Tolerance from the Family

One crucial aspect of interfaith relationships is family support or at least tolerance. When a partner is socially approachable, it often paves the way for smoother family acceptance despite religious differences. Sociability and openness can reduce tensions in

socio-religious contexts. This is a subtheme under *Sociability vs. Similar Religion*, which emerged among participants N, H, S, A, R, and NN.

j. The Need for a Socially Engaged Partner

Some individuals prefer partners who are socially active, easy to interact with, open in communication, and well-connected. They believe that a socially dynamic life brings positive energy into the relationship, even when religious backgrounds differ. Social partners are also seen as better at building networks and supporting joint social activities. This is a subtheme under *Sociability vs. Similar Religion*, found among participants N, H, S, A, R, and NN.

k. Identity Formation Through Economic and Cultural Differences

Partner identity is shaped not only by religion but also by social, economic, and cultural dynamics. Having a partner from a different religion but who can form shared values through life experiences and social interactions reflects new types of relationships that are flexible and adaptive to diversity. This is a subtheme under *Sociability vs. Similar Religion*, which emerged among participants N, H, S, A, R, and NN.

l. Family Expectations of Partner's Background

Family expectations regarding a partner's family background are often significant in interfaith relationship dynamics. Many families expect their child's partner to share the same religion as a way of preserving long-standing spiritual and cultural values.

m. Individual Perceptions of Religious Beliefs

An individual's perception of religion strongly shapes how they interpret diversity in relationships, especially when facing a partner of a different faith. For some, religion is an absolute principle, making differences a major obstacle to long-term commitment. For others, religion is viewed more personally and spiritually, with love and humanity as the foundation of partner choice. These perceptions are shaped by childhood experiences, parenting styles, social environment, education, and personal spirituality. Individuals with inclusive, open perspectives are more flexible in navigating interfaith relationships, as long as communication and mutual respect exist. Meanwhile, those with rigid, exclusive religious views are more likely to face inner conflicts, especially regarding values, identity, and future relationship orientation.

n. Choosing a Life Partner

Selecting a life partner is one of the key factors influencing individuals' decisions in determining their future spouse. This process reflects personal considerations involving values, expectations, challenges, and long-term goals.

o. Learning to Live Together with a Partner

Learning to live with a partner is an important process in early adulthood developmental tasks. This transition marks the shift from individual life toward family life, involving preparation for marriage, shared responsibilities, and learning to understand one another in building a relationship.

5 Discussion

Participants highlighted that sharing the same religion was perceived as essential for long-term stability. This resonates with Erikson's notion of identity formation in early adulthood, where clarity of values is central to intimacy. Recent studies on religious identity development emphasize that interfaith youth often experience a "double negotiation" between personal spirituality and family expectations. In the Indonesian context, where marriage law privileges same-religion unions, this negotiation becomes even more complex. As one participant noted, *"changing religion is not a trivial matter-it means changing beliefs."* The data show that family approval was a recurring concern, often outweighing personal preferences. This aligns with intersectionality theory, where decisions are shaped not only by religion but also by family hierarchy, ethnicity, and socio-economic status. In Indonesia, where kinship ties and collective values remain strong, interfaith couples face amplified pressures. Participants' accounts of "*hidden prayers*" or difficulties during holidays illustrate how families both constrain and support relational choices. Beyond religious differences, participants also emphasized the importance of emotional connection, stability, and shared life goals. This reflects cultural negotiation, where partners develop strategies such as open communication and value compromise to sustain intimacy. While literature often portrays interfaith relationships as fragile, our findings show resilience when couples receive psychosocial support and maintain adaptive communication. The findings underscore the need for more inclusive psychosocial support for interfaith youth, both in counseling practices and in family education. Given Indonesia's pluralistic society yet restrictive legal framework, young adults from interfaith families often struggle with navigating between personal agency and collective norms. Rather than viewing interfaith unions solely as a risk, policy and family interventions should recognize the agency and adaptive strategies of emerging adults [6].

From a developmental perspective, partner selection in early adulthood cannot be separated from the developmental tasks that individuals must undergo. Santrock (2018), referring to Erikson, states that early adulthood is characterized by the psychosocial crisis of intimacy vs. isolation. This means that individuals are in a phase where they seek closeness and meaningful emotional intimacy with others, including building romantic relationships that may lead to marriage. At this stage, individuals have also reached cognitive maturity, namely the ability to engage in complex postformal reasoning, consider multiple perspectives, and make decisions based on a balance of rational and emotional considerations. This ability is particularly important when individuals are faced with difficult choices, such as marrying a partner from a different background while confronting family opposition [4].

The challenges of choosing a partner in early adulthood with different religious and cultural family backgrounds appear to be complex and diverse. Based on findings from six participants, conflicts emerged involving family pressure, spiritual confusion, and deep internal dilemmas. For instance, participant H expressed concern about the future of children in the context of inconsistent religious education, while participants R and A faced social pressure due to differences in ethnicity and cultural background. This illustrates that in the Indonesian context, which upholds the importance of shared religious and cultural values, individuals often experience a tension between personal affection and social norms. Erikson, as cited in Santrock (2018), emphasizes that individuals in early adulthood are in the stage of intimacy vs. isolation, marked by the drive to form meaningful relationships amid the threat of alienation due to social differences. These findings are supported by Amalia, who shows that

interfaith couples tend to face strong resistance from families, especially when there is no clear religious commitment [11]. Moreover, research by Gustiawati and Lestari, also highlights that parental approval is a dominant factor in the success or failure of interethnic and interfaith relationships, even more influential than the couple's emotional readiness itself [12].

The factors considered in choosing a partner are not only emotional but also include rational and practical aspects. Findings from participants revealed that love was the main reason, but it was followed by considerations such as comfort, responsibility, shared goals, and financial stability. Participants R and NN emphasized the importance of economic readiness as a marker of maturity in building a relationship. This aligns with Santrock's (2018) theory of early adulthood development, which states that individuals in this phase begin to apply postformal thinking, meaning they can think flexibly, consider multiple perspectives, and accept ambiguity when making important decisions such as partner selection. In addition, DeGenova (2008) explains that couples in early adulthood tend to balance between Love vs. Status Resources, namely emotional needs and social support with economic realities and family expectations. Research by Fatimah, Maulana, and Pratiwi, shows that realistic considerations such as shared life goals and responsibility are prioritized more by young couples than physical attractiveness or popularity [13]. Similarly, the study by Handayani and Sugiarti, concludes that prospective partners with financial readiness are more highly valued, as they are considered capable of being stable and supportive life companions in the long term [14].

6 Conclusion

This study highlights that partner selection in early adulthood is a critical developmental task influenced by emotional, social, cultural, and religious factors. The findings show that love often serves as the foundation, but it is not the sole determinant. Economic stability, emotional reliability, and alignment of values particularly religious beliefs emerged as equally important considerations. Participants N, H, and S experienced challenges in balancing personal aspirations with family expectations, particularly when faced with religious differences and cultural traditions. Religious incompatibility was the most significant barrier, often leading to family rejection, emotional stress, and social pressure.

At the same time, participants emphasized the importance of emotional maturity, communication, and adaptability in sustaining relationships across differences. For example, H prioritized economic security due to past financial instability, while N and S valued emotional stability and character more than physical appearance. These findings indicate that in Indonesia's socio-cultural context where family approval and religious alignment are highly valued partner choice often becomes a negotiation between personal desires and social expectations.

Implications for practice can be drawn from these findings. Educators and counselors may help young adults develop reflective decision-making skills and coping strategies when facing family resistance. Pre-marital counseling programs could emphasize communication, negotiation of values, and strategies to balance personal and cultural expectations. Policymakers can also support awareness campaigns promoting tolerance and inclusivity in intercultural and interfaith relationships, reducing stigma and creating a more supportive environment for young couples.

Recommendations for future research include broadening the sample to include individuals from different religious communities, not only Muslims, and employing larger or more diverse

samples to capture varied perspectives. A longitudinal approach could also provide deeper insights into how early decisions about partner selection evolve over time and impact marital satisfaction and family functioning.

In sum, partner selection during early adulthood in the context of religiously diverse families is shaped by complex interactions between love, pragmatic considerations, and sociocultural influences. While emotional readiness and personal choice play crucial roles, family acceptance and cultural norms remain powerful determinants of relationship success.

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Flourishing Adolescent Boys in *LPKA* Class I and Class II Foster Children

Eprillia Elfane Lucia Salsabila[1], Rr. Setyawati[2]

{eprillia.elfane@gmail.com[1], rrsetyawati21psiump@gmail.com[2]}

Fakultas Psikologi, Universitas Muhammadiyah Purwokerto[1], Fakultas Psikologi, Universitas Muhammadiyah Purwokerto[2]

Abstract. The purpose of this study was to determine the flourishing condition of adolescent boys with foster child status. The research applied a quantitative method conducted at LPKA Class I Kutoarjo and LPKA Class II Yogyakarta. The sample consisted of 97 children selected through simple random sampling. The measuring instrument used was the Flourishing Scale, which includes six aspects: positive relationship, engagement, purpose in life, self-acceptance and self-esteem, competence, and optimism. Individuals with high flourishing are characterized by motivation and willingness to develop, improve, and expand their abilities [31]. Data were analyzed using effective contribution analysis with SPSS for Windows. The results indicated that most fostered children are male aged 16–18 years. The majority have high flourishing, while some show moderate flourishing, and none have low flourishing. The programs implemented by LPKA are proven beneficial in maintaining and improving flourishing among foster children.

Keywords: Flourishing, Adolescents Boys, Foster Children, *LPKA*.

1 Introduction

Crimes are not only committed by adults, but many teenagers have begun to deal with the law. The National Police Bareskrim Annual Report 2023 noted that there has been a spike in criminal offenses from 2022 to 2023 by 34.40% [1]. Based on the report, it was noted that the highest number of criminal offenders were from high school, which reached 10.56% or 46,515 people. The next position is from junior high school at 4.46% or 19,651 people from the total criminality cases throughout Indonesia. This condition is in line with the records of the General Directorate of the General Justice Agency in 2023, which noted that there were 5,672 children who became perpetrators of criminal act [2].

The Bareskrim annual report found that the majority of criminal offenses were committed by men. It was recorded that 46.75% or 205,839 criminal offenders were male. The male dominated percentage of criminal offenders reminds us of the gender stigma that has developed in society. The stigma of gender is used as a means for society to determine and regulate levels, cultural meanings, and perspectives on identity in each gender [3]. The emergence of this stigma results from the concepts of masculinity and femininity that have developed in society. This stereotype of society will provide rules for men and women about how to dress, work, communicate, express emotions, and how to socialize in the surrounding environment. In this case, the existence of a patriarchal culture also causes many criminal offenders to be dominated by men.

This culture views men as having superior power over women [4]. The statement above is in line with the researcher's findings regarding the number of male adolescents in conflict with the law, especially in the provinces of Yogyakarta and Central Java.

In the two provinces, there are approximately 150 cases of juveniles who are legally recognized as criminals. Over the years, many teenagers who should be getting an education have stumbled into legal cases. Surprisingly, now the role of teenagers is not only to be an accomplice of an individual, but not a few of the teenagers become perpetrators. Juvenile delinquency is not only a social phenomenon that suddenly occurs, but it can be a form of consequence of unpleasant events [5]. Some of the reasons why adolescents commit crimes include moral immaturity, lack of upbringing provided by the family, social environment, and friendships that have a negative influence. In the context of applicable government regulations, adolescents who are convicted of committing crimes will undergo guidance at the LPKA and are referred to as foster children. The LPKA institution not only serves as a place of punishment and rehabilitation but also as a guidance process for children in conflict with the law, restructuring, and preventing children from losing their future despite their status as foster children. The phenomenon of adolescents as wards reflects developmental deviations, such as failures in moral development and self-control during adolescence.

Adolescence is in the transition period from childhood to adulthood which provides various changes [6]. At the same age, there is also a demand to always be able to make adjustments to new things and values in their interactions in the social environment [7]. In the same time, the changes that occur cause adolescents to not be able to optimize their physical and psychological changes properly, giving rise to several new problems, such as feelings of wanting to fight, unstable, and restlessness, which often cause negative responses in adolescents [8]. This condition is in line with the term adolescent social deviation. Adolescent social deviation is a social phenomenon in adolescents due to conditions of neglect carried out by the surrounding environment. So that it creates a feeling that no one can understand his desires and heart [9]. Furthermore, these feelings build an egocentrism system embedded in adolescents. The inability of adolescents to respond leads to maladaptive responses and leads to criminality.

Another factor that causes adolescents to commit crimes is the desire to be accepted and recognized in their friendship environment. Moreover, the friendship environment is the second world that is closer to adolescents after family. Adolescence individuals have the main task of solving the identity crisis, resolving identity confusion, and building a unique identity in adolescents so that they can create meaningful relationships with others [10]. In other words, at that age, adolescents are looking for existence and identity, even if it is by violating norms and rules. It is also in line with the research that the klitih gang phenomenon carried out by male adolescents in Yogyakarta is carried out as a means of gaining existence and status in the group [11]. The act of violence is even tolerated to the point of being celebrated. The treatment aims to strengthen masculinity which leads to physicality and aggressiveness. Adolescents who join klitih gangs also use gangs as a place of expression, maintaining existence, and showing revenge.

Adolescents who already hold the status of foster children will have a full life in the *Lembaga Pembinaan Khusus Anak*. The process of living in a *LPKA* environment requires fostered children to adapt and have an impact on changes in their interaction process with the outside world. The changes experienced by fostered children can cause new problems to emerge, such

as mental problems that can affect physical, emotional, thinking, and adolescent functioning in the environment [12]. Mental problems are usually caused by distance, a sense of suffering, inequality, a desire to end life, or emotions that are released by hurting others [13].

Individuals with a healthy and optimally functioning mental state are characteristic of psychological well-being [14]. The word well-being in the field of positive psychology is called flourishing. Flourishing is the highest level of well-being in individuals indicated by life goals, self-control, and self-acceptance [15] Individual flourishing conditions are dynamic, which means that these conditions can change over time. The high and low quality of flourishing is influenced by environmental conditions and situations in individuals [16]. Low flourishing can be caused by environmental conditions and situations that are not in accordance with the desires within the individual. So that it can be in line with the conditions of foster children who have the potential to have low flourishing, because of the restrictions on the lives of foster children in their interactions and the freedom that is taken away [17].

The research examining the condition of flourishing in foster children is important and interesting, considering that the *LPKA* environment tends to be prescriptive and creates a sense of discomfort in foster children. This condition can influence the level of flourishing quality in foster children. Through a deep understanding of the aspects of flourishing, it will provide a real picture that in reality the experience of adolescents in prison does not all have a positive impact. Even unhappy events can also occur and have a direct impact on the emotional condition of foster children. One of the factors in the problems of foster children is due to the demands that must be faced to be able to adapt to a new and unfamiliar prison environment for adolescents. This can trigger the process of achieving flourishing in adolescents who have the status of foster children to be more difficult when compared to adolescents their age. So it can be interpreted that the life of fostered children adolescents will be heavier and different [18]. Based on the explanation above regarding the theory and cases that occur, the implementation of this study aims to determine the condition of flourishing in adolescent boys in *LPKA* Class I and II.

2 Literature Review
2.1 Adolescent

Etymologically, the word adolescence comes from the Latin "adolescence" which means growing or growing to reach maturity. So that children are said to be adolescents and are considered adults if they are able to reproduce [19]. According to WHO, the concept of adolescence is divided into three, such as biological, psychological, and economic [9]. Biologically, adolescence is defined as the condition of individuals when they first experience signs of secondary sexual maturity until they reach sexual maturity. Psychologically, adolescents are individuals who are experiencing a process of development and identity from childhood to adulthood. Meanwhile, economically, adolescence is a period of transition from full socioeconomic dependence to a more independent state [9]. Adolescence is an age that has become integrated into adult society, so that individuals no longer feel they are in a position younger than their older people but feel equal or equal [20].

Adolescents will go through three phases in their lives [21], including first the pre-adolescent phase occurs at the age of 11 or 12-13 to 14 years, this phase is classified as the shortest phase, which occurs for only one year. In this phase adolescents will experience hormonal changes that cause rapid mood swings. In an adolescent's life, adolescent will also reflect on his or her changing self-reflection and excessive thoughts about other people's opinions of him or her.

Second, the early adolescent phase occurs at the age of 13 or 14 to 17 years, this phase has many rapid changes and reaches a breaking point. Adolescents will begin to explore their identity and emotional conditions are unstable. In this phase, adolescents will feel that they have the right to make their own decisions. Third, the advanced adolescent phase occurs at the age of 17-20 or 21 years and the desire to be the center of attention begins to appear. So that adolescents begin to want to highlight themselves, have high ideals, and are full of enthusiasm. In addition, there is a sense of emotional independence.

2.2 Foster Children

According to legislation number 22 of 2022, fostered children are children who are in the range of 14 - 18 years and are undergoing guidance in Specialized Institutions for Children [22]. Adolescents who commit criminal offenses will be dealt with in accordance with the juvenile criminal justice system which refers to the processing of guidance in *LPKA*. Adolescents who have been legally confirmed guilty will then be handed over to the children's prison in order to provide guidance so as to improve behavior and skills in children during the detention process [23].

2.3 Flourishing

The concept of well-being in the field of positive psychology refers to flourishing. The word flourish comes from the Latin "Flor" which means flower and "Bhlo" from the Indo-European language which means a blossoming flower. So Flourish can be defined as growing, developing, and successful [24]. The word flourishing is also a development of individual subjective well being, which means that individuals not only feel happy, but can function optimally in their psychosocial [25]. The concept of flourishing is described as the highest level of individual well-being that refers to hedonic and eudaimonic theories. Hedonic theory regards happiness subjectively because it is directly related to the evaluation of the person [26]. Meanwhile, eudaimonic theory explains that well being is not only feeling happy, because being happy does not always describe a psychologically well-being individual. So that the definition of happiness from eudaimonic theory and centered on Aristotle's theory, happiness focuses on the meaningfulness of life with good happiness and a life that reflects human excellence [24].

Flourishing is a positive psychology concept that describes a complete life [27]. In line with the opinion that flourishing is the highest level of individual well being [28]. It is characterized by individuals having a valuable assessment of every experience passed, leading to life achievements, having good relationships with others, and contributing to community activities. In another study stated that if individuals have low flourishing, it will foster a sense of self-dissatisfaction, easily provoked by social pressure, and easily frustrated [29].

Another stated, flourishing is when an individual can use their abilities optimally so that they can function well in the environmen [30]. The encouragement and willingness within individuals to continue to develop, improve, and extend their abilities are characteristics of individuals who have high flourishing [31]. Flourishing is an individual's ability to use abilities optimally to achieve goals and enjoy every roles in the process [32]. Meanwhile in another opinion, flourishing is an individual who develops fully, does good either morally or intellectually, and engages in moral activities (33). Thus, flourishing can be described as an individual who is fully developed in affective, cognitive, behavioral, social, and political excellence [34].

Flourishing into 10 components: competence, emotional stability, engagement, optimism, meaning, positive emotions, positive relationships, resilience, self-esteem, and vitality [35].There are several factors that can affect flourishing, namely socio-demographic, personality, and individual situational [36]. Flourishing also have several aspects, specifically positive relationships, engagement, purpose in life, self acceptance and self esteem, competence, and optimism The positive relationship aspect means that individuals have a good social life and can play a role in providing well-being for others and their surroundings. The engagement aspect means that individuals are fully involved and have the desire to participate in activities. The purpose in life aspect illustrates that individuals can determine life goals so that they can know the process of achieving goals in a meaningful life. Then the self acceptance aspect describes the individual is ready to accept what is in him, while the self esteem of the individual evaluates life so as to achieve a sense of satisfaction with his life. The competence aspect describes the individual's ability to carry out work competently. And the optimism aspect explains that individuals have confidence in themselves about the future and see the future with full responsibility.

3 Method

The research used a quantitative research design. Quantitative research is a research approach to test theories and relationships between variables measured using instruments so that they can be analyzed with statistical procedures [37]. The research data collection method uses a questionnaire distributed to foster children. The flourishing measuring scale used refers to the theory of Diener et al 2010, which has been modified for each item. Based on that theory, flourishing is influenced by six aspects, including positive relationships, engagement, purpose in life, self acceptance and self esteem, competence, and optimism [31]. Flourishing scale has eight items with seven alternative answers. In this study, the items on the scale were modified by the researcher to 27 items with five alternative answers that already describe each aspect of flourishing.

The research was conducted in two provinces, namely Central Java and Yogyakarta, located in *LPKA* Class I Kutoarjo and *LPKA* Class II Yogyakarta. The study population amounted to 150 fostered children with a research sample of 97 fostered children. The research sampling technique used simple random sampling technique. The simple random sampling technique is a way of taking research samples from the total population randomly and not paying attention to the levels in the population [38]. Thus, this research technique provides equal opportunities for all populations to be selected as research samples.

This research data analysis uses effective contribution analysis. Effective contribution analysis is one of the statistical methods used to measure the contribution of each independent variable to the dependent variable in research [39]. The technique of calculating effective contribution analysis uses SPSS for windows version 27.0 software by considering the value of cross-product deviations and covariances, regression, and the component value of each dependent variable. After that, the value obtained is entered into the effective contribution formula for each dependent variable.

$$SE_{X=} \frac{b_x \cdot crossproduct \cdot R^2}{Regression} (100\%)$$

4 Result

This section presents the research results obtained based on the data that has been collected and analyzed. To provide a clearer picture, the results are presented in the following table:

Table 1. Data on the Number of Respondents

No	Gender	Number of Children	Percentage
1	Male	97	100%
	Total	97	100%

Based on the table above, it can be said that all respondents totaling 97 foster children are male.

Table 2. Categorization Level Data

No	Categorization	Number of Children
1	Low	27 – 62
2	Medium	63 – 98
3	High	99 – 127

Based on the measurement results, respondents' scores were classified into three levels: low (27–62), moderate (63–98), and high (99–127). This grouping facilitates the interpretation of each respondent's achievement level according to the indicators in the instrument, so that further analysis can be focused on groups with different intervention needs.

Table 3. Data Analysis Results

No	Categorization	Total of Children
1	Low	0
2	Medium	18
3	High	79
	Total	97

Based on the classification of respondents' scores, the children were divided into three achievement categories: low, medium, and high. In the low category (score range 27–62), there were no respondents, so the number was 0 children. This condition shows that all respondents were at a relatively good level of achievement. Furthermore, in the moderate category (score range 63–98), there were 18 children or about 18.6% of the total respondents. This indicates that a small number of foster children were at a moderate achievement level, where some indicators had been met but further improvement was still needed to reach the optimal level. The high category (score range 99–127) is the group with the largest number of respondents, namely 79 children or about 81.4% of all respondents. This finding shows that the majority of foster children are at a high level of achievement, which means that most of the indicators have been well met.

Overall, the number of respondents in this study was 97 children, with a dominant distribution in the high category. These results provide an overview that the condition of foster children in

general shows a positive trend, although there are still a small number of respondents who are in the moderate category and require further attention.

Table 4. Effective Contribution of Each Aspect

No	Aspects	Effective Contribution of Each Aspect
1	Positive relationship	21.30%
2	Engagement	22.48%
3	Purpose in life	17.10%
4	Self acceptance and self esteem	24.25%
5	Competence	1.87%
6	Optimism	13%

Based on the results of the SEM analysis, the effective contribution of each aspect to children's flourishing demonstrates notable variations. Self-acceptance and self-esteem made the largest contribution at 24.25%, followed by engagement (22.48%) and positive relationships (21.30%), indicating that personal acceptance, active involvement, and supportive social connections are the dominant factors in shaping psychological well-being. Purpose in life contributed 17.10%, underscoring the importance of having clear goals and meaning, while optimism accounted for 13%, which, although smaller, still plays a role in enabling children to face challenges with positive expectations. Meanwhile, competence showed the smallest contribution at 1.87%, suggesting that while abilities remain relevant, they are not the primary determinant of flourishing. Overall, these findings suggest that flourishing among children is more strongly influenced by internal psychological factors than by competence alone.

5 Discussion

Table 1 explains that all respondents totaled 97 foster children and were male. The research respondents were between 14-18 years old and were serving a sentence of under 4 years. Then table 2, explains that this study has three levels of categorization which are low, medium and high. The foster children are said to have a low level of flourishing if they get an accumulated score between 27 - 62, a medium level if they get a score between 63 - 98, and high if the foster children get a score between 99 - 127. Based on Table 3, it explains that the results of research conducted in *LPKA* Class I Kutoarjo and *LPKA* Class II Yogyakarta, on average, foster children have a high level of flourishing. A total of 79 foster children or 81.44% of the total foster children have a high level of flourishing. Meanwhile, 18 foster children or 18.56% have a moderate level of flourishing. This means that there are no foster children from both *LPKA* who have a low level of flourishing.

Table 4 when discussing the aspects of flourishing, it is found that all aspects have a contribution to the flourishing of foster children. The highest contribution is in the aspect of self acceptance and self esteem of 24.25%. This means that the flourishing of foster children is influenced by a sense of acceptance of what is in them even though it is in *LPKA*, then there is an evaluation of foster children which encourages a sense of satisfaction with life while in *LPKA*. A study is in line with the results of this study that self acceptance and self esteem contribute significantly to flourishing and are the biggest factors in predicting flourishing [40]

The second factor is influenced by the engagement aspect of 22.48%, this aspect illustrates that foster children have full involvement in all activities in *LPKA* and are interested in following

until the end of the activities organized by prison officers. Meanwhile, the flourishing of foster children is influenced by the positive relationship aspect by 21.30%. This shows that there is a good relationship between foster children with each other or with prison officers. So as to create a sense of satisfaction within the foster children and can also help increase the happiness of others. The results of this study are in line with research which states that active involvement in positive activities can reduce symptoms of internalization and externalization in juvenile prisoners [41]. Furthermore, it will have an impact on increasing the psychological well-being of juvenile prisoners. Meanwhile, another research explains that teenage prisoners can mingle and relate well with adults in correctional institutions [42]. Having a good and warm relationship is one of the characteristics of a criteria of maturniti.

Other aspects also contribute to the flourishing level of fostered children although not as much as the three aspects above. The purpose in life aspect has a contribution to the flourishing level of 17.10%, meaning that children's understanding of their future desires and how to achieve these desires increases their sense of satisfaction and happiness. This is in line with research that adolescents who have a strong life purpose will experience increased psychological well-being including positive affect, life satisfaction, and healthy identity development [43]. Another study also explained that adolescent prisoners who have desires and goals after being released from prison improve adolescent well-being [42]. In addition, it is also explained that individuals who have clear life goals tend to have a positive personality and play a role in developing identity [44].

Then the optimism aspect has an effect of 13%, this aspect describes the attitude of belief and trust that grows in him by accepting all the past that has happened and seeing the future with enthusiasm and new hope. It is consistent with previous research conducted that optimism is associated with increased psychological well-being and reduced symptoms of depression in adolescents if the application of optimism also pays attention to other psychological elements [45]. The level of optimism will foster the ability to view the future more positively and increase the belief that individuals can overcome life's challenges. The last aspect of competence has an effect of 1.87% on the level of meaningfulness of fostered children. This aspect describes the feeling of being able to do work skillfully and capably. Based another research, one of the results of their research shows that adolescent prisoners have good welfare which is characterized by the ability of adolescents to develop their potential, such as being active in church services and active as library administrators in correctional facilities [42].

In other words, reviewing the research results and data analysis, it can be concluded that the high level of flourishing is not entirely influenced by the luxury of the building occupied, the good infrastructure provided, or the delicious food eaten every day. Rather, fostered children have an average high flourishing quality because of the educational facilities and skills that are provided.

6 Conclusion

Based on the findings, it was revealed that most of the fostered children in LPKA Class I Kutoarjo and LPKA Class II Yogyakarta are male and in their late teenage years. The majority of them demonstrate a high level of flourishing, while some are at a moderate level, and none are at a low level. The aspects that most strongly contribute to their flourishing include self-acceptance and self-esteem, active engagement, positive relationships, sense of purpose, optimism, and competence. This positive condition is supported by the various coaching activities, educational facilities, skill development programs, and other initiatives provided by the institutions. Therefore, the study shows that the programs implemented in LPKA play a

significant role in maintaining and enhancing the psychological well-being of the fostered children.

Acknowledgments

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The Relationship Between Effective Communication and Marital Satisfaction in Wives in The First Ten Years of Marriage

Ramaryllis Chesylia Monalu[1], Malida Fatimah[2]

{190810397@student.mercubuana-yogya.ac.id[1], malida@mercubuana-yogya.ac.id [2]}

Universitas Mercu Buana Yogyakarta

Abstract. The early years of marriage represent a crucial adjustment period for couples. Marital satisfaction is defined as an individual's subjective evaluation of the quality of their marital relationship. Effective communication is presumed to play an important role in enhancing marital satisfaction. This study aims to examine the relationship between effective communication and marital satisfaction among wives within the first ten years of marriage. The research method employed is quantitative with purposive sampling, involving 163 participants. The instruments used were the Marital Satisfaction Scale and the Effective Communication Scale, which were adapted and developed by the researcher. Data analysis was conducted using Pearson Correlation. The results indicate a significant relationship between effective communication and marital satisfaction with a significance value of 0.669. The findings of this study may guide couples in strengthening marital harmony and satisfaction and is expected to contributed to academic references in the fields of developmental psychology.

Keywords: Marital Satisfaction, Effective Communication, Wives

1 Introduction

The early period of marriage is a very important and fundamental period, which determines the desire for future married life [1]. The early phase of marriage of one to ten years is a critical period where various life transitions occur such as changes in status from single to married, changes in privacy, actions in decision making, financial conditions, and the presence and care of children [2]. The beginning of marriage is a period of adjustment that must be gone through by every couple [3], if there is dissatisfaction with the partner, this can cause conflict that will threaten the marriage, even with the worst possibility of divorce [4].

According to Lavner et al. [5], even couples with initially high marital satisfaction may end up divorcing. This underscores the impact of poorly managed marital dynamics on long-term relationship quality. Ten years of marriage age greatly indicates the sustainability of a marriage. Decreased marital satisfaction can lead to divorce at the age of ten years of marriage [6]. This indicates that the first ten years of marriage are a critical period for a couple to maintain harmony and increase marital satisfaction.

According to the APA Dictionary of Psychology, marriage is a social culture where women and men commit to a relationship where sexual relations are declared legal and partners can be

responsible for each other [7]. Marital satisfaction is an important factor in maintaining the harmony of a marriage. Fowers and Olson [8] define marital satisfaction as a subjective feeling of the quality of a marriage as assessed by various criteria. In accordance with the definition proposed by Olson, DeFrain, and Skogrand [9] marital satisfaction refers to the emotional evaluation made by spouses regarding the overall quality of their marital relationship.

Several studies have shown that wives tend to experience lower satisfaction than husbands, especially in emotional integrity and roles in marriage [10]. Papalia and Olds [11] emphasize factors that influence marital satisfaction include the quality of communication, age at marriage, personality, religious beliefs, parental upbringing, emotional maturity, commitment, economic stability, presence of children, relationships with extended family and friends, and leisure activities outside of daily routines.

Communication plays an important role in marriage, without effective communication it will be difficult to maintain a strong marriage relationship. Canary and Stafford [13] define effective communication as actions taken to maintain relationship harmony to create success between partners. The first ten years of marriage which is still considered beginning, really needs intimacy which plays an important role in forming effective communication as a foundation for the process of living together where husband and wife understand their respective roles and functions in the family. Balanced reciprocity in communication is also the key to increasing satisfaction in marriage [14].

The results of a study conducted by Humaira [15] on Interpersonal communication and marital satisfaction in newly married couples with a marriage duration of 6 months to 5 years show that marital satisfaction is highest in the first year of marriage, with husbands reporting higher levels of satisfaction than wives. Widyarini et al. [16] emphasized that effective communication greatly contributes to a lasting marriage relationship. Devito [17] stated that effective communication will produce dominant human relationships that emphasize the quality of openness, sympathy, support, positive state of mind, and equality. According to Harahap and Lestari [18], the more effective the communication, the more harmonious the relationship between husband and wife. Effective communication is not necessarily seen from how intense the communication is, but rather from how partners show attention to each other, particularly how the wife pays attention to her husband, ensuring continuous communication is maintained.

Data can also show that dissatisfaction in marriage can contribute to the increasing divorce rate in Indonesia. In 2023, the Supreme Court [Directorate General of the Religious Affairs Agency] reported that there were 408,347 divorce cases [19], with 251,828 divorce cases caused by disputes and quarrels [20]. Amato and Hohmann-Marriot [12] in their research revealed that divorce can be triggered by dissatisfaction in marriage that occurs repeatedly.

Previous studies have revealed that communication plays a crucial role in fostering marital satisfaction and harmony, both among newly married couples and those in longer marital durations. Marital satisfaction tends to be higher during the early years of marriage but begins to decline as couples approach the tenth year, which is often considered a critical stage in marital life. This study, however, specifically focuses on the relationship between effective communication and marital satisfaction among wives in the first ten years of marriage, thereby providing a novel contribution to enriching the understanding of marital satisfaction dynamics during this critical period.

Previous studies have focused on various aspects of communication, ranging from the influence of popular culture, the general conceptualization of effective communication, newly married couples, to the critical ten-year period of marriage. This study, however, focuses on the relationship between effective communication and marital satisfaction among wives in the first ten years of marriage, thereby offering a newcontribution to enriching the understanding of marital satisfaction dynamics within this critical period.

2 Literature Review

Marital Satisfaction is an individual subjective evaluation of their marital relationship which pertains to various criteria contributing to marital satisfaction, such as happiness, harmony, mutual household agreement, and the quality of interpersonal treatment between spouses [8]. Sayehmiri et al. [21] define marital satisfaction as a mental state that cannot be achieved directly but requires continous effort from spouses, especially in the early years of marriage when satisfaction can be unstable and potentially threaten marital stability.

Rahmananda, Adiyanti, and Sari [6] suggest that marital satisfaction refers to an emotional evaluation made by individuals regarding their marital relationship. Olson, Defrain, and Skogrand [9] define it as the emotional state experienced by spouses when assessing the overall quality of their marriage. This sense of satisfaction typically involves a comprehensive evaluation that encompasses multiple aspects of the relationship. Similarly Meri [4] describes marital satisfaction as an individual's assessment of their marital condition, which may reflect their level of optimism about the relationship or a combination of satisfaction derived from various dimensions of marital life.

Fowers and Olson [8] identify ten essential dimensions in marriage that contribute to the development and enhancement of marital satisfaction: communication, personal issues, egalitarian roles, conflict resolution, financial management, leisure activities, sexual relationship, children and marriage, family and friends, and religious orientation. Furthermore, Papalia and Olds [11] emphasize factors that influence marital satisfaction include the quality of communication, age at marriage, personality, religious beliefs, parental upbringing, emotional maturity, commitment, economic stability, presence of children, relationships with extended family and friends, and leisure activities outside of daily routines.

Communication is an interaction expressed symbolically, conveyed through language and adhering to established norms, the language used must be understandable, accurate, honest, and appropriate [22]. According to Canary and Stafford [13], effective communication is an action perfomed to maintain harmony in a relationship as desired, with the aim of achieving success between spouses. Effective communication is the activity of conveying information to one's spouse, understanding what is communicated, and maintaining the relationship [23]. Aligned with the definition stated by DeVito as cited in Pangaribuan [24], effective communication results in dominant interpersonal relationships that emphasize qualities such as openness, empathy, support, positive mindset, and equality.

Canary and Stafford [13] identify several aspects of effective communication. Positivity, which refers to behaving well and being pleasant to spouses. Openness, defined as mutual transparency between spouses regarding their thoughts and feelings. Assurance, which involves maintaining a strong sense of commitment within the relationship. Social networking, referring to nurturing the relationship by building and sustaining good connections with family and friends. And sharing task, which involves maintaining the relationship through a responsible division of roles and responsibilities between spouses.

Effective communication contributes significantly to enchanging marital satisfacation, particularly during the first ten years of marriage. Communication refers to the process of conveying messages through symbols such as words, images, numbers, and other forms [25]. According to Harold Lasswell in Caropeboka [26], effective communication comprises several components, the communicator, the message, the medium, the recipient, and the resulting effect of the communication process. Within the context of marriage, effective communication can promote greater intimacy and mutual understanding between spouses [27].

Effective communication is recognized as a key determinant of marital satisfaction among wives particulary during the first ten years of marriage. According to Canary and Stafford [13], effective communication influences marital satisfaction through positivity, which refers to friendly behavior, attentiveness, creating a warm atmosphere, reducing conflict, and enhancing overall marital happiness [28]. Openness involves emotional transparency with the aim of strengthening emotional closeness and increasing marital satisfaction [29]. Assurance serves as an expression of love and provides a sense of security regarding the future of the relationship [30]. Social networking includes maintaining social connections that reinforce the couple's emotional bond [8][31]. Sharing tasks refers to taking on roles and responsibilities in household duties fairly, thereby enhancing the sense of equity within the relationship especially in the first ten years of marriage [13][32].

Effective communication between couples plays an important role in preventing and resolving problems in marriage such as arguments, conflicts, adn infidelity. The first ten years of marriage represent a critical period that determines the longevity of the relationship. A decline in marital satisfaction during this period may increase the risk of divorce [6]. Effective communication is not merely a matter of frequency, but rather how couples show mutual attention amid their daily routines [18]. Communication skills also assist couples in addressing conflict, managing psychological differences, and facing emotional challenges such as hormonal changes experienced by wives [33][34].

3 Method

This study employs a quantitative approach with data collected using psychological scales. The subjects of this study are wives who have been married for 1 to 10 years. Two measurement scales are used, the marital satisfaction scale and the effective communication scale, both employing a four-point Likert scale. Participants are instructed to complete the questionnaire within 10 to 15 minutes. All responses are collected anonymously and treated with strict confidentiality, solely for research purposes.The data were analyzed using Pearson Product-Moment correlation analysis.

3.1 Instrument

The marital satisfaction scale consists of 10 items. Respondents are asked to answer items that assess various aspects of marital satisfaction, including communication, personal issues, egalitarian roles, financial management, conflict resolution, leisure activities, sexual relationship, children and marriage, family and friends, and religious orientation. The effective communication scale comprises 15 items, from which respondents are asked to respond to 15 items measuring five dimensions: positivity, openness, assurance, social networking, and shared tasks.

The scale was then adapted and developed based on the marital satisfaction scale from Fowers & Olson [8] and the effective communication scale from Saputri [35]. Validity was assessed through professional evaluation, and reliability was measured using Cronbach's Alpha with a reliable value of greater than or equal to 0.600. Examples of items on the marital satisfaction and effective communication scales include "When I get married, I will accept my husband's opinion even if it differs from mine" in the conflict resolution aspect and "My husband and I are open with each other about any situation" in the openness aspect.

3.2 Subject of the Research

The subjects of this study consisted of 163 wives whose length of marriage ranged from 1 to 10 years. The subjects was obtained by purposive sampling technique, which involves selecting participants based on specific criteria [36]. This criteria for subjects in this study were wives with a marital duration of 1 to 10 years. This technique was employed because the subject criteria ha d been predetermined by the researcher, ensuring that all participants met the established requirements.

3.3 Data Analysis

The analysis of this study used Pearson Correlation. It is because the researcher want to measure the correlation between the independent variable which is effective communication, and dependent variable which is marital satisfaction.

4 Result

This study was conducted through the distribution of questionnaires for data collection, resulting in a total of 163 wives as a subject, each with a marital duration ranging from 1-10 years

Table 1. Distribution Of Study Subject Based On Length Of Marriage

Duration [Years]	Frequency	Presentation [%]
1-3	73	44,79
4-6	49	30,06
7-10	41	25,11
Total	**163**	**100%**

In table 1, the majority of respondents were in the 1-3 years of marriage category, totaling 73 subject or 44,79%, then respondents with 4–6 years of marriage, totaling 49 individuals or 30.06%, and respondents with 7–10 years of marriage, totaling 41 individuals or 25.11%.

The assumption test is conducted first before the hypothesis test is conducted. The normality test employed was the Kolmogorov-Smirnov test with a significance value (Sig) of 0.000, indicating that both variables are normally distributed.

The result of the linearity test in this study indicate that the variables of effective communication and marital satisfaction have a significance value of p= 0,000. If the significance value <0.050 then there is a linear relationship between the two variables. Based on these results, the assumption test is fulfilled and the analysis can proceed to the hypotesis test.

Table 2. Hypotesis Test Result

Variable	Sig.	Correlation	Description
Marital Satisfaction			
Effective Communication	0,000	0,669	Significant

From table 2 it can be seen that the result of the correlation coefficient analysis between effective communication and marital satisfaction are p=0,000 (p ≤ 0,05). These results indicate that there is a significant positive relationship between effective communication and marital satisfaction. This indicates that the hypothesis is accepted, the better the communication between spouses, the higher the marital satisfaction. Conversely,poorer communication between spouses is associated with lower level of marital satisfaction.

5 Discussion

This study provides empirical evidence of a significant positive relationship between effective communication and marital satisfaction among wives in the first ten years of marriage. This indicates that the more effective communication is associated with greater marital satisfaction, whereas less effective communication tends to be associated with lower levels of satisfaction. The acceptance of the hypothesis in this study indicates that effective communication is a factor positively correlated with marital satisfaction.

The result of this study conducted by Haris and Kumar [37] also revealed a positive correlation between marital satisfaction and communication. This suggests that the more effective the communication between spouses, the greater the level of satisfaction within the marriage. Conversely, ineffective communication is associated with lower levels of marital satisfaction. In other words, communication plays a pivotal role in the quality and stability of marital relationships.
Hananiah and Sanjaya in their study [38] reported a significant positive relationship between interpersonal communication and marital satisfaction among couples engaged in long-distance

marriages. Notably, 75% of the participants in this study were women in the role of wives. This finding suggests that the more effective the interpersonal communication, the higher the level of marital satisfaction experienced by wives in long-distance relationships.

The results also align with the findings of Pandey and Neelam [39] confirm that the ability to communicate effectively has a significant positive correlation with marital satisfaction. This implies that when communication is conducted effectively, marital satisfaction tends to be high. Conversely, ineffective communication is associated with lower levels of satisfaction within the marital relationship.

According to Buehler and Well as cited in Nyarks and Hope, communication is a fundamental form of interaction within a relationship that enables individuals to express a wide range of meanings. Given the diverse ways in which people communicate, couples often anticipate differences that can make communication more dynamic and engaging. Effective communication skills are positively correlated with marital satisfaction and are considered essential for achieving happiness in marriage [27].

The acceptance of the research hypothesis is further substantiated by the coefficient of determination (R^2), which was found to be 0.448. This indicates that 44.8% of the variance in marital satisfaction can be explained by effective communication. The remaining 55.2% may be influenced by other factors not included in this study.

6 Conclusion

Based on the analysis and discussion of this study, it can be concluded that effective communication has a significant relationship with marital satisfaction among wives during the first ten years of marriage. The better the communication between spouses, the higher the level of marital satisfaction. The findings of this study are expected to provide valuable insights for couples, especially women planning to marry, on how to build a healthy marital relationship to achieve harmony and satisfaction in marriage. The result of this study are expected enrich academic discourse and serve as a reference for future research in the field of psychology. Furthermore, this research can be expanded by incorporating other factors that may influence marital satisfaction.

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Outdoor Activity as Mindfulness Process for Early Childhood Development

Rikha Surtika Dewi[1], Nita Anggi Purnama[2]

{rikha.sd@gmail.com [1], nita.ap@umtas.ac.id[2]}

Muhammadiyah University of Malang, Indonesia[1], Muhammadiyah University of Tasikmalaya, Indonesia[2]

Abstract. Today we are faced with the challenge of children playing outdoors less and less, which actually provides many benefits for early childhood development. Outdoor activities can provide stimulation not only in physical and social aspects, but also cognitive aspects and other aspects in a child's development. This literature study aims to analyze various previous studies related to the importance of playing outdoors for early childhood development. This article uses a literature review research method with reference sources from previous research. Based on the results of a search for 16 articles related to the importance of outdoor activities as meaningful activities for early childhood, most of them provide reinforcement that outdoor activities such as playing in nature and games that interact with the outside world make a major contribution to the growth and development of early childhood.

Keyword: Early childhood, mindfulness, outdoor activity, development

1 Introduction

A nation's future is shaped by how successfully its children attain optimal growth and development., in addition, the age of children from birth to 6 years is a crucial phase in the growth and development of children [1]. However, on the other hand, early childhood is in the golden age where all children's potentials develop rapidly [2], Children possess strong curiosity and enthusiasm, naturally engaging in exploration and adventure, and they learn by maximizing their remarkable potential. At this golden age, the child's brain grows optimally, as does their physical growth. Children experience extraordinary growth and development [3]. Child development encompasses changes in physical, motor, and language abilities that occur throughout childhood [4]. Therefore, we as adults are important to create a conducive environment for children to stimulate development and maximize their potential in their growth and development [5]. A conducive environment for children is an environment that supports the growth and development of children so that children are able to carry out activities safely and comfortably. One of the activities that can be done by children is outdoor activity. Various studies have shown that outdoor activities provide benefits for child development [6]. Outdoor activities carried out by children can be used as a mindfulness process for early childhood development. Mindfulness is a group of practices that focus on developing self-awareness through the systematic use of concentration [7]. Mindfulness programs have been implemented in various places such as schools, universities, institutions, and companies including for children [8]. The purpose of this mindfulness process is to trigger students' awareness, enable them to

think critically, increase their interest in the learning process and activate their creativity while outdoors [9]. In addition, outdoor activities are expected to stimulate children's imagination and provide opportunities for children to try various ideas without feeling afraid and children will find that designing something new and different can be satisfying [10]. Children who are naturally homo ludens or playful creatures will get maximum benefits through these activities [11]. However, most adults are worried about outdoor activities so that children play more indoors and less explore the surrounding environment [12].

From the explanations above, we know that outdoor activities are important for children's development. In addition, it is hoped that outdoor activities can be used as a mindfulness process for children's development. Therefore, this study aims to trigger readers' awareness that outdoor activities can be used as a mindfulness process for early childhood development.

2   Literature Review

2.1 Outdoor activity for early childhood

The main goal of early childhood education is to improve the overall development of children. Thus, children need a variety of learning environments in order to develop optimally, one of which is outdoor activities that will affect the overall development of children in many aspects [13]. Outdoor learning provides opportunities to learn various subjects and supports the holistic development of children and children will feel happy because they can go on outdoor adventures involving various challenges [14]. Various natural and interesting activities, playing improves cognitive, physical, social, and emotional well-being, and provides the conditions necessary for children to develop and learn. Through play, children can experiment, solve problems, think creatively, cooperate with others, etc., and gain deeper knowledge about themselves and the world [15]. Outdoor activities are a form of experiential learning that allows children to learn to use all their senses through exposure to nature [16]. Outdoor learning environments also provide opportunities for children to express their curiosity, as their desires are stimulated when they are outdoors. In addition, outdoor play gives children the freedom to move freely, so that they can better express their talents [17].The benefits of outdoor play on child development are reinforced by the results of previous studies, which explain that through outdoor play experiences, it can have a positive impact on children's individual development and behavior. Everyone builds their reality as a result of their experiences and how they interpret those experiences [18].

2.2 Mindfullness process for earlychildhood development

Studies on early childhood development (ECD) indicate that it represents one of the most crucial stages in an individual's life [19] because of the fundamental role of early childhood growth as a basis for human development in adolescence and adulthood [20]. To achieve this, children need to be given meaningful activities to enable them to understand the world around them more effectively [21]. Early childhood development must always be supported to reach its optimal stage. A child's learning environment plays an essential role in their overall growth and development. Must create an environment that optimally fosters various aspects of child growth and development [22].

3 Method

This study uses a Systematic Literature Review (SLR) to gather and examine previous research related to the topic. Through this method, various sources, such as journal articles, conference papers, books, and dissertations were reviewed to build the foundation of the discussion and propose relevant solutions [24]. The review followed several steps adapted from [25]. First, the researchers searched for and collected articles that matched the topic of outdoor activities as a mindfulness approach in early childhood development. Next, the articles were screened by focusing on key ideas, identifying important themes, and removing sources that were not relevant. The selected studies were then organized into tables and short summaries to show the main findings. After that, the literature was discussed and interpreted based on the chosen review method. Finally, conclusions were drawn from the overall findings of the review.

4 Result

In the early stages of collecting articles based on the relevance of the topic raised regarding Outdoor Activity as Mindfulness Process for Early Childhood Development, there were 25 articles. However, after being reduced, only 16 articles were obtained that were in accordance with the topic. This is because the topic of the title taken has not been widely researched. The display of articles that will be discussed is as follows

Table 1. Collecting articles based on the relevance of the topic

No.	Author	Publication Year	Article Title	Journal Publisher	Volume Number	Number of pages
1	M. Syukri Azwar Lubis, Karim, Arman Kalean, Arfiani Yulianti Fiyul, Nur Latifah	2024	Exploring Mindful Teaching Practices: Strategies for Enhancing Early Childhood Education	Global International Journal of Unnovation Research	2, (8)	1914-1922
2.	Syeda Parsa Jarar, Pratiwi Widyasari	2025	Mindfulness Practices and Attention Control in Early Childhood and Primary Education: A Review	Jurnal Obsesi: Jurnal Pendidikan Anak Usia Dini	9, (4)	1153-1162

No.	Author	Publication Year	Article Title	Journal Publisher	Volume Number	Number of pages
3	Jasper Schipperijn , Cathrine Damsbo Madsen , Mette Toftager , Danielle Nørager Johansen , Ida Lousen , Thea Toft Amholt , Charlotte Skau Pawlowski	2024	The role of playgrounds in promoting children's health – a scoping review	*International Journal of Behavioral Nutrition and Physical Activity*	21 (1): 70	1-12
4	Julie Ernst, Kerri McAllister, Pirkko Siklander, Rune Storli	2021	Contributions to Sustainability through Young Children's Nature Play: A Systematic Review	Sustainability	13 (13): 7443	1-36
5	Yaoyao Sun, Renee Lamoreau, Samantha O'Connell, Raquel Horlick and Alessandra N. Bazzano	2021	Yoga and Mindfulness Interventions for Preschool-Aged Children in Educational Settings: A Systematic Review	International Journal of Environmental Research and Public Health	18: 6091	1-25
6	Courtney Beers Dewhirst, Jacqueline Goldman	2018	Launching motivation for mindfulness: introducing mindfulness to early childhood preservice teachers. *Early Child Development and Care,*	Early Child Development and Care .Taylor & Francis	190 (8)	1299–1312
7	Prins J, van der Wilt F, van der Veen C and Hovinga D	2022	Nature play in early childhood education: A systematic	Frontiers in Psychology	13:995164.	1-15

No.	Author	Publication Year	Article Title	Journal Publisher	Volume Number	Number of pages
			review and meta ethnography of qualitative research			
8	Avril Johnstone , Paul McCrorie , Rita Cordovil , Ingunn Fjørtoft , Susanna Iivonen , Boris Jidovtseff , Frederico Lopes , John J. Reilly , Hilary Thomson , Valerie Wells and Anne Martin	2020	Nature-based early childhood education for child health, wellbeing and development: a mixed-methods systematic review protocol	International Jurnal Environ Res Public Health	19(10):5967	1-6
9	Kylie A. Dankiw, Saravana Kumar, Katherine L. Baldock, Margarita D. Tsiros	2023	Parent and early childhood educator perspectives of unstructured nature play for young children: A qualitative descriptive study	PLoS One	18(6):e0286468	1-24
10	Eun-Young Lee , Ajaypal Bains , Stephen Hunter , Alyssa Ament , Javier Brazo-Sayavera , Valerie Carson , Shawn Hakimi , Wendy Y Huang , Ian Janssen , Mikyung Lee , Heejun Lim , Diego Augusto Santos Silva , Mark S Tremblay	2021	Systematic review of the correlates of outdoor play and time among children aged 3-12 years	International Journal of Behavioral Nutrition and Physical Activity	18:41	1-46

No.	Author	Publication Year	Article Title	Journal Publisher	Volume Number	Number of pages
11	Steph Scott , Tonia Gray , Jenna Charlton , Sharon Millard	2022	The Impact of Time Spent in Natural Outdoor Spaces on Children's Language, Communication and Social Skills: A Systematic Review Protocol	International Journal Environment Reseasch Public Health.	19(19):12038	1-14
12	Danielle Craig , Nazia Afrin Trina , Muntazar Monsur , Umme Tasnima Haque , Garrett Farrow , Md Zahid Hasan , Fariha Tasnim , Moyin Sabaina2h Akinbobola	2024	Effective Nature-Based Outdoor Play and Learning Environments for below-3 Children: A Literature-Based Summary	International Journal Environment Reseasch Public Health.	21(9):1247	1-22
13	Dorra Jalleli , Sana Jarraya	2025	The Effect of a Short-Term Mindfulness Program on Motor Skills and on Psychological and Social Behavior in Preschool Children: A Randomized Controlled Trial	Perception Motor Skills.	9:12	1-21
14	Elizabeth Kimberly A. Robinson J. Erwin,	2015	The joy of being: making way for young children's	*Early Child Development and Care*	*186*(2),	268–286.

No.	Author	Publication Year	Article Title	Journal Publisher	Volume Number	Number of pages
			natural mindfulness			
15	Chandani Bhandari, Sarah N. Douglas	2024	Embedding Mindfulness Into Early Childhood Classroom Routines: A Practical Strategy for Teachers	*Childhood Education*	*100*(4)	20–29.
16	Sara Berti, Ada Cigala	2020	Mindfulness for Preschoolers: Effects on Prosocial Behavior, Self-Regulation and Perspective Taking	*Early Education and Development*	*33*(1)	38–57

The first article reviewed discusses the growing use of mindfulness-based teaching strategies in early childhood education [26]. It explains how bringing present-moment awareness into classroom activities can benefit both teachers and young learners. Mindfulness helps educators manage stress, regulate emotions, and create a more supportive learning environment. The article also highlights several practical techniques, such as mindful breathing, reflective listening, and integrating simple mindfulness activities into daily routines. These approaches strengthen children's social–emotional skills and support cognitive development by improving focus, empathy, and resilience. Research findings presented in the article also show better classroom behavior, stronger teacher–child relationships and improved early academic outcomes. In addition, challenges in adopting mindfulness practices, such as time constraints and the need for professional development, are discussed. The article concludes with practical recommendations for educators who wish to integrate mindfulness into their teaching, emphasizing the importance of consistency, community support, and ongoing reflection. By adopting mindfulness teaching practices, educators can create more supportive and effective learning environments, ultimately contributing to children's holistic development.

The second article written entitled Mindfulness Practices and Attention Control in Early Childhood and Primary Education: A Review reveals that Mindfulness-based interventions (MBIs) have gained recognition for improving attention control in early childhood education, helping students maintain focus, filter out distractions, and regulate cognitive effort. While previous research highlights short-term benefits, gaps remain regarding long-term effectiveness, real-world implementation, and comparative efficacy to other attention-enhancing strategies

[27]. This review synthesizes findings on the impact of mindfulness on sustained, selective, and executive attention, bridging the gap between controlled experiments and classroom applications. A narrative review approach was used, analyzing peer-reviewed studies published between 2013 and 2024 from Medline, Google Scholar, ERIC, PsycINFO, and Scopus. Studies were selected based on pre-determined criteria; prioritizing research conducted in early education settings. Findings suggest that mindfulness strengthens neural pathways associated with executive function, leading to improved focus, impulse control, and cognitive flexibility. Programs such as the Mindful School Curriculum and the Kindness Curriculum have shown positive impacts, but barriers such as teacher training gaps, limited class time, and intervention variability hinder widespread adoption. The review emphasizes the need for longitudinal studies, cross-cultural comparisons, and integration of digital mindfulness tools. While mindfulness offers promise as an educational strategy, more research is needed to assess its scalability and long-term impact on attention control and learning outcomes. Ernst, J.et.all in his research showed that nature play supports the achievement of educational benchmarks for sustainability which include applied knowledge, dispositions, skills, and applications. Various relevant results related to nature play indicate that teachers should not abandon nature play in their efforts towards sustainability [28].

Schipperijn, J., et.al conducted a literature review related to the use of playgrounds for children, the results showed that of the 247 studies reviewed, almost 80% concluded that playing in schoolyards increased physical activity [29]. Planting schoolyards has a positive impact, especially on the social and mental health of children. Several of these studies reinforce the need to create a development model that not only emphasizes modeling outdoor activities but is also supported by a basis of full awareness or mindfulness which refers to the sensory development components of early childhood, so that the activities carried out are not only meaningful but also have an impact on the growth and development of early childhood. Research conducted by Prins J, van der Wilt F, van der Veen C and Hovinga D that If teachers know how to mediate children's interactions with nature-based environments, these interactions will have developmental value, considering the value of nature-based environments for play, in accordance with Article 31 of the UN Convention on the Rights of the Child (United Nations, 1989), we can even consider nature play as a basic need and right of children [30].

Dankiw K.A. and colleagues carried out a study to better understand how parents and early childhood educators (ECEs) perceive and engage with nature-based play, addressing the limited insights available on this topic [31]. The researchers used a qualitative descriptive design and gathered data through semi-structured interviews with 18 ECEs and 13 parents from four early childhood centers across metropolitan Adelaide, South Australia. From the interview analysis, five overarching themes emerged. These included generally positive attitudes toward nature play, the various factors that shape children's involvement, differing interpretations of what nature play entails, considerations for designing outdoor environments, and the place of risky play within these settings. Participants highlighted several advantages, such as fostering children's emotional regulation, strengthening their connection to the natural world, encouraging sustainability awareness, and helping them recognize their own capabilities. However, the study also revealed several obstacles. Educators pointed to institutional limitations—such as restricted resources, compliance demands, and timing constraints—while parents reported challenges like limited time, worries about children getting dirty, and a lack of nearby natural spaces. Weather-related concerns were also frequently mentioned. Taken together, these insights indicate that both parents and educators may benefit from additional

guidance and resources to better support children's participation in nature play at school and at home.

Lee EY, Bains A, Hunter S, and Ament A. [32] found that both the home setting and the role of parents strongly shape how often and what types of outdoor play children engage in. They also noted that broader ecological conditions—such as seasonal changes or whether families live in rural or urban areas—can influence children's outdoor playtime, highlighting the need for clearer guidelines on recommended outdoor play duration. In another study, Craig D., Trina N. A., and Monsur M. [33] offered valuable insights for designing nature-focused outdoor spaces for children under three years old in childcare settings. They emphasized that early and meaningful interaction with natural environments supports spontaneous, informal learning, which is especially important during the first three years of life—a critical period that lays the foundation for later development, behavior, and health. Research by Scott S., Gray T., Charlton J., and Millard S. [34] further demonstrated that outdoor engagement can strengthen children's communication and language abilities. Because nature-based activities have well-documented benefits for physical health, mental well-being, and psychological growth, the authors argue that more research is needed to understand how natural environments specifically contribute to young children's language, social interaction, and communication development.

Sun, Y.; Lamoreau, R.; O'Connell, S. et al. [35], conducted a literature review related to how Sun, Y., Lamoreau, R., O'Connell, S., and colleagues [35] reviewed studies examining how school-based yoga and mindfulness programs support young children's social–emotional development. Their review indicates that these activities may enhance not only social and emotional skills but also regulatory abilities such as behavioral self-control and executive functioning. The authors suggest that mindfulness practices benefit both children and educators, as they are aligned with developmental needs and help create more effective learning environments. Similarly, Beers Dewhirst C. and Goldman J. [36] found that mindfulness strategies used by early childhood educators can improve teacher well-being. Enhanced well-being, in turn, contributes to more prosocial classroom dynamics and positive learning outcomes for children. Berti S. and Cigala A. [37] further explored the effects of a mindfulness-based intervention on preschool children's social–emotional learning. In their pre-post pilot study involving 21 children assigned to either an experimental or control group, those who participated in the intervention showed notable gains in prosocial behavior, inhibitory self-regulation, and both emotional and cognitive aspects of perspective-taking. Bhandari, C., & Douglas, S. N. in their research on the application of mindfulness concluded that the presence of full attention in early childhood learning environments fosters self- awareness, emotional regulation, and cognitive focus, thereby creating a conducive atmosphere for social-emotional development and academic readiness [38].

Erwin E. J. and Robinson K. A. [39] carried out a systematic review on the use of mindfulness practices in early childhood education. Their analysis showed that interest in mindfulness for young children is increasing worldwide, although the ways these practices are understood and applied appear to vary across cultural contexts. Similarly, Jalleli D. and Jarraya S. reported that mindfulness-based programs have been linked to improvements in several developmental domains, such as social behavior, resilience, and motor skills. However, they noted that evidence involving preschool-aged children remains limited [40]. To address this gap, they conducted a study investigating the impact of a one-week mindfulness program on four- to five-year-olds. Their findings indicated that even a short intervention can positively influence

children's motor abilities and social behaviors, although no significant changes were observed in resilience.

5 Discussion

In the Early Childhood phase, children are in the process of developing various aspects of development, including physical, cognitive, social, and emotional. This phase is considered a very important period because at this time children have very high learning abilities. They have the ability to absorb information quickly and develop basic skills that will help them in their later lives, this age is often known as the Golden Age [4]. Various efforts are made to optimize the development of all aspects in this Golden Age phase, one of which is by providing stimulation through various activities both carried out naturally by the environment or carried out in a structured manner. Based on the results of studies from several previous studies, a picture was obtained of how outdoor activities can be meaningful activities for early childhood. In addition to children being able to interact with objects around them, they can also develop creativity, for example by playing freely. The opportunity to explore the natural environment can develop sensory integration and build meaningful experiences because it involves the senses so that an experience is created through children's perceptions of various objects, situations and activities that are natural, not artificial.

6 Conclusion

Various stimulation activities needed by early childhood are essentially playing, where this playing activity is a means of developing sensory-motor-cognitive-emotional in early childhood. Playing activities can be done using media or without media, and can be done in various situations, closed rooms such as classrooms or outdoors such as in the yard or in nature. Playing activities in nature can not only stimulate the physical development of early childhood but also related to conceptual and interactive or social abilities, and this will be very potential if PAUD teachers and parents have the understanding and ability to develop playing activities in nature for early childhood as the main activity because it can build meaningful activities for children.

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"VOC Parenting" (Authoritarian Parenting) Associated with the Formation of Children's Character from an Islamic Perspective

Luh Putu Shanti Kusumaningsih

{luhputu@unissula.ac.id}

Faculty of Psychology, Sultan Agung Islamic University, Semarang, Indonesia

Abstract. The current phenomenon highlights an ongoing debate regarding the most effective parenting style in shaping children's character. Modern parenting, which emphasizes emotional comfort, is often considered less effective as it may lead children to lack discipline and awareness of rules. In response, a stricter style known as "VOC Parenting" has re-emerged. Some parents believe authoritarian approaches are necessary to foster resilience, while others argue that coercive or harsh methods are inconsistent with Islamic teachings. The research gap lies in the limited studies exploring the relationship between authoritarian parenting (VOC parenting) and character development from an Islamic perspective. This study aims to examine VOC Parenting using a Systematic Literature Review of both national and international journals. The novelty of this research is its contribution in revealing the connection between authoritarian parenting and children's character formation through the lens of Islam, offering new insights for parents and educators.

Keywords: VOC parenting, authoritarian parenting, character development, Islamic perspective, parenting style

1 Introduction

Science and the existence of technology are currently experiencing very rapid progress. This technological progress helps humans in completing their daily work. However, it turns out that technological progress has several impacts on human life, both positive and negative. One of the effects of globalization is the changing character of children in each generation [5].

A person with character and intelligent intellect is a demand that must be met by humans related to the development of the times. Tabi'in [21] defines character as behavior, personality, and habits that are internalized so as to form an individual's character in seeing points of view, determining attitudes, thoughts and actions.

The changing times are thought to have resulted in the erosion of the character values of Eastern culture that have been instilled since childhood, even disappearing because they have been replaced by cultures that should not be applied. One of the cultures that has experienced a shift in values in the current generation is politeness. Politeness is an unwritten norm but is able to

regulate individuals in their attitudes and behavior. Individuals who have good manners are individuals who uphold the values of good manners, so they are polite in speaking and behaving [23]. Unfortunately, the culture of friendliness and politeness that is the pride of the Indonesian nation has recently declined. The current young generation is less able to reflect the culture of the Indonesian nation as a whole because they are starting to lose good ethics in communicating and behaving towards peers, people who are considered older, teachers at school, and even parents [4].

Several factors that are known to be the cause of low ethics in the current generation are the lack of willingness of parents to provide education to children about what is good and what is not because they do not want their children's feelings to be hurt so that they give the impression of spoiling children and the lack of emphasis on the importance of politeness values [12]. The attitude of spoiling children too much by not giving children limits on social norms, shows a change in parenting patterns that should be in accordance with Eastern cultural values. This change is known to occur due to the influence of globalization in the fields of politics, economics and socio-culture. The influence of globalization ultimately also changes the perspective and way of thinking of parents in implementing the right parenting patterns for children [5].

One phenomenon that illustrates the decline in politeness values in the younger generation is the stabbing of a biological mother by her child. This incident occurred in Lebak Bulus, South Jakarta on December 1, 2024. As a result of the incident, the mother suffered injuries almost all over her body such as the neck, arms and cheeks. In addition, MAS (14 years old) was also known to have stabbed his father and grandmother so that they died [15]. A similar case also occurred in Ponorogo, where it was known that a teenager killed his biological father because his request was not fulfilled [18]. The loss of ethics and manners among teenagers today is a serious concern for many parties, especially parents, educators and the community. As a result of parenting patterns that are too indulgent towards children, the current young generation has lost their respect for parents and elders due to a cultural shift towards individualism and unlimited freedom of expression. The younger generation considers that unlimited expression is the right to be able to behave as they please without regard to prevailing social norms [19]. This situation raises the assumption in society that children's behavior that goes beyond the limits of decency is known because of the parenting model that is considered too soft and follows the child's wishes without any firmness to control the child's behavior. Some parents agree to educate children with gentleness without punishment. However, on the other hand, some parents do not agree with this method and apply a different parenting pattern.

This phenomenon has caused some parents to switch and return to the old parenting methods that were widely applied by parents in the past by providing strict education to children to form positive characters in children. Then the assumption arose that an authoritarian parenting style or better known as "VOC Parenting" was believed to be able to form children's characters to be more independent and obedient to their parents.

"VOC Parenting" is a term derived from the abbreviation Vereenigde Oostindische Compagnie (VOC) as a metaphor for a harsh and authoritarian parenting method. "VOC Parenting" was chosen as a synonym for authoritarian parenting because during the Dutch colonial era they

were known to often shout and give orders to the natives. "VOC Parenting" applies strict discipline and regulations without giving children the opportunity to argue so that it is believed to be able to shape children into strong and independent individuals [14].

The basis for the formation of a child's personality is greatly influenced by the parenting patterns applied by parents. The existence of differences in the application of appropriate parenting patterns for today's generation has given rise to pros and cons among the community, especially parents. Facts show that if children are given a good education based on applicable social norms, then children will display good and responsible behavior. Conversely, if children receive too relaxed parenting, play a lot, are spoiled excessively, then children will grow up to be individuals who have rebellious, naughty, impolite, and lazy characters [7].

According to Ulwan [22] children are a mandate for parents, the purity of heart possessed by children is an expensive and priceless gem. Therefore, children must be taught and accustomed to things that are good so that they grow in goodness so that they are happy in this world and the hereafter. Meanwhile, children will live more miserably if they are accustomed to doing evil, wrong and left without supervision.

Islam also pays great attention to how to raise and educate children. Islam believes that children are the next generation of parents' struggle in the future. Children who are well guided will provide bright hopes. On the other hand, children who are neglected and not well educated will face a bleak future.

This statement is in accordance with the Hadith of the Prophet Muhammad SAW :

"Every baby is born with a pure state (Islamic nature). It is the father and mother who will later make the child a Jew, Christian or idol worshiper" (HR. Bukhori).

Based on the description above, it can be concluded that each parenting method can provide different results in the formation of children's character. However, which is better between the parenting method that is too indulgent or vice versa still requires further analysis. The focus of this study is to further identify whether "VOC Parenting" or authoritarian parenting can influence the formation of children's character and is in accordance with Islamic teachings in educating children.

2 Method

This research design uses a qualitative method with the Systematic Literature Review (SLR) technique. Journals and books that are categorized as representative will be the theoretical references used to analyze research problems. The database used to search for relevant journals is done online through Google Scholar. The keywords used are authoritarian parenting, character formation in children, parenting in an Islamic perspective. The data extraction process is carried out by conducting a data inventory in journals that are in accordance with the research topic, then processed by selecting and exploring to be presented and analyzed. The research method based on this literature study, the researcher begins by reading and understanding the contents of the journal well, and conducting further searches if there is incomplete data. The number of journals used in this study is 17 ranging from 2016-2025.
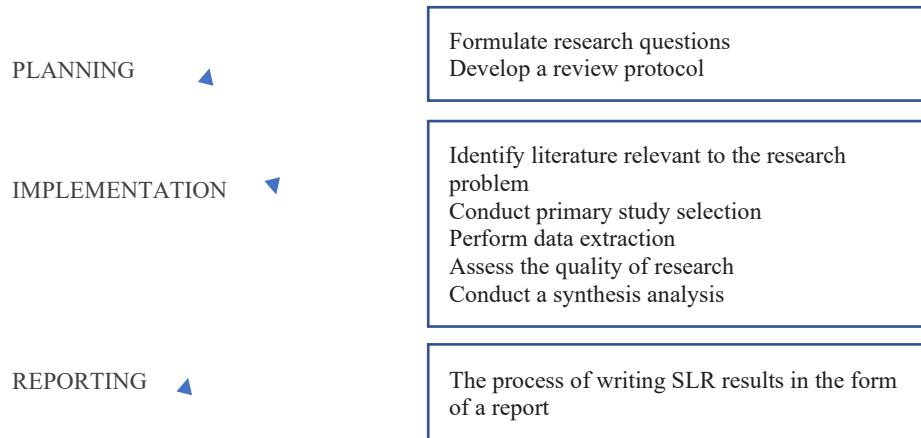
Fig. 1. Systematic Literature Review (SLR) Stages

3 Results

This study aims to determine the relationship between authoritarian parenting patterns and the formation of children's character from an Islamic perspective. The researcher categorized the journals to suit the research objectives, namely journals related to parenting patterns and character formation totaling 11 and parenting patterns from an Islamic perspective totaling 6 so that the total journals that are references for the literature review in this study are 17 journals. The age of the research respondents in the reference journals ranges from early childhood to elementary school age. The research method used in the reference journals is a qualitative method. The following are the results of the literature review that are in accordance with the research objectives:

Table 1. Results of Systematic Literature Review Study on Parenting Patterns with Character Formation

No.	Writer	Journal	Results
1.	Hasanah, Uswatun. (2016).	Parenting Patterns in Shaping Children's Character. Elementary, Vol 2 (2) Juli 2016 : 72-82	The success of character formation in children is influenced by the type of parenting pattern in educating children. Each parenting pattern has an impact on child development. The recommended parenting pattern is authoritative because parents consider children to be equal in both rights and obligations while still providing freedom and guidance to children.

No.	Writer	Journal	Results
2.	Firmansyah, Wira. (2019).	The Influence of Parenting Patterns on the Formation of Children's Character in the Era of Globalization. Primary Education Journal Silampari Vol I (1) : 1-6	Parenting style has an impact on the formation of a child's character so that parents need to apply the best parenting style. The recommended parenting style is democratic parenting.
3.	Saputra, Forma Widya & Yani, M Turhan. (2020).	Parenting Patterns in the Formation of Children's Character. Kajian Moral dan Kewarganegaraan. Vol 08 (03) : 1037-1051	The parenting pattern that is known to influence character formation is the democratic parenting pattern because its implementation is in accordance with the wishes of the parents and children.
4.	Utami, F. & Prasetyo, Iis. (2021).	Family Care for the Development of Disciplined Character in Early Childhood. Jurnal Obsesi : Jurnal Pendidikan Anak Usia Dini. Vol. 5 (2) : 1777-1786.	There is a relationship between parenting patterns and the formation of children's disciplined character. Each form of parenting will have a different influence on the child's character in the future.
5.	Yuliana, D. Murtono.; & Oktaviani, Ika. (2021).	Formation of Children's Character of Good Manners through Family Parenting Patterns. Jurnal Educatio, Vol. 7 (4) : 1434-1439.	Each form of parenting has a different impact. Democratic parenting makes children behave politely and well. Authoritarian parenting makes children behave very well. While permissive parenting makes children behave politely and quite low.
6.	Handayani, R. (2021)	Characteristics of Early Childhood Parenting Patterns in the Family. KIDDO : Jurnal Pendidikan Islam Anak Usia Dini. Vol 2 (2) : 159-168.	Parenting patterns are the result of interactions between parents and children. Parental attitudes can include how to give rules, rewards and punishments, including how parents show their authority and attention and response to children.
7.	Elan, E. & Handayani, Stevi. (2023).	The Importance of Parenting Patterns in Forming the Character of Early Childhood. Jurnal Obsesi : Jurnal PAUD, vol 7 (3) : 2951-2960).	Every parent can apply several types of parenting patterns. However, every parent will certainly apply the most dominant parenting pattern.

No.	Writer	Journal	Results
8.	Taib, Bahran., Ummah, Dewi Mufidatul., & Bun, Yulianti. (2020).	Analysis of Authoritarian Parenting Patterns of Parents on Children's Moral Development. Jurnal Pendidikan Guru Pendidikan Anak Usia Dini. Volume 3 (1) : 129-137.	Authoritarian parenting can have both positive and negative impacts. Authoritarian parenting will have an impact on children's obedience in following parental orders that are mandatory and behavior that is in accordance with social norms. While the impact of authoritarian parenting is that it will result in children being stubborn and difficult to control if parents are too harsh on the child.
9.	Pratiwi, Ranti., Mardeli., & Fitri, Izza. (2022).	The Relationship between Authoritarian Parenting Patterns and Early Childhood Characters in Lubuk Karet Village, Betung District, Banyuasin Regency. ULIL ALBAB : Jurnal Ilmiah Multidisiplin Vol 1 (5) : 1273-1278.	There is a relationship between Authoritarian Parenting Patterns and Early Childhood Characters in Lubuk Karet Village, Betung District, Banyuasin Regency. The coefficient result r_count = 0.954 > r_table = 0.240.
10.	Ilham, Lailul. (2022).	The Impact of Authoritarian Parenting on Child Development. Islamic EduKids: Jurnal Pendidikan Anak Usia Dini. Vol. 4 (2) : 63-73.	Authoritarian parenting does not provide comfort to children towards their parents, so children try to find a comfortable environment outside, for example school, prayer room and their play environment. Children prefer to linger outside the house and show bad behavior.
11.	Karennina, Thurfah., , Askar., & Ramlah, Ufiyah. (2024).	Descriptive Study of Authoritarian Parenting Patterns on Children's Behavior in School Environments.Jurnal kependidikan Vo. 13 (001) : 983-992.	Authoritarian parenting has a positive impact on controlling children's behavior towards mandatory rules.

In addition to conducting a literature review of journals discussing parenting patterns and character formation in children, researchers also conducted a literature review related to parenting patterns from an Islamic perspective. The results of the literature review on parenting patterns from an Islamic perspective are as follows:

Table 2. Results of Systematic Literature Review on Parenting Patterns in Islamic Perspective

No.	Writer	Journal	Results
1.	Adnan, M. (2018).	Parenting Patterns in the Formation of Morals in Islamic Education. Cendekia : Jurnal Studi Keislaman. Vol 4 (1) : 66-81.	Family is the basic principle of moral formation. Parents play an important role in the formation of children's morals.
2.	Fachmi, Teguh., Umayah., Hasbullah., & Juhji. (2021).	Islamic Parenting: Between Theological Values Transformation and Character Internalization Mahmudah. Geneologi PAI : Jurnal Pendidikan Agama Islam Vol 8 (2) : 423-432.	Islam has regulated the best parenting pattern in the Qur'an and the Hadith. Parenting in Islam is a complete unity between the attitude and treatment of parents to children from childhood to adulthood in order to be in accordance with religious teachings.
3.	Wijono, Hani Adi., Nafiah, Ulin., & Lailiyah, Nurul. (2021).	The Concept of Parenting Patterns from an Islamic Education Perspective. Irsyaduna : Jurnal Studi Kemahasiswaan Vol 1 (2) : 155-174.	The parenting pattern recommended in Islam is a parenting pattern that can provide examples, advice, attention and guidance to create good habits in children.
4.	Julita, Monika Sales., Utari, Nifty., handayani, Rahmah., Yanti, Vira Dwi P., & Putri, Yecha F. (2022).	Prophetic Parenting: The Ideal Concept of Islamic Parenting. Jurnal Multidipliner Bharasumba Vol 1(1) : 147-155.	The essence of raising children is a form of gratitude for the blessings and gifts of Allah SWT for the presence of children so that children become a source of happiness, successors to the lineage and become independent human beings.
5.	Gori, Fitriani. (2023).	Ideal Parenting Patterns according to Islam. Jurnal Edukatif Vol 1 (2) : 210-215.	Parenting patterns from an Islamic perspective emphasize two-way communication between parents and children with a focus on obedience to Allah SWT and His Messenger.
6.	Sholekhah, Zaqy Faridatus., Taqiyuddin, Naufal., dkk. (2025).	Parenting Styles in the Perspective of the Qur'an: Its Impact on Early Childhood Social Education. Jurnal Pendidikan Islam Vol 2 (2) : 1-14.	The Quran is the main foundation for instilling the character of early childhood social education. Parents must adapt to their children by instilling the concept of monotheism and morals.

Based on the results of the literature review of journals related to this study, it is known that the type of parenting pattern is believed to be able to shape children's character with different effects. Meanwhile, authoritarian parenting (VOC Parenting) is known to have a positive impact on children in the implementation of mandatory rules. Children will carry out their parents' orders wholeheartedly without any rejection. However, authoritarian parenting (VOC Parenting) also has a negative impact on children if it is carried out with violence in the form of different behavior in children when in front of their parents and not. The behavior shown is even known to be bad behavior.

Literature review on parenting patterns from an Islamic perspective shows that Islam places great trust in parents to educate their children wholeheartedly as a form of gratitude for the presence of children based on the Quran and Hadith.

4 Discussion

Children are a gift from Allah SWT to parents as a form of love. Therefore, every child must develop into an adult with good behavior so that they can take care of themselves without depending on others, so it is the obligation of parents to provide good examples for their children. Giving affection and education about life values are factors that play an important role in the formation of a child's character. In this case, the family is the main contributor in the formation of this character through proper parenting patterns [16].

According to Djamarah [23], parenting patterns are habits carried out by parents in leading, caring for, and guiding children consistently since the child's birth and become a process to shape children's behavior to comply with the norms and values that apply in society.

The most important part in the process of child development is how the parenting method is applied in the family. Children need more attention from parents for their psychological development as adults. Parenting is a description of the interaction between parents and children where there is a process of guidance and coaching in everyday life as an effort to help children grow and develop both physically and psychologically [2].

Parents as protectors of children will certainly try to always give attention and affection to their children. However, not all parents realize and make mistakes in implementing parenting patterns by showing excessive affection to children so that it seems to spoil the child too much. Parents forget their main task that instilling the value of independence in children is the main provision for children in the future.

Authoritarian parenting or "VOC Parenting" is one of the parenting methods that can be applied by parents in educating children and in forming children's character in this era of globalization, especially regarding discipline and politeness. However, some people think that authoritarian parenting is a bad parenting model because it is forcing the will of parents on children. Parents act too much as supervisors who control children's behavior, demanding and are required to carry out parental orders without objection. Punishment will also be given to children if they do not obey parental [11].

Basically, punishment can be applied to children so that children better understand the boundaries of good and bad behavior. Punishment is expected to deepen the values of self-

discipline. Good punishment should be based on pedagogical values so as to help children become independent and mature. Discipline is an ability where individuals are able to show obedience, order, and respect for applicable decisions and regulations. Disciplined behavior will help individuals to face various life challenges and various problems after entering community life) [21]. This description shows that punishment that is packaged as part of the educational method in authoritarian parenting is known to have a positive impact on children's behavior.

The results of a study conducted by Dewi Yuliana, et al. in 2021 showed that children who received authoritarian parenting (VOC Parenting) methods were known to grow up to be obedient and tend to be disciplined. Similar research results that support these results were also conveyed by Thurfah Karennina, et al., in 2024 that authoritarian parenting has a positive impact on controlling children's behavior so that they can behave well towards mandatory rules, such as praying and respecting parents.

However, parents should still be able to control themselves so as not to apply excessive punishment to their children, because authoritarian parenting (VOC Parenting) can also have a negative impact on children's psychological development. The results of a study conducted by Bahran Taib, et al. in 2020 stated that the negative impact that occurs if a child receives excessive authoritarian parenting will make the child stubborn and difficult to control.

Similar research conducted by Lailul Ilham in 2020 stated that authoritarian parenting will make children feel uncomfortable with their parents, so that children try to find a comfortable environment outside, for example school, prayer room and their play environment. Children prefer to stay outside the house for a long time and show bad behavior.

In addition, authoritarian parenting (VOC Parenting) can also reduce children's self-confidence and cause fear in children towards their parents [23]. Tends to be unhappy, always feels anxious, lacks initiative and has a rebellious nature [8]. The description above shows that authoritarian parenting is acceptable for forming a child's character as long as it is carried out within appropriate limits.

Islam teaches parents to be able to educate children with full firmness but also full of affection based on the values of monotheism, noble morals, independence, responsibility, and manners and politeness to their children. Islam also emphasizes the importance of maintaining a good relationship between children and their parents. Children are expected to be able to speak politely and gently and also full of affection towards their parents. Likewise, parents must also be able to apply the same thing when interacting with their children. Every parent is obliged to provide useful education so as not to risk damaging their children. Parenting patterns from an Islamic perspective teach parents to educate children based on the Al-Quran and Al-Hadith in order to produce a young generation who are moral and follow Islamic values from birth until the child is able to carry out his role as a caliph in the world [17].

The concept of Islamic parenting is more directed at a series of methods, namely parenting that is exemplary in nature, where parents in providing education are not only sufficient with words but must also be supported by real actions or attitudes. The next method is parenting that is advisory in nature, where parents are expected to be able to provide calls or invitations that please the child's day and gentle rejection if there is a child's behavior that is not in accordance with applicable norms [1].

Parenting in an Islamic perspective does not explain which parenting style is better or best. Parenting in Islam focuses more on things that parents should and should do and must still pay attention to the situation and condition of the child [22]. Parents who impose their will without paying attention to the child's condition are categorized as parents who are negligent in carrying out Islamic parenting [6]. Islamic parenting is essentially a form of gratitude from parents for the presence of children so that in its implementation it must focus on Allah SWT and Rasullullah SAW to realize the personality of pious children accompanied by prayer.

5 Conclusion

The conclusion obtained based on the results of the literature review related to the research objectives is that authoritarian parenting can be categorized as one of the acceptable parenting methods in the formation of children's character as long as it is not carried out with excessive violence. Parenting in an Islamic perspective emphasizes that parents will be categorized as negligent in carrying out Islamic parenting if they force their will on their children. Parents must pay attention to the situation and condition of their children when educating children by paying attention to things that are appropriate and should be in accordance with the Qur'an and hadith. The suggestion that can be conveyed in this study is that parents are expected to be able to apply a balanced authoritarian parenting method in the formation of children's character between firmness and affection so that children can distinguish between good and bad behavior.

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Transforming Social Skills in Children with Autism : Inclusive Teaching Best Practices

Nur'aeni[1], Dhiyah Ulhaq Nazhifah Ulayya[2], Dyah Astorini Wulandari[3], Imam Faisal Hamzah[4]

nuraeni@ump.ac.id[1], dhiyahulhaqn@gmail.com[2], rinirifqi@gmail.com[3], imam.faisal.ins@gmail.com[4]

Fakultas Psikologi Universitas Muhammadiyah Purwokerto[1], Fakultas Psikologi Universitas Muhammadiyah Purwokerto[2], Fakultas Psikologi Universitas Muhammadiyah Purwokerto[3], Fakultas Psikologi Universitas Muhammadiyah Purwokerto[4]

Abstract. Inclusive education mandates equitable opportunities for all students, including those with Autism Spectrum Disorder (ASD), yet many still face difficulties with social integration in inclusive settings. This study explores strategies employed by companion teachers to support the social skills of children with ASD in inclusive primary schools. A qualitative approach was used with purposive sampling of three companion teachers and three ASD students from ten ASD children at SD Muhammadiyah Ketanggungan, Brebes, Indonesia. Data were collected through observation, interviews, and documentation, then analyzed thematically. Results revealed the use of structured routines, adaptive environments, positive reinforcement, peer-mediated strategies, and interventions tailored to needs. These strategies improved verbal communication, empathy, self-regulation, and peer cooperation. Targeted companion teacher support thus significantly promotes social development in ASD children. The study contributes theoretically by enriching inclusive education literature and practically by offering guidance for teachers and stakeholders in fostering social-emotional growth for children with ASD.

Keywords: Inclusive Education; Autism Spectrum Disorder; Social Skills; Companion Teacher; Intervention Strategy.

1 Introduction

Inclusive education according to the Regulation of the Minister of National Education of the Republic of Indonesia Number 70 of 2009 is an education system that allows all students, including those with special needs or special talents, to study in the same educational environment as other students in a fair manner. The basic principles of inclusive education prioritize providing opportunities to all students without discrimination, avoiding the use of negative labels, and maintaining balance in its implementation [1].

Although the principles of inclusive education have been regulated, in reality, the education system in Indonesia is still faced with a number of significant challenges in realizing inclusion for children with special needs. These challenges include the availability of facilities, teacher expertise, student needs, and support provided by parents and the community. Many children with disabilities face challenges when trying to be accepted into the school of their choice, and make a serious effort to integrate in a regular classroom environment and mix with peers. As a result, they often face discrimination and isolation, which ultimately leads them to have to attend Extraordinary Schools [2].

Children with special needs are children who experience growth and development with significant differences compared to other children in general. ABK does not only refer to

children with physical or mental disabilities, but also to the specific needs needed by children with different conditions. Each child with special needs has specific characteristics, making them different from other children. All children need services that are in accordance with their abilities and needs. Parents and teachers' understanding of these uniqueness is very important to provide support that is in accordance with the child's condition and potential [3].

Children with special needs include those with autism, who have complex developmental disorders related to cognitive, emotional, behavioral, social interaction, and communication aspects. These children may have difficulty in verbal and non-verbal interactions with the people around them. Autism spectrum disorder (ASD) affects the way they think, feel, and interact with their surroundings. In terms of cognition, autistic children may exhibit a distinctive thinking style and problem-solving abilities, exhibiting exceptional skills in certain areas, but they often find it difficult to grasp more abstract ideas. This affects their capacity to fit in in a social environment [4].

Social skills are very helpful for a person to adapt to social norms or live their lives without feeling difficulties in dealing with various situations and conditions that may occur. Important aspects of social skills include: cooperation, assertion, responsibility, empathy, and self-control. If students have good social skills, they will be more fluent in getting along and adjusting to the surrounding environment. However, if children with autism have difficulty interacting socially or are unable to meet these aspects, they will have difficulty adjusting and building healthy social relationships [5].

Implementing an appropriate approach is essential to support the development of social skills of children with autism so that they can interact and adapt well in the surrounding environment. Good social skills not only make it easier to socialize, but also play an important role in improving independence and confidence. A special approach from schools, especially teachers, is needed to provide appropriate strategies to support the development of social skills of children with autism and create a good learning environment for them.

For this reason, appropriate social skills mentoring models and appropriate strategies are needed so that the interventions provided can meet the unique needs of children with ASD. This study aims to identify and analyze the mentoring model applied by teachers accompanying autistic children in inclusive schools, as well as evaluate its effectiveness in improving children's social skills. With the right understanding and application of the model, it is hoped that children with ASD can develop better social skills, strengthen confidence, and be able to adapt optimally in the school and community environment.

This research is expected to make a contribution both theoretically and practically. Theoretically, the results of the study can enrich the treasures of science on assisting children with ASD in an inclusive environment. Practically, the findings of the study can be a reference for accompanying teachers, educators, and parents in developing effective mentoring strategies, so as to be able to optimally support the social and emotional development of children with ASD.

2 Theoretical Foundations

Mentoring is a series of structured activities carried out by educators with the aim of helping children's growth and development optimally through full attention and a planned and sustainable approach. The mentoring process does not only involve direct intervention, but also active communication between teachers, children, and related parties to meet the needs of children holistically [6]. In the context of children with Autism Spectrum Disorder (ASD),

mentoring is very important to support the development of social skills that often experience obstacles.

Social skills are a person's ability to communicate and interact effectively in a variety of social situations. According to [7] Social skills include understanding the social context, adjustment to applicable norms, and efforts to maintain harmonious and productive interactions. For children with special needs such as ASD, repetitive behaviors and communication barriers are challenges that need to be overcome so that social interaction can take place properly. Aspects of social skills that need to be developed include verbal communication, nonverbal communication, social interaction, conflict resolution, empathy, self-control, and cooperation.

In addition to aspects of social skills, there are several factors that affect children's social abilities. The social environment (learner characteristics) plays an important role in encouraging the optimal use of social skills. The level of child development also determines the extent to which the child is able to carry out his social tasks. Gender factors also have an effect, where boys and girls tend to show differences in their social interaction patterns. Furthermore, cognitive and behavioral impairments are significant barriers to developing social skills, which are commonly experienced by children with ASD [7].

In an effort to improve the social skills of children with autism, [8] put forward some key strategies that are effectively implemented. First, an organized structure and routine helps reduce anxiety for children with ASD and provides a sense of security and focus in learning. Second, social skills improvement can be done through various approaches, ranging from environmental change (ecological variation), strengthening play or academic skills (collateral interventions), direct training of social skills such as social stories (child-specific interventions), facilitated interaction with peers (peer-mediated interventions), to comprehensive approaches that combine several methods at once. Third, functional behavior assessments help understand the goals behind the behavior of children with autism, so that educators can replace them with alternatives that are more positive and in line with social norms.

3 Methods

This study uses a qualitative approach with a study method that aims to understand how companions support the social skills of children with Autism Spectrum Disorder (ASD) at SD Muhammadiyah Ketanggungan, Brebes Regency [9]. The focus of the research is the mentoring strategies applied by teachers in the learning process of children with ASD.

The population of this study consisted of 10 children with ASD enrolled at SD Muhammadiyah Ketanggungan, with a sample of 3 ASD children accompanied by 3 special companion teachers. Participants were selected using purposive sampling techniques based on specific criteria, namely children with ASD and companion teachers who were directly involved in the learning process and mentoring of the child [10]. Data collection techniques include interviews, observations, and documentation to get a comprehensive picture of the implementation of the mentoring strategy. Observation data were carried out to directly observe the mentoring process, such as how teachers provided instructions, gave positive reinforcement, established structured routines, and guided interactions with peers. Interviews were conducted to explore teachers' experiences, the strategies they applied, and the challenges faced in supporting children with ASD. Documentation was used as complementary

supporting data in the form of relevant notes and learning programs. This approach helps to understand in depth the role of teachers in accompanying children with these special needs.

4 Results

This research was conducted at SD Muhammadiyah Ketanggungan, an inclusion school in Ketanggungan District, Brebes Regency that provides special companion teachers for students with special needs, including children with Autism Spectrum Disorder (ASD). Out of a total of 223 students, there are 10 students with special needs with 6 of them children with ASD. The study involved 3 special assistant teachers as the main participants and 3 children with ASD as the research subjects.

Table 1. Participant Profile

No	Initial	GPK	Gender
1	A	Special Assistant Teacher, Classroom Teacher, Class Companion	Female
2	B	Special Assistant Teacher, Classroom Teacher	Female
3	C	Special Assistant Teacher, Classroom Teacher	Female

The data obtained provides an overview of the implementation of mentoring strategies carried out by teachers to support the development of social skills of children with ASD in the inclusive school environment.

Teachers use various mentoring strategies that are tailored to the needs of children, such as diverting children's emotions by taking them to their favorite places to calm down, as well as providing a choice of activities according to their interests so that children feel comfortable and appreciated. This approach is flexible and integrated, allowing children to develop optimally intellectually, emotionally, and socially. Teachers also create a calm atmosphere and provide positive reinforcement to help children focus and learn independently.

Through daily activities, teachers teach independence, emotional control, and language skills consistently. Play and creative activities such as drawing are used as a means of self-expression and socialization that are important for children's development. The support of teachers and the surrounding environment, including the family, plays a very important role in maintaining the stability of children's emotions and behaviors. As a result, children who previously had difficulties in communication, self-control, and social interaction, showed significant development such as improved speech skills, eye contact, empathy, and cooperation with friends.

Teachers adapt their approach to the child's mood, give room to calm down, and avoid coercion so that the child does not stress. Peer interaction assistance is carried out flexibly according to the child's character, so that children can practice natural socialization. Social-emotional reinforcement and norms are carried out patiently and communicatively, even though children have difficulty understanding behaviors and emotions, teachers guide in a fun and repetitive way. Visual-based individualized learning helps children focus and understand the material. Teachers monitor children's independence that is still fluctuating, especially in basic activities, and provide direction with a flexible and consistent approach to support the development of children with ASD.

Table 2. Summary of Interview Analysis on Teacher Mentoring Strategies

Aspect / Teacher	A	B	C
Structured Routines	Adaptive approach, structured guidance, consistent education	Flexible and consistent approach	Consistent guidance & supportive environment
Emotional Support	Diversion strategies, self-soothing guidance	Empathic approach, emotional regulation	Bonding & social-emotional reinforcement
Individualized Learning	Visual-based learning, individual instruction	Minimizing distractions, visual aids	Peer interaction support, flexible approach
Social Skills Development	Peer-mediated play, creative activities	Interactive learning, flexible socialization	Comprehensive interventions, social-emotional norms
Behavior Monitoring	Functional behavior assessment, pattern monitoring	Behavior adjustment guidance	Direction & monitoring, flexible approach

In teacher, communication and social development is clearly visible: from passive to more confident and actively interacting. teacher is also getting better at resolving conflicts, showing empathy, controlling himself, and working together in groups. Overall, there have been significant advances in social and emotional skills that support the development of teacher.

Teachers combine theory, observation, and experience in accompanying children with the support of parents and peers even though communication with parents is still limited. The learning environment is made safe and comfortable for children to participate at their convenience., The empathetic and supervising approach helps children manage emotions, develop empathy, and interact socially. Although there were initially difficulties in accepting friends, over time they became more inclusive. Individual learning with minimal distractions is also applied. As a result, AL showed progress in verbal and non-verbal communication, social interaction, conflict resolution, empathy, self-control, and cooperation in groups.

5 Discussion

In this study, the theory of social skills, [7] plays an important role as a framework to see the condition and ability of children with Autism Spectrum Disorder (ASD) in social interaction. Aspects of social skills such as verbal and nonverbal communication, social interaction, empathy, and self-control are the main indicators to assess the extent to which children are able to adapt to their social environment. The condition of children with ASD who often experience obstacles in these aspects is the main focus of this study, because suboptimal social skills can have an impact on children's difficulties in adapting and communicating with others. Using this theory, researchers can describe the real picture of the social challenges experienced by children and the specific need for assistance interventions.

Meanwhile, the strategy theory outlined by [8] It is used to assess the condition of accompanying teachers, especially in terms of how teachers design and implement effective approaches to support the development of children's social skills.

Strategies such as the implementation of consistent structures and routines, the improvement of social skills through various interventions, and functional behavior assessments provide an idea of how teachers play an active role in creating a conducive environment and supporting the learning process of children with ASD.

The condition of teachers as direct implementers of intervention greatly affects the success of the mentoring process, so understanding the strategies they use is important to know the extent of teachers' abilities and readiness in assisting children optimally.

The integration of these two theories shows a close relationship between the child's condition and the role of the accompanying teacher. Children's social skills, which are the main focus of interventions, can only develop properly if teachers are able to implement appropriate and effective strategies. Thus, this study not only assesses the needs and conditions of children, but also explores how teachers adjust their mentoring methods based on the characteristics of the child and the context of the inclusive school. This is important to ensure that the mentoring process runs holistically and continuously, so as to support the optimal social development of children. The following is a discussion of the results of the research:

5.1 Structure and Routine

Structure and routines such as self-eating schedules, orderly queues, use of standard language, reading habits, and consistent consequences help ASD children understand the sequence of activities, reduce anxiety, and improve social interaction [8]. Teachers emphasize discipline through daily habits and strengthening social values; teachers maintain emotional stability with the flexibility of routines, giving space for expression without coercion; while teachers combine coaching consistency with a responsive classroom environment physical contact, visual communicat ion, and safe play spaces. The adaptive approach of these three teachers is in line with various studies such as [11] about structured interventions and consistent schedules, [12] on the use of visual schedules, [13] in visual media and learning environments in interactive visual learning, and [14] on sensory support and individualization. Thus, consistent, adaptive, and responsive structures and routines not only increase independence and reduce tantrums, but also optimally develop the social skills of ASD children.

5.2 Social Skills Intervention,

5.2.1 Ecological Variation is an intervention strategy by changing the environment or activities to improve the social interaction of ASD children.

This approach replaces monotonous activities with more interesting activities to increase child involvement. Although its effectiveness is moderate, this strategy expands the opportunities for children to interact socially. In this study, teachers diverted children to interest-based activities when children were not ready to participate in the main activities, as well as providing alternative spaces such as libraries and MIPA rooms that were quieter and more comfortable.

Teachers adapt the learning environment to the child's sensory sensitivity, such as setting the time of rest and the intensity of activities when the child shows fatigue, according to the emotional and physical needs of the child. teachers handle tantrums patiently and consistently, providing repetitive explanations without pressure, creating an empathetic environment to help children manage their emotions.

These findings are in line with research [15] that show that interest-based activity diversion is effective in reducing maladaptive behavior and increasing child involvement. [16] emphasized the importance of alternative spaces such as Reflection Rooms and Individual Learning Spaces for the emotional needs and focus of children with special needs, in line with the practice of

Teachers. Adjustment of the learning environment by Teachers in accordance with [17] which highlights the importance of adaptation to external stimuli. teachers' empathic approach in handling tantrums supports the findings [18] which emphasizes patience and consistency as the key in managing the emotions of children with ASD.

5.3 Collateral skills interventions

Collateral Skills Intervention is a strategy that aims to improve additional skills such as play, academic ability, or other cognitive skills that can indirectly promote the development of social skills of children with Autism Spectrum Disorder (ASD). In this study, teachers combined the reinforcement of positive values such as patience and gratitude with consequences-based discipline to help children control behavior and emotion regulation. Teachers focus on verbal communication and involve peers to gradually foster the child's social awareness. Meanwhile, teachers adjust learning and educate classmates to be more sensitive to differences, supporting a positive inclusive social experience.

These findings are in line with [19] which emphasizes the importance of teaching the value of patience for the regulation of emotions, [20] which shows the role of peer interaction in the social development of children with special needs, and [21] and [22] which underlines the importance of inclusive education that instills tolerance and empathy in the learning environment.

5.4 Child Specification Intervention

This approach focuses on training social skills directly to children, for example through social stories or social simulation methods. Children are given an understanding of certain social situations, how to act, and what they can expect, so that they are better prepared to deal with various interactions in daily life. In this study, Teacher applied an individualized approach by creating a calm atmosphere and providing positive reinforcement through sounding techniques.

The goal is to help children focus, feel comfortable, and develop their curiosity. Moreover teachers use visual-based learning, where children learn in a calm atmosphere with face-to-face face-to-face, while the material is delivered using pictures or stories. teachers, on the other hand, emphasize more on setting up a environment with minimal distractions, creating a focused space and providing clear instructions to direct children's creativity The approach carried out by teachers is in line with the findings [23] which states that empathic communication from teachers can encourage autistic students to be more socialized and understand the feelings of others. A calm atmosphere, followed by positive reinforcement, has been shown to be effective in improving children's focus and comfort, as well as supporting them in interacting.

[24] In his research, it is also explained that interpersonal communication carried out by teachers by showing understanding, affection, and patience in communicating with autistic children can affect the actions shown by children. This can increase children's confidence and the desire to blend in with the surrounding environment.

Furthermore, teachers who use visual media in learning support the findings [25] which shows that the use of flash cards improves identification skills in autistic children and makes learning more engaging and effective. The approach of PT teachers who manage the learning environment with minimal disruption corroborates the findings [26], who explained that the application of the TEACCH method, which involves environmental regulation, can have a

positive effect on the development of autistic children, helping them in understanding the material and instructions.

5.4.1 Peer Dimension Intervention

A peer-based approach is effective in improving the social skills of children with Autism Spectrum Disorder (ASD) through hands-on interaction and a comfortable atmosphere. Teachers use play activities such as Lego and plasticine and involve friends in drawing activities and small competitions to practice children's social interactions. teachers organize structured activities that give children and friends the freedom to participate, creating a safe social space. teachers apply a peer approach and strive to maintain learning consistency between school and home despite experiencing communication challenges with parents. Teacher's Strategy is in accordance with [27] which states that group play is effective in increasing the social interaction of autistic children, supporting [28] who find playing Lego improves concentration and social interaction, as well as [29] which explains that plasticine helps the development of social interaction of autistic children. Teachers' non-directive approach corroborates findings [30] about the importance of the Among system in social inclusion, and [31] which affirms that peer social support is important for the social engagement of children with autism.

The collaborative approach of teachers and is in line with [5] that highlight the involvement of parents and peers in cooperative play activities, as well as [14] which emphasizes the cooperation of teachers and parents for the success of learning for children with special needs in an inclusive environment.

5.4.2 Comprehensive intervention

Comprehensive Interventions combine social skills training, positive reinforcement, and learning environment adaptation to improve children's overall social interaction. Teachers provide freedom of exploration according to children's interests, with a holistic approach that includes intellectual, emotional, and spiritual aspects, creating an atmosphere that supports confidence and natural social understanding. Teachers teach social norms patiently and consistently, providing reinforcement to positive behaviors, so that children adjust their behavior gradually. Teachers use observation and motivation reinforcement with direct guidance, provide safe play spaces to build social connections, and supervise classmates to understand the condition of autistic children.

Teacher's Approach Is Appropriate [32] who find a holistic approach to increase the confidence and social adaptation of children with special needs [33] emphasized the importance of social understanding in improving the interaction of autistic children, in line with the efforts of teacher. The results of the study also support [34] who stated that the gradual strengthening technique (shaping) applied by teacher. The PT Teacher Strategy is supported by [35] who stated that playing directed with teacher supervision improves social skills, and [4] which emphasizes learning through observation and modeling helps children build social interactions gradually.

5.4.3 Assessment of functional behavior

Functional behavior assessments are essential for understanding the purpose behind the behavior of a child with Autism Spectrum Disorder (ASD). This strategy helps teachers replace negative behaviors with positive alternatives, such as the use of physical cues or assistive devices. Teachers use this strategy to understand the meaning of children's behaviors and

replace them with better behaviors, as well as provide structured educational options to support children's independence with cooperation between teachers in monitoring children's activities. Teachers combine independent encouragement and consistent social consequences through repeated explanations so that children understand responsibilities and needs gradually, as well as provide positive reinforcement. Teachers focus on building emotional closeness through physical contact and visual communication that are tailored to the child's response patterns, helping to create a sense of security and encourage positive behavior.

These findings are supported by research [36] which emphasizes the importance of collaboration between teachers and homeroom teachers in inclusive learning, according to the practice of teachers [37] emphasizing the need for an adaptive and collaborative approach, in line with the Teacher's strategy that is flexible and structured.

In line with the results of the research [38] , which states that the Teacher approach that uses simple instruction and social reinforcement to increase children's confidence [39] supported by the approach of teachers with visual communication that improves the verbal ability and sense of security of autistic children. found that flexible learning strategies and adaptive curricula were effective in supporting the development of independence and social skills of children with ASD, in accordance with the overall approach of the three teachers.

6 Conclusions

This study shows that accompanying teachers have a significant role in supporting the development of social skills of children with Autism Spectrum Disorder (ASD) in inclusive schools. The strategies implemented include an individualized approach according to the needs of the child, structured habituation, and the creation of a safe and supportive environment, so as to reduce children's stress and anxiety.

Collaboration between the accompanying teacher, classroom teacher, parents, and peers is also an important factor in the success of mentoring. This strategy helps children adapt, build positive relationships, and improve social interaction skills. Consistent and responsive mentoring to the individual characteristics of children helps create an inclusive learning environment that supports the social and emotional development of children with ASD.

Based on the findings of the study, there are several suggestions that can be considered. For future researchers, it is recommended to conduct similar studies in various inclusion schools with different types of special needs so that the results are more comprehensive. In addition, it is important to explore the perspectives of children and parents regarding social skills assistance. The use of longitudinal methods is also recommended to look at the social development of children with ASD in the long term. Subsequent research should also consider external factors such as education policies and external interventions.

Meanwhile, for practice in schools, it is recommended that inclusion schools hold training for accompanying teachers so that they can understand and implement the right mentoring strategies. Collaboration between teachers, parents, and the social environment also needs to be strengthened to create a comprehensive support system. In addition, regular evaluation of the assistance strategies implemented is important to increase the effectiveness of the program in an ongoing manner.

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The Relationship Between Self-Compassion and Psychological Well-Being in Emerging Adulthood Who Have Lost a Father Figure Due to Death

Deswita Ning Tiyas Pangestika[1], Mira Aliza Rachmawati[2]

{tiyaspangestikaa@gmail.com[1], miraaliza@uii.ac.id[2]}

Psychology Department, Fakultas Psikologi, Universitas Islam Indonesia[1,2]

Abstract. Several studies have shown that losing a loved one can disrupt psychological well-being. This study aims to determine the relationship between self-compassion and psychological well-being in emerging adults who have lost their father due to death. The hypothesis proposed in this research is that there is a positive relationship between self-compassion and psychological well-being in emerging adults who have lost their father figure due to death. This research uses a quantitative approach with a correlational research design. The subjects of this research were 297 people. Data was collected using the Self-Compassion Scale—Short Form (SCS-SF) and the Psychological Well-Being Scale (PWBS). Data analysis in this study used Jamovi software version 2.2.5. The results of the analysis show that there is a significant positive relationship between self-compassion and psychological well-being in emerging adults who have lost their father figure due to death ($r = 0.665$; $p < 0.001$).

Keywords: emerging adulthood, lost father figure due to death, psychological well-being, self-compassion

1 Introduction

Having a complete and intact family is everyone's dream. Ideally, a family consists of a father, a mother, and children, each playing a role in building a harmonious relationship. Parents play a crucial role in supporting the development of their children as they grow and mature. Therefore, the presence of both mother and father figures significantly influences a child's psychological condition. The transition from adolescence to early adulthood is known as emerging adulthood. During this time, individuals begin to explore their lives and gradually become more mature. This period is characterized by self-exploration, instability, self-focus, ambiguity, and experimentation [1]. Although individuals strive for independence, they still need parental figures to support them in making decisions and navigating challenges [2].

Emerging adulthood can bring about various experiences, including the loss of a family figure, such as a father due to death. The roles of both parents are essential and complementary in childrearing. When one role, particularly that of the father, is missing, the parenting process may become less effective [3]. Loss is a common experience and can significantly impact an individual's development. Porter & Claridge [4] stated that individuals in emerging adulthood may experience disrupted development and difficulties due to loss, especially the death of a father figure.

An interview with participant X revealed that she was shocked and saddened by the sudden death of her father. As the youngest child, she was very close to him. She reported feelings of despair and considered dropping out of college, preferring to stay home due to fear and feeling unworthy. Even now, she still feels sadness but tries to calm herself with patience and acceptance. When overwhelmed, she often finds a quiet place to cry. Ramadhanti & Satiningsih [3] stated that the absence of a father figure can affect a child's psychological condition into adulthood, including reduced self-confidence, difficulty making decisions, feelings of unfairness, and fear of forming romantic relationships. McCoyd & Walteralso found that losing a parent threatens emotional well-being and material needs [3]. Based on the research conducted by Majid and Abdullah [5]. the loss of a father has an impact on individual's mental health. The impact of losing a father causes the child to struggle with emotional regulation and experience difficulties in social interactions with others.

Several studies have shown that losing a loved one can disrupt psychological well-being. Keyes et al. [6] found that unexpected death can lead to trauma, depression, and post-traumatic stress disorder (PTSD). Dhara & Jogsan [7] also found that depression negatively impacts psychological well-being. Therefore, individuals who experience depression will have low psychological well-being. Ryff [8] defined psychological well-being as a positive psychological function encompassing self-acceptance, relationship development, autonomy, environmental mastery, life purpose, and personal growth. A person is considered psychologically well when positive emotions outweigh negative ones and when they can manage emotional conflicts [9]. Although losing a father causes deep sorrow, such feelings should not persist indefinitely. Acceptance and the willingness to move forward are needed to improve psychological well-being. Ryff & Singer [10] suggested that factors influencing psychological well-being include demographics (age and gender), socio-economic status, and culture. Nasir & Rusli [11] identified self-compassion as one such factor. Self-compassion is the ability to treat oneself kindly in the face of suffering or failure [12]. Higher self-compassion is associated with higher psychological well-being (13–15). Based on this explanation, the researcher conducted a study on the relationship between self-compassion and psychological well-being in emerging adults who lost their father due to death. Although similar studies exist, this study focuses specifically on this unique subject group.

2 Literature Review

2.1 Definition of psychological well-being

Ryff and Singer [10] view well-being as a concept formed from a collection of experiences and the optimal functioning of an individual human being. Furthermore, according to Ryff [8], psychological well-being is a condition in which individuals are able to make independent decisions, maintain positive interpersonal relationships, create or manage environments that align with their needs, pursue meaningful life goals, and possess the drive for self-development. Huppert [16] stated that psychological well-being is a combination of feeling favourable and functioning effectively. These two elements contribute to a life that runs smoothly while also equipping individuals with the ability to protect themselves from stress by managing it effectively. From the perspective of Deci and Ryan [17], psychological well-being reflects a fully functioning individual, assessed through three main frameworks: eudaimonia (flourishing of the soul), self-development, and life purpose. Meanwhile, Bradburn, as cited in Ryff & Keyes [18] described psychological well-being as a condition influenced by two dimensions: positive affect and negative affect. For Bradburn, psychological well-being is achieved when these two dimensions are balanced. Based on the above definitions, psychological well-being can be

concluded as a condition in which individuals demonstrate healthy psychological functioning, live their lives effectively, and are able to manage stress and negative emotions they encounter.

2.2 Aspects of psychological well-being

According to Ryff (1989), the aspects of psychological well-being are as follows:

a. Self-Acceptance—Ryff [8] defines self-acceptance as the ability of individuals to fully accept themselves as a prerequisite for self-actualization, optimal functioning, and maturity. This includes having a positive view of one's past. Individuals with high self-acceptance tend to exhibit elevated levels of positive psychological functioning. Conversely, those with low self-acceptance often feel dissatisfied with themselves, express disappointment about past events, and struggle to view themselves as individuals of quality.

b. Positive Relations with Others—Ryff [8] emphasizes that positive and warm interpersonal relationships are essential to psychological well-being. Such relationships require the development of affection, intimacy, friendship, empathy, and love. Individuals with strong abilities in forming positive relationships tend to be warmer, more open, empathetic, and affectionate, as well as capable of accepting and understanding the relationships they are in. In contrast, individuals with low abilities in this aspect may find it difficult to be warm or open and may feel isolated or frustrated in their relationships.

c. Autonomy—According to Ryff [8], autonomy refers to an individual's independence and freedom in regulating their own behaviour or actions. Individuals with high autonomy demonstrate strong independence, the ability to resist social pressure to think and act in prescribed ways, and self-regulation and self-evaluation based on personal standards rather than the standards of others. Conversely, individuals with low autonomy may struggle to make independent decisions and tend to conform to social pressures.

d. Environmental Mastery—Ryff [8] defines environmental mastery as the ability of individuals to create, control, or select environments that suit their psychological needs. Individuals with high environmental mastery can manage their surroundings effectively, control external activities, take advantage of opportunities, and shape environments that meet their needs. On the other hand, individuals with low environmental mastery may struggle to manage daily life, feel unable to change or control their environment, and find it difficult to recognize available opportunities.

e. Purpose in Life—Ryff [8] asserts that having life goals or a clear direction is a crucial aspect of psychological well-being. Individuals with a strong sense of purpose tend to live with greater direction and perceive their lives as meaningful. Conversely, individuals without clear life goals may experience a sense of meaninglessness, lack of direction, and absence of future plans.

f. Personal Growth—As described by Ryff [8], personal growth refers to openness to experiences and the continual development of personal potential. Individuals with high levels of personal growth perceive themselves as constantly evolving, open to new experiences, aware of their potential, and able to recognize and embrace change over time effectively.

2.3 Factors Influencing Psychological Well-Being

Psychological well-being can be influenced by both internal and external factors. Internal factors originate from within the individual, such as age, gender, and personality. External

factors come from outside the individual, such as environment, culture, and social status. Ryff & Singer [10] outlined several factors that influence psychological well-being, including:

a. Age According to Ryff [8], psychological well-being is influenced by age differences. Ryff & Singer [10] further noted that environmental mastery and autonomy tend to increase with age, while self-control and life purpose tend to decline. Self-acceptance and positive relations with others, however, remain stable across age groups.

b. Gender Ryff & Singer [10] noted that women tend to have higher psychological well-being in aspects such as personal growth and positive relationships. The other four aspects showed no significant gender difference. However, they also found that this contradicts findings by Strickland [19], who found that women are more likely to face psychological problems such as depression.

c. Socioeconomic Status Ryff & Singer [10] found that individuals with higher education levels and income or positions tend to have higher psychological well-being. Socioeconomic status also affects health conditions.

d. Culture Cultural differences also influence psychological well-being. In Western individualistic cultures, aspects such as self-acceptance and autonomy score higher, while in interdependent Eastern cultures, positive relations with others are more emphasized.

Other influencing factors include self-compassion. A study by Rizky et al. [20] found that higher levels of self-compassion are associated with higher psychological well-being. Renggani & Widiasavitri [21] also stated that self-compassion can be a major source of psychological well-being or eudaimonic happiness.

2.4 Self-Compassion

Self-compassion, developed by Neff [12] based on the general concept of compassion, refers to the practice of loving and caring for oneself in the face of difficulty, suffering, failure, or life challenges. According to Neff, it emphasizes valuing oneself as an imperfect human being. Having self-compassion does not mean being selfish, as this sense of compassion also extends to others [22]. Simply put, self-compassion is how individuals relate to themselves when experiencing failure, hardship, incapacity, or suffering [23]. Shepherd and Cardon [24)] described self-compassion as an individual's ability to regulate negative emotions associated with failure and to use such experiences as learning opportunities. Breines and Chen [25] found that self-compassion represents the capacity to respond adaptively to failure, thereby facilitating personal development. According to Krieger et al. [26], self-compassion involves adopting affectionate and caring attitudes toward oneself when dealing with life challenges, whether related to psychological or physical pain. Ferrari et al. [27] emphasized that self-compassion allows individuals to face difficulties openly rather than avoiding them. It reflects an awareness that experiencing pain is part of the shared human experience. From the above definitions, self-compassion can be concluded as the practice of extending compassion toward oneself when facing failure or suffering, recognizing such experiences as part of the human condition, and drawing lessons from them. Neff [12] identified the following aspects of self-compassion:

a. Self-Kindness—Self-kindness refers to the extent to which individuals understand, appreciate, and care for themselves during hardship. This aspect fosters a supportive attitude that validates one's feelings even in times of struggle. The opposite of self-kindness is *self-judgment*, which involves self-criticism, condemnation, and a lack of self-love.

b. Common Humanity—Common humanity reflects the understanding that both positive and negative experiences are normal parts of life. It recognizes that no one is perfect and that

everyone makes mistakes and faces failures, imperfections, and pain. This perspective helps individuals accept problems as natural and universal. The opposite of common humanity is *isolation*, in which individuals feel they must bear burdens alone and tend to withdraw from others.

c. Mindfulness—Mindfulness is a balanced and present-focused awareness of difficulties. Mindful individuals acknowledge their pain without exaggerating or avoiding it. The opposite is *over-identification*, where individuals become consumed by their problems, believing that these problems define them and perceiving them as larger than they truly are.

Thus, the aspects of self-compassion consist of self-kindness, common humanity, and mindfulness [12].

3 Method

3.1 Research Design

This research employed a quantitative approach with a correlational design. The correlational quantitative design is used to examine the relationship between two or more variables statistically [28].

3.2 Research Subjects

The subjects of this study were emerging adults aged 18–25 years who had lost their father due to death, male or female, and were willing to participate in the research from beginning to end. Participants were selected using purposive sampling based on the criteria of emerging adulthood.

3.3 Research Instruments

a. The Psychological Well-Being Scale used in this study consisted of 18 items. Initially developed by Ryff [8], the scale was later shortened by Ryff and Keyes [18] and adapted by Clarke et al. [29]. It employed a 6-point Likert scale ranging from 1 = *Strongly Disagree* to 6 = *Strongly Agree* for favorable items, with reverse scoring applied to unfavorable items.

b. Self-compassion was measured using the 12-item *Self-Compassion Scale–Short Form* developed by Neff [8], which comprises three components: self-kindness, common humanity, and mindfulness. A 5-point Likert scale was used, ranging from 1 = *Almost Never* to 5 = *Almost Always* for favorable items, with reverse scoring for unfavorable items. Higher scores indicate greater self-compassion.

3.4 Data Analysis

Data were analyzed using Jamovi version 2.2.5. Statistical tests included assumption testing and hypothesis testing. Assumption tests were conducted to validate conditions for hypothesis testing, while hypothesis testing was conducted to determine the relationship between psychological well-being and self-compassion in emerging adults who had lost their father due to death.

4 Result

Of the 335 participants, it was discovered that participant who meet the requirements criteria in study This obtained as many as 297 people.

Table 1. Description Subject Study

No.	Variables Demographics		Amount	Percentage
1	Gender	Man	20	6.73%
		Woman	277	93.27%
2	Age	18-21 years	167	56.23%
		22-25 years	130	43.77%
3	Long Lost	< 1 year	21	7.07%
		1-5 year	124	41.75%
		> 5 years	152	51.18%

Based on the table above, most respondents in this study were female, comprising 277 individuals (93.27%), while 20 respondents (6.73%) were male. In terms of age, 167 respondents (56.23%) were between 18 and 21 years old, whereas 130 respondents (43.77%) were between 22 and 25 years old. Furthermore, 20 participants (7.07%) had experienced paternal loss for less than one year, 124 participants (41.75%) for approximately one to five years, and 152 participants (51.18%) for more than five years.

4.1 Research data description

The research data description was prepared to determine the levels of each variable, namely *self-compassion,* and well-being psychological. The table below presents a general overview of the research data, including both hypothetical and empirical data. These include minimum and maximum values, means, and standard deviations, which are used to calculate the categorization of the research data.

Table 2. Data Description

Variables	Hypothetical				Empirical			
	Min	Max	Mean	SD	Min	Max	Mean	SD
Self-Compassion	12	60	36	8	12	60	38.14	6.84
Psychological Well-being	18	108	63	15	32	79	55.81	9.50

The data categorization in this study were categorization into five levels very low, low, medium, high, and very high. Table 3 below presents the categorization of scores for the psychological well-being.

Table 3. Psychological Well-Being Score Categorization

Guidelines	Score	Category	Amount	%
X < μ - 1.8σ	X < 39	Very Low	13	4.38%
μ - 1.8σ ≤ X < μ - 0.6σ	39 ≤ X < 50	Low	68	22.90%
μ - 0.6σ ≤ X < μ + 0.6σ	50 ≤ X < 62	Average	129	43.43%
μ + 0.6σ ≤ X < μ + 1.8σ	62 ≤ X < 73	High	74	24.92%
X > μ + 1.8σ	X > 73	Very high	13	4.38%

Note. N = 297, X = Subject score, μ = empirical M , σ = empirical SD .

Based on table 3, it can be observed that the highest percentage of psychological well-being in this study falls within the average category, with a total of 129 subjects (43.43%). Subsequently, the following table presents the categorization of self-compassion scores obtained in this study.

Table 4. Self-Compassion Score Categorization

Guidelines	Score	Category	Amount	%
X < μ - 1.8σ	X < 26	Very Low	11	3.07%
μ – 1.8σ ≤ X < μ – 0.6σ	26 ≤ X < 34	Low	76	25.59%
μ – 0.6σ ≤ X < μ + 0.6σ	34 ≤ X < 42	Average	133	44.78%
μ + 0.6σ ≤ X < μ + 1.8σ	42 ≤ X < 50	High	68	22.90%
X > μ + 1.8σ	X > 50	Very high	9	3.03%

Note. N = 297, X = Subject score, μ = empirical M , σ = empirical SD .

Based on Table 4, it can be concluded that the highest level of self-compassion in this study also falls within the average category, with a total of 133 subjects (44.78%).

4.2 Assumption test

This assumption test was conducted to determine whether the hypothesis should be tested using parametric or non-parametric correlation analysis. The assumption tests consisted of a normality test and a linearity test, both of which were performed using Jamovi version 2.2.5.

The normality test is a prerequisite analysis used to assess the distribution of data for the research variables. The data distribution is considered normal if the significance value is greater than 0.05 (p > 0.05). The results of the normality test for the self-compassion and psychological well-being variables are presented below.

Table 5. Normality Test

Variables	Significance (p)	Information
Self-Compassion	0.028	Not normal
Psychological well-being	0.575	Normal

Based on the normality test conducted for both variables, it was found that the self-compassion variable had a significance value of 0.028 (p < 0.05). This indicates that the data for the self-compassion variable are not normally distributed. Meanwhile, the psychological well-being variable had a significance value of 0.575, indicating that the data are normally distributed (p > 0.05).

Following the normality test, the prerequisite analysis continued with a linearity test to examine the relationship between the two variables in this study. The linearity assumption is considered met if the significance value is less than 0.05 (p < 0.05). In this study, the results of the linearity test for the self-compassion and psychological well-being variables are presented in table 10 below.

Table 6. Simple Linear Regression Test

Model	F	p	Information
1	184	< 0.001	Linear

Based on the linearity test conducted, the significance value was found to be p < 0.001. Therefore, the relationship between self-compassion and psychological well-being is considered linear, as the p-value is less than 0.05. In other words, self-compassion can significantly predict psychological well-being.

4.3 Hypothesis testing

The hypothesis proposed in this study is that there is a positive relationship between self-compassion and psychological well-being in emerging adults who have lost a father figure due to death. The higher the self-compassion, the higher the psychological well-being of emerging adults who have experienced the loss of a father figure, and vice versa. Based on the assumption tests conducted, hypothesis testing was carried out using a non-parametric correlation test, specifically Spearman's rho correlation. This was due to the results of the normality test, which indicated that one of the variables in this study was not normally distributed.

Table 7. Hypothesis Testing

		PWB_TOTAL	
SC_TOTAL	Spearman's rho	0.635	***
	p-value	< .001	

Notes . * p < .05, ** p < .01, *** p < .001

Based on the correlational analysis conducted, the significance value was found to be p < 0.001, indicating a significant correlation between self-compassion and psychological well-being (p < 0.05). The Spearman's rho correlation coefficient was 0.635, which indicates a positive relationship between the two variables. Therefore, the proposed hypothesis is accepted.

5 Discussion

Based on the analysis results, there is a significant positive relationship between self-compassion and psychological well-being among emerging adults who have experienced the loss of a father figure. Specifically, higher levels of self-compassion are associated with greater psychological well-being, whereas lower levels of self-compassion correspond to lower psychological well-being in this group. The findings of the study revealed a non-parametric Spearman's rho correlation coefficient of 0.635 with a significance level of $p < 0.001$.

These results are supported by previous studies. Anggoro [30], in a study on wives who had lost their spouses to death, found a significant positive relationship between self-compassion and psychological well-being. Similarly, research by Fauziah & Rofiqoh [31] also identified a significant influence of self-compassion on psychological well-being. Other studies with similar variables have consistently demonstrated a significant positive relationship between the two [32–34]. Positive psychological adjustment and low levels of depression have been associated with close relationships between parents and children [35]. Therefore, the loss of a father is likely to affect the psychological adjustment and depression levels in emerging adults. Prior research has also shown that high levels of depression correlate with low levels of psychological well-being [36]. A literature review by Wardi & Ningsih [37] emphasized a strong link between self-compassion and psychological well-being. Their study also found that self-compassion contributes effectively to the development of psychological well-being. In this study, self-compassion was shown to be a predictor of psychological well-being in emerging adults who lost their fathers due to death, with an effective contribution of 40.3%, while the remaining 59.7% was influenced by other variables not examined in this research. The effective contribution was calculated by squaring the correlation coefficient between self-compassion and psychological well-being (R^2).

This study also analyzed the relationship between the three components of self-compassion and psychological well-being in emerging adults who had lost a father figure. All three components—mindfulness, common humanity, and self-kindness—were found to have a significant positive relationship with psychological well-being. The strongest correlation was shown by the mindfulness component, with a coefficient of 0.551 and a significance value of $p < 0.001$. This finding aligns with the study by Yulistyowati & Savira [38], which also identified a significant positive relationship between mindfulness and psychological well-being. This suggests that as a person's mindfulness increases, so too does their psychological well-being. Germer and Siegel, as cited in Germer et al. [39] stated that deep mindfulness fosters self-compassion and wisdom, which in turn leads to psychological freedom. Furthermore, mindfulness is said to enhance energy, mental clarity, and happiness [39]. Following mindfulness, the second strongest correlation was found in the common humanity component ($r = 0.540$; $p < 0.001$), and the lowest was in the self-kindness component ($r = 0.460$; $p < 0.001$). The correlation between the three components of self-compassion and psychological well-being is also supported by the findings of Kurnia et al. [33], which showed a significant positive relationship between all aspects of self-compassion and psychological well-being. However, in their study, self-kindness had the highest correlation compared to the other two components.

The characteristics of the people who took part in the study help explain the results. Most of them were women, making up 93.27% of the group, which means the findings might mainly show what women feel emotionally. This matches earlier studies that show women are often more likely to join research on emotions and how people deal with stress. Looking at their ages, about 56.23% were between 18 and 21 years old, and 43.77% were aged 22 to 25. This shows the group is mostly made up of people who are in the early stages of adulthood. This time in

life is important because it's when people are trying to figure out who they are, gaining more independence, and facing emotional challenges, especially after losing a parent. The similar numbers of people in these age groups make the sample more representative of this group. When it comes to how long they had lost their fathers, more than half, or 51.18%, had lost their fathers for over five years. This means the study looks at how people adjust to the loss over a long period, and it allows for looking at both short-term and long-term ways of coping. On the other hand, the smaller number of people who had recently lost their fathers—less than a year, which is 7.07%—helps understand the early stages of grief and how it affects mental health.

The results in table 3 show that most participants (43.43%) had average levels of psychological well-being. Fewer were in the high (24.92%), low (22.90%), very low (4.38%), or very high (4.38%) categories. This means that most young adults in the study felt their psychological well-being was about average after losing a father figure. Having most people in the average group might be because emerging adulthood is a time of change. This suggests that some people struggled more with the loss and might have trouble moving past their grief or adjusting to life without their father figure. It shows the importance of helping these individuals develop better coping skills and emotional control. Support that focuses on self-compassion could be especially helpful.

Based on table 4, nearly half of the participants (44.78%) had average self-compassion scores, according to the results. About a quarter (22.90%) have high scores, and a quarter (25.59%) have low scores. A comparable small percentage (3.03%) have very high scores, while fewer people (3.07%) have very low scores. This indicates that although there are significant individual differences, young adults who have lost a father figure generally exhibit moderate levels of self-kindness, mindfulness, and a sense of community. Overall, these results show that while many young adults can adapt well to the loss of a father, a significant number still face challenges in maintaining good mental health. his highlights the need for programs and support that help this group improve their psychological well-being.

Overall, this study confirms a significant positive relationship between self-compassion and psychological well-being in emerging adults who have lost a father figure due to death. Nevertheless, the study was unable to explore differences in psychological well-being based on gender or time since loss due to significant disparities in the distribution of data across these categories. Another limitation of the study was the difficulty in finding supporting data from other sources with the same research topic. Additionally, the questionnaire did not include attention check questions, which could have ensured that participants answered the items attentively and sincerely. The absence of such questions may have resulted in less accurate responses due to inattentive or careless answering behaviour.

6 Conclusion

Based on the findings of this study, it can be concluded that there is a significant positive relationship between self-compassion and psychological well-being in emerging adults who have experienced the loss of a father due to death. This means that the higher the level of self-compassion, the higher the level of psychological well-being among the study participants. Conversely, lower levels of self-compassion correspond to lower levels of psychological well-being.

Based on the findings of this study, it is expected that participants become more aware of the importance of self-care and develop self-compassion to enhance their psychological well-being. Future researchers are encouraged to include additional relevant variables as mediators in the relationship between self-compassion and psychological well-being to provide more varied research data. It is also recommended that future research incorporate attention check questions in the questionnaire to ensure that respondents carefully consider each item presented.

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Measuring the Link: Family Resilience and Negative Emotional State in Elderly Aisyiyah Banyumas

Suwarti[1], Ayu Kurnia S[2*], Dyah Astorini Wulandari[3], Nadaa Rihhadatul Aisy[4], Fajrin Aldina Fezihisya[5]

{suwartidarman@gmail.com, ayukurnias@gmail.com, rinirifqi@gmail.com, nadaarihhadatulaisy@gmail.com, fajrinafezih@gmail.com}

Faculty of Psychology, Universitas Muhammadiyah Purwokerto, Banyumas Regency, Indonesia[1,2,3,4,5]

Abstract. Elderly commonly encounter various challenges related to negative emotional states. Previous research highlights the crucial role of family support in mitigating these issues among the elderly. This study investigates the correlation between family resilience and negative emotional states. Employing a quantitative research design, the study included 30 elderly participants from Aisyiyah Banyumas selected through random sampling. Two instruments were utilized: the Walsh Family Resilience Questionnaire and the Depression Anxiety Stress Scale. The findings indicate a weak and statistically insignificant relationship between family resilience and negative emotional states (depression, anxiety, and stress) among the elderly in Aisyiyah Banyumas, with correlation coefficients of 0.204, 0.036, and 0.056 respectively. Additionally, a majority of participants (56.67%) reported that religious practices such as prayer, reliance on God, and engaging in religious rituals like nightly prayers and Quran recitation are commonly used coping strategies during stressful situations. These results suggest a need for further research exploring the impact of spiritual factors on negative emotional states in the elderly.

Keywords: Elderly Aisyiyah Banyumas, Family Resilience, Negative Emotional State

1. Introduction

The Law of the Republic of Indonesia No. 13 of 1998 defines elderly as those aged 60 (sixty) years and older. This phase of life is characterized by both physical and psychological decline [1]. Physically, elderly people often experience fatigue, reduced stamina, stooped posture, wrinkled skin, graying hair, tooth loss, decreased digestive function, and joint calcification [2]. As individuals age, they are more likely to experience feelings of loneliness due to psychological stress from abandonment by children, relatives, or life partners [1]. Lovibond and Lovibond [3] introduced the concept of negative emotional states, which encompass an inability to manage positive emotions within oneself.

Negative emotional states typically manifest as stress, anxiety, and depression, influenced by external stimuli and an individual's coping abilities [3]. Elderly individuals, in particular, are susceptible to these states due to changes in physical health, psychological well-being, and social interactions [4]. Symptoms may include emotional instability, irritability, feelings of disappointment, sadness, loss, and worthlessness. Factors contributing to negative emotional states

in the elderly include declining self-esteem, reduced activity, loss of social connections, physical dependency, chronic illness, medication side effects, fear of mortality, changes in daily routines or living environments, and lack of social support [5]. Elderly experiencing anxiety may exhibit clinical symptoms such as dry mouth, dizziness, restlessness, palpitations, and feelings of impending doom [6]. Prolonged stress, anxiety, and depression can lead to existential questions, emotional instability, and cognitive decline if left untreated [7].

Previous studies have indicated a connection between family resilience and reduced negative emotional states among the elderly [8]. Elderly individuals supported by resilient families tend to experience overall well-being, both physically and mentally [9]. According to Gunawan and Sulasti [9], addressing negative emotional states in the elderly significantly involves the family's role. The prevalence of negative emotional states among the elderly, often linked with vulnerability, underscores the family's responsibility in providing care and social support in daily life and elderly services. Positive familial relationships contribute to the elderly feeling secure and content, fostering joy and motivation in their later years [10]. This perspective aligns with the findings of Pospos and Khairani [11], highlighting the elderly's reliance on social support within the family to buffer against psychological pressures. Offering social support to elderly family members provides them with a profound sense of support, care, and companionship, aiding them in navigating life's challenges [12] Resilient families are adept at perceiving crises as opportunities rather than succumbing to stress, anxiety, or depression [12]. Nonetheless, addressing negative emotional states in the elderly involves consideration of other factors such as biology, education, spirituality, and social environment [13].

Aisyiyah is an autonomous organization within Muhammadiyah and one of Indonesia's largest, with 33 regional leaders at the provincial level, 370 at the district level, 2,332 at the sub-district level, and 6,924 at the village level. Aisyiyah Banyumas encompasses members across various age groups, including adults and the elderly. The elderly members of Aisyiyah Banyumas engage in diverse activities such as regular recitations, social gatherings, and health check-ups. Initial data collected through interviews with Aisyiyah managers revealed that there has been no specific study conducted on the psychological profile of the elderly, particularly exploring the impact of family resilience on their negative emotional states. However, various programs aimed at enhancing family resilience have been implemented [14]. Conducting research specifically on the influence of family resilience on the negative emotional states of elderly Aisyiyah Banyumas members can provide valuable insights and recommendations for future organizational policies. This study aims to investigate the relationship between family resilience and the negative emotional states experienced by the elderly in Aisyiyah Banyumas.

2. Literature Review

2.1 Family resilience

Family resilience refers to a family system's ability to adapt, recover, and grow stronger when facing adversity [15]. Rather than the absence of dysfunction, it emphasizes positive adaptation through shared belief systems, organizational flexibility, and effective communication [15; 16]. From a systemic perspective, family resilience arises from interactions among members and contextual resources that help maintain stability under stress [17].

Empirical studies demonstrate that higher family resilience predicts better psychological well-being, life satisfaction, and mental health [18]. During crises such as the COVID-19 pandemic,

resilient families exhibit stronger communication, optimism, and collective coping, buffering negative psychological impacts [19]. Therefore, family resilience serves as a protective mechanism that enables families to sustain functioning and emotional balance during challenging times.

2.2 Negative emotional state

Negative emotional states refer to affective experiences characterized by distress, sadness, anxiety, anger, or frustration [20]. Although normal in daily life, persistent negative emotions can impair well-being, social functioning, and health [21]. Such states often arise from stress, unmet needs, or social isolation and are associated with increased vulnerability to depression and reduced life satisfaction [22].

Recent findings indicate that resilience mitigates the effects of negative emotional states, suggesting that emotional regulation and supportive relationships buffer individuals from stress [23]. In the context of aging, negative emotions such as loneliness or anxiety may worsen mental health, highlighting the importance of interventions promoting optimism, connection, and resilience.

3. Method

3.1 Design and sample

This research used a quantitative approach to investigate how family resilience correlates with negative emotional states. The study involved 30 elderly participants from Aisyiyah Banyumas, Indonesia, selected using random sampling methods.

3.2 Research instruments

There were two measurement instruments used in this study, namely the measurement tool developed by Walsh [15] is known as the Walsh Family Resilience Questionnaire, which originated from her extensive clinical experience and review of literature on family resilience processes. It consists of 32 Likert-format items categorized into three subscales: belief systems (13 items), organizational processes (9 items), and communication processes (10 items). Responses range from "almost always" (5) to "rarely" (1), with higher scores indicating greater family resilience. Item 32 differs from the others as it is an open-ended question: "What beliefs and/or practices does your family have that are particularly helpful to you when dealing with stressful situations?" Descriptive analysis was used specifically for this item in the research.

The Depression Anxiety Stress Scale (DASS-21), developed by Lovibond and Lovibond [3] is designed to assess negative emotional states including depression, anxiety, and stress. The scale comprises 21 items divided into three subscales. It has been adapted into Indonesian by Damanik (2014), with Cronbach's alpha coefficients reported as 0.85 for depression, 0.84 for anxiety, and 0.84 for stress. Spearman-Brown coefficients were also noted as 0.84 for depression, 0.83 for anxiety, and 0.85 for stress. An example item from the DASS-21 is "I feel my lips are often dry." Responses are on a Likert scale with four categories: never (0), sometimes (1), often (2), and very often (3). Scores are interpreted across five severity categories: normal, mild, moderate, severe, and extremely severe for depression, anxiety, and stress. Higher scores indicate higher levels of these negative emotional states.

3.3 Procedures

The research utilized an offline method. Data collection was carried out on June, 2024. Before filling out the instrument, the participants had to complete a research consent approval and filling

in their identity. Furthermore, they had to fill out the instruments: Walsh Family Resilience Scale (WFRQ) and Depression and Anxiety Stress Scale (DASS-21).

3.4   Data analyses

In this study, IBM Statistical Package for Social Sciences (SPSS) version 27.0 was employed for data analysis. The qualitative variables examined included age, marital status, employment, and education. Prior to hypothesis testing, tests for linearity and normality were conducted. To compare scores from the Depression Anxiety Stress Scale (DASS-21) and the Walsh Family Resilience Questionnaire (WFRQ) domains, Spearman's Rho correlation was utilized. A significance level of $p \leq 0.05$ was set for statistical significance. All participants completed the offline form without missing data, ensuring comprehensive data for analysis. Notably, for item 32 of the WFRQ, which involved an open-ended question, descriptive analysis was performed to present the data effectively.

4.   Result

4.1 Demographic participants

Table 1 displays the demographic data of the study participants. The majority of participants were aged 60-65 years (46.66%), were divorced due to spousal death (53.33%), were unemployed (93.55%), and had completed junior high school as their highest level of education (36.66%).

Table 1. Demographics participants

Variable	n	%
Age		
- 60-65 year	14	46.66%
- 66-70 year	9	30%
- >70 year	7	23.33%
Marital status		
- Married	12	40%
- Divorce due to the death of a husband	16	53.33%
- Divorce (while the husband is still alive)	2	6.66%
Employment status		
- Work (entrepreneurship)	2	6.66%
- Unemployment	28	93.33%
Education		
- Not completed in primary school	2	6.66%
- Primary school	6	20%
- Junior High School	11	36.66%
- Senior High School	5	16.66%
- Associate Degree	1	3.33%
- Bachelor Degree	5	16.66%

4.2 Hypothesis test results

Based on the hypothesis testing results presented in Table 2, correlation coefficients were obtained for depression, anxiety, and stress, which were 0.204, 0.036, and 0.056, respectively. These values

indicate a weak correlation between family resilience variables and depression, anxiety, and stress. Furthermore, the significance value (1-tailed) was found to be greater than >0.05, indicating that the observed relationships were not statistically significant.

Table 2. Hypothesis test results

	Variable	Depression	Anxiety	Stres
Family Resilience	Correlation Coefficient	,204	,036	,051
	Sig. (1-tailed)	,140	,425	,395
	N	30	30	30

*. Correlation is significant at the 0.05 level (1-tailed).

4.3 Negative emotional state among lansia Aisyiyah Banyumas

Table 3 illustrates the levels of negative emotional states among the participants, indicating that the majority of participants experienced moderate levels of depression (46.67%), low levels of anxiety (43.3%), and moderate to low levels of stress (33.3%).

Table 3. *Negative emotional state among lansia Aisyiyah Banyumas*

Level of Negative emotional state	Depression	Anxiety	Stress
very low	0	0	1 (3%)
Low	12 (40%)	13 (43,3%)	10 (33,3%)
currently	14 (46,67%)	9 (30%)	10 (33,3%)
High	1 (3,33%)	4 (13,33%)	6 (20%)
very high	3 (10%)	4 (13,33%)	3 (10%)

4.4 Desciptive analysis on item no 32 WFRQ

Table 4 presents practices undertaken by families that were particularly helpful to participants when facing stressful situations. The majority of participants (56.66%) identified religious practices such as praying, performing salah (Islamic prayers), and reciting Quran as significantly beneficial when dealing with pressure-filled situations.

Table 4. Practices were particularly helpful to participants when facing stressful situations

Aspect	Details	n	%
Beliefs	Belief that all problems can be overcome	4	14,33%
	All problems are faced happily and relaxed	7	23,33%
Practices	Pray, *Shalat* and recite the Al-Qur'an	17	56,66%
	Deliberation with Family	2	6,66%

5. Discussion

In this study, specifically 46.67%, exhibited moderate levels of depression. This finding is consistent with Ari's research [24], which similarly identified 32.1% of respondents experiencing moderate depression. According to the World Health Organization (WHO), approximately one in ten elderly individuals may suffer from depression, making it the second leading cause of physical and psychosocial disability among this demographic. Depressive symptoms can manifest in older adults due to medication use or as a result of psychiatric disorders such as obsessive-compulsive disorder or panic disorder [25]

Regarding anxiety, 43.33% of participants in this study reported low levels of anxiety. The accumulated life experience among the elderly often contributes to greater emotional resilience, reducing susceptibility to anxiety. These anxieties can deplete already limited resources among the elderly, hindering their psychological adaptability and perpetuating distress throughout their lives. Participants had a stress level of 33.33% which was categorized at a moderate level. This is supported by research conducted by Kaunang [6] which found that 84.3% of the elderly experienced mild psychological stress. This is because the elderly sometimes or never feel disturbed by the shadows of a bad past, get angry over trivial things, find it difficult to relax, are easily offended, find it difficult to feel calm, feel fear without any clear reason, feel lonely, easily agitated, find it difficult to rest, feel that life is no longer meaningful.

This study shows an insignificant relationship between family resilience and negative emotional state in the elderly at Aisyiyah Banyumas. The findings in this study are in line with the findings of Ahn et al. [25] which states that family resilience is not related to negative emotional state. However, this finding is also different from several other research results which state that there is a relationship between family resilience and negative emotional state [12]

Based on descriptive analysis of filling out the WFRQ scale item number 32, most participants (56.67%) said that the practices that participants often do when facing stressful situations are praying, tawakkal and carrying out religious routines such as tahajud prayer and reciting the Koran. The research findings of Sari et al [26] state that one of the factors that can suppress negative emotional states in the elderly is spirituality. The characteristics of spirituality are formed by religion, belief, knowledge, sincere love, a sense of connection with the universe, respect for life and the provision of personal strength. Research by Arifuddin et al [24] explains that a good level of spirituality in the elderly can increase the meaning and hope of life, and reduce anxiety and fear. Spirituality is not only the relationship between humans and God, but also the relationship between humans and humans. In addition to increasing the frequency of worship, the elderly do something busy, forming interactions or social relationships with others. Through social relationships, the elderly can confide in each other and share experiences related to the things they feel, so that the elderly do not feel that they are alone and excessive anxiety can be avoided. Musmiler [27] also revealed the same thing that the elderly believe that religion can provide a way to solve life's problems, religion also functions as a guide in life, and reassures their hearts. The elderly try to reduce stress, anxiety, and depression by seeking support from their religious beliefs or spirituality. Shalat, prayers, reading the holy book Al-Quran and other religious practices help fulfill high spirituality needs [27]. Aspects of spirituality that are fulfilled in the elderly are able to formulate a positive meaning of the purpose of their existence in the world, develop the meaning of suffering and believe in the wisdom of an event or suffering, live a positive and dynamic relationship through

faith, self-confidence and love. Research conducted by Pratiwi et al., [28] explains that spirituality-based mindfulness is an adaptive coping strategy to mitigate various negative psychological reactions including negative emotional states by responding to stressors experienced by the body to build self-awareness that every problem experienced today is a scenario of Allah / God. This means that the elderly in Aisyiyah Banyumas have indications to be healthy independently from negative emotional state conditions by realizing that the stress, anxiety, and depression experienced are God's scenarios and only God can overcome them. However, this study has not been able to reveal quantitatively the relationship between spirituality and negative emotional state in elderly Aisyiyah Banyumas. This can be a recommendation for further research.

The limited number of participants can also be a factor in different research findings. This study used 'Aisyiyah elderly participants with 30 elderly subjects. This is a limitation of this research greeting. The limited number of participants can affect the results of the study, in line with research conducted by Hair et al [29] providing recommendations regarding the minimum sample size required to conduct research analysis. For example, exploratory factor analysis cannot be performed if the sample has less than 50 observations (which still depends on other factors), while simple regression analysis requires at least 50 samples and usually 100 research samples for the most part in different situations. Meanwhile, according to Guilford [30] an absolute minimum of 200 samples is required for Pearson Correlation analysis. Bujang and Baharum [31] added that a sample size of 782 is required to be able to detect a correlation coefficient of 0.1 with an alpha of 0.05 and a power of 80.0%. Future research can increase the number of participants by involving various groups of elderly people in several regions to produce findings with a wider range.

6.   Conclusion

This study aimed to examine the relationship between family resilience and negative emotional states among the elderly in Aisyiyah Banyumas. The research conclude a lack of significant relationship between family resilience and negative emotional states in the elderly at Aisyiyah Banyumas. Despite the lack of significance, descriptive analysis revealed that a majority of participants (56.67%) reported engaging in practices such as prayer, relying on God, and performing religious routines like nightly prayers and Quranic recitation when facing stressful situations. Spirituality, perceived not only as a connection between individuals and God but also among individuals themselves, may play a dominant role in influencing negative emotional states among the elderly in Aisyiyah Banyumas. This underscores the need for further research to explore the relationship between spirituality and negative emotional states.

7.   Acknowledgments

8. References

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Too Afraid to Disconnect? Investigating the Influence of Nomophobia on Problematic Internet Use and Sleep Quality among College Students

Syakira Nurfajrina[1], Hazhira Qudsyi[2*]

{syakira.nurfajrina@alumni.uii.ac.id[1], hazhira.qudsyi@uii.ac.id[2*]}

Psychology Study Program, Universitas Islam Indonesia[1,2]

Abstract. Nomophobia has become an important issue in the digital era as it can trigger Problematic Internet Use (PIU) and disturb sleep quality. College students, as active internet users, are vulnerable to these negative effects. However, research on the relationship between these three variables in Indonesia remains limited. This study aims to examine the relationship between nomophobia, PIU, and sleep quality among students. Using a quantitative correlational design, data were collected from 302 students through the Generalized Problematic Internet Use Scale 2 (GPIUS2), Pittsburgh Sleep Quality Index (PSQI), and Nomophobia Questionnaire (NMP-Q). Results showed: (1) a positive relationship between nomophobia and PIU, and (2) a positive relationship between nomophobia and sleep quality. The unexpected positive link between nomophobia and sleep quality indicates the need for further studies to explore moderating factors such as smartphone use for positive coping. The findings support the importance of digital literacy promoting adaptive technology use.

Keywords: College Students, Nomophobia, Problematic Internet Use, Sleep Quality.

1 Introduction

The development of information technology today plays a very important role, as it meets the need for faster and more accurate information exchange [1]. One of the communication tools that has emerged from this technological development is the smartphone. A survey conducted in 2015 by CLSA showed that 36% of smartphone users in Indonesia spent between 4 to 8 hours per day using their smartphones [2].

Smartphones bring positive impacts, such as convenience in daily life; however, their use can also lead to negative consequences. Prolonged smartphone use can result in nomophobia (no mobile-phone phobia), which is characterized by the tendency to constantly check one's phone and feelings of anxiety when unable to part from it [3].

Nomophobia has become a concerning issue because it can affect various aspects of an individual's life, such as problematic internet use and sleep quality. This issue is particularly significant in today's digital era, especially among university students who rely heavily on technology to achieve their academic and social goals.

Nomophobia can trigger anxiety when access to a smartphone is lost, which may lead individuals to use the internet more frequently as a coping mechanism. This anxiety can cause

individuals to check their phones more often and spend more time online. This tendency can lead to Problematic Internet Use (PIU), which refers to uncontrolled internet use that disrupts other areas of life [4].

According to a survey conducted by APJII (Indonesian Internet Service Providers Association) with 8,720 respondents, internet users in Indonesia in 2023–2024 reached 79.50%, or 221,563,479 people out of a total population of 278,696,200. The survey results indicate a steady increase over the years: in 2023, the figure was 78.19%; in 2022, 77.01%; and from 2018 to 2020, 73.70%. Internet use based on education level is dominated by undergraduate (S1) and diploma (D1/D2/D3) degree holders, with a penetration rate of 99.91% and a contribution rate of 8.42% [5].

Bashir et al. (6) stated that many students use the internet and consider it a functional tool due to its various roles in facilitating interactions with others and providing academic information. However, students are also considered a vulnerable group when it comes to Problematic Internet Use (PIU), as they often have more free time, irregular schedules, and unlimited campus Wi-Fi access [7].

A previous study by Buctot et al. [8], which examined junior and senior high school students in the Philippines, found that nomophobia could lead to internet addiction. Another study involving nursing students found that nomophobia could trigger Problematic Internet Use [9]. Similarly, Pavithra et al. [10] found that respondents with high levels of problematic internet use also had high levels of nomophobia.

These findings are consistent with a more recent study by Lesmana [11], which showed that individuals with nomophobia symptoms were more likely to exhibit symptoms of problematic internet use. The results suggest that fear of being away from one's smartphone (nomophobia) can lead to problematic internet use, as individuals increasingly rely on smartphones as a medium for internet access—resulting in negative effects such as impaired interpersonal skills and other psychological symptoms.

According to Bragazzi [12], a characteristic of nomophobia is the tendency to keep one's phone on at all times (24/7), even sleeping with it in bed. Excessive smartphone use has been linked to greater sleep disturbances and poorer sleep quality [13].

King et al. [14] found that nomophobia can lead to persistent anxiety, including stress. Chronic stress can negatively affect an individual's sleep quality. Good sleep quality is defined by the absence of sleep deprivation symptoms and lack of sleep-related problems [15].

During sleep, the body undergoes a recovery process that restores stamina and returns the body to an optimal state [16]. However, sleep deprivation is common among young adults. University students, who fall within this age group, often experience insufficient sleep [17]. Poor sleep quality among students affects both physical and psychological well-being, including health problems, decreased concentration, stress, memory disturbances, and lower academic performance [18].

A study by the National Sleep Foundation [19] revealed that around 36% of 1,000 college students in the U.S. experienced difficulty waking up in the morning, compared to 20% of individuals aged 30–64, and 9% of those over 65. Moreover, nearly a quarter of young adults aged 18–29 often arrived late to class or work due to difficulty waking up, and 40% reported feeling drowsy during other activities.

Another study by Ratnasari et al. [20] involving 98 Electrical Engineering students at Diponegoro University—using the Pittsburgh Sleep Quality Index (PSQI)—found that 71 students (72.4%) had poor sleep quality, while the remaining 27 (27.6%) had good sleep quality.

Excessive phone use (nomophobia) disrupts sleep architecture, reducing Rapid Eye Movement (REM), slow-wave sleep, and overall sleep efficiency [21]. Nomophobia can also cause physical discomfort and headaches, which further impact sleep quality. This is supported by Ghanate et al. [22], whose study found that among participants with nomophobia-related issues, 39.5% experienced poor sleep quality—indicating a link between nomophobia and poor sleep.

Based on the above explanation, the researcher is interested in conducting a study on the relationship between nomophobia, Problematic Internet Use (PIU), and sleep quality in university students. The choice of students as subjects is based on findings from the National Sleep Foundation [19], which reported that individuals aged 18–29 struggle the most with waking up in the morning and feel drowsy during other activities—40% on average, the highest among all age groups. The average age range of university students is 18–24 years [23].

Although some previous studies share similar variables and participant selection, this research incorporates a broader range of variables. The researcher also believes that the title of this study differs from earlier ones, even if one of the variables may overlap with previous research.

For example, the study by Ghanate et al. [22], titled *"A study on nomophobia, quality of sleep and associated behavioural problems in engineering students,"* examined variables similar to those in this study (nomophobia and sleep quality), but it was conducted outside Indonesia. Since it is difficult to find studies in Indonesia exploring the relationship between nomophobia and sleep quality, this research aims to further investigate this topic using Indonesian university students as participants.

Another study by Lesmana [11], titled *"The Relationship Between Nomophobia and Problematic Internet Use Among University Students in Jakarta,"* also investigated similar variables (problematic internet use and nomophobia) and used students as participants. However, that study focused solely on students from a single university in Jakarta who were studying online. In contrast, the current study focuses on students from various universities across Indonesia.

Based on the background of the problem that has been explained, the researcher formulated the research problem as follows "Is there a relationship between Nomophobia and Problematic Internet Use (PIU) and the quality of sleep of students?". This study employed a correlational design to address the empirical gap regarding the relationship between nomophobia, PIU, and sleep quality in Indonesian college students. Although it does not directly test a new theoretical model, this study can still contribute by enriching the cross-cultural evidence base and possibly yielding unexpected findings regarding the relationship between nomophobia and sleep quality. It is also hoped that this research will provide both theoretical and practical contributions, not simply "searching for a relationship".

Hypothesis

H1: There is a positive relationship between nomophobia and problematic internet use in students.

H2: There is a negative relationship between nomophobia and sleep quality in college students.

2 Literature Review

In the adolescent age group of 18–25 years who are pursuing higher education and have student status [24], daily activities are generally closely tied to internet access. Students frequently rely on the internet, which is accessible at their fingertips through smartphones. Many academic needs such as accessing journals, e-books, and other course-related information require internet connectivity.

However, the extensive use of the internet among students often leads to constant dependence, with a persistent urge to access online activities across various platforms. This dependency may result in negative consequences, such as the development of nomophobia. Nomophobia is characterized by a tendency to constantly check one's smartphone and can trigger anxiety when individuals are unable to separate themselves from their phones [3]. When using smartphones as communication tools, individuals require internet access to interact remotely without limits in exchanging or searching for information or engaging in any form of interaction [25]. Therefore, if nomophobic tendencies persist, they may lead to internet use disorders or Problematic Internet Use (PIU) [11].

One symptom of nomophobia, according to Bragazzi [12], is the constant need to keep the smartphone on (24 hours a day), even sleeping with it in bed. One factor that can affect sleep quality is excessive smartphone use (nomophobia), which can interfere with sleep architecture by reducing Rapid Eye Movement (REM) sleep, slow-wave sleep, and sleep efficiency [21].

Yildirim et al. [26] identified four aspects of nomophobia. The first is *not being able to communicate*, which refers to the feeling of loss when communication with others is suddenly cut off or when one is unable to use smartphone features when urgently needed. This creates anxiety due to the inability to communicate or receive responses from others. This anxiety can, in turn, affect sleep quality. As explained by Audina et al [27], anxiety can lead to difficulty falling asleep. Anxiety makes it hard for individuals to initiate sleep, ultimately resulting in poor sleep habits [28].

Similarly, in problematic internet use, anxiety experienced by individuals—especially students—can contribute to internet addiction. Higher anxiety levels are associated with increased internet use, which can develop into problematic internet use and reduce students' academic performance [29].

The second aspect is *losing connectedness*, which relates to the sense of loss when individuals cannot connect to their smartphone systems. This aspect shows that nomophobia and internet addiction (PIU) are closely intertwined. When the internet connection is lost, individuals may feel disconnected and will attempt to reconnect as quickly as possible.

When reconnected, individuals may become absorbed in their smartphones. As Lesmana et al. (11) state, problematic internet use arises from negative behaviors that make it difficult for individuals to separate from their smartphones, even causing fear of losing phone signal.

In terms of sleep quality, when individuals feel a sense of loss from not being connected to their smartphones, they may try to stay online continuously, even during nighttime. Nighttime smartphone use emits light that reaches the retina and disrupts sleep patterns [30].

The third aspect is *not being able to access information*, which describes the discomfort felt when individuals cannot retrieve or search for information via smartphones, which are typically a convenient source of information. In this context, students heavily depend on smartphones and

internet access to support their academic activities. When internet access is unavailable, the information flow is disrupted, often causing students to panic or feel anxious. This is supported by Sharma et al. [31], who found that 83% of students experienced panic attacks when they couldn't use their smartphones.

In relation to sleep quality, students' reliance on smartphones as an easy way to gather information often causes them to lose track of time, especially at night. Since daytime is occupied with classes, students tend to seek information or entertainment at night. This aligns with Mangapi et al. [32], who found that many students perceive smartphones as essential in daily life and tend to spend long hours at night on their phones, increasing the risk of sleep disturbances by reducing sleep duration and altering sleep processes.

Although smartphones are used to access information via the internet, much of this usage often occurs late at night, causing students to stay up. As Mangapi et al. [32] suggest, nighttime should be reserved for rest, not excessive internet use, as this affects sleep duration and, consequently, sleep quality.

The final aspect is *giving up convenience*, which refers to the comfort experienced when using smartphones and the desire to maintain this comfort. This often causes individuals to continually seek the comfort of their smartphones, leading to excessive use that interferes with daily activities, including changes in sleep time and, ultimately, poor sleep quality.

This is consistent with Supartini et al [13], who states that excessive smartphone use has a significant impact on sleep disturbances and sleep quality. Similarly, excessive and unregulated internet usage through smartphones can lead to problematic internet use (PIU), including addictions related to social media, email, online gaming, and other internet-related disorders [33].

3 Method

Participant

This study uses the following criteria: (a) College students (b) Aged 18-25 years (c) Have a gadget (d) Using the internet. Individuals aged 18-25 are included in the late adolescent and early adult phases who need to sleep approximately 7-9 hours per day (34). Participants of this study were 302 college students, with 21.19% male and 78.81% female, and came from 41.72% public universities and 58.28% private universities in Indonesia. The detail of participant's description can be seen on Table 1 in the results section.

Measurement

Problematic Internet Use (PIU) in this study will be measured using a scale adapted from the Generalized Problematic Internet Use Scale 2 (GPIUS 2) developed by Caplan (35). This scale measures problematic internet use in individuals, there are 15 items that will be measured in the GPIUS 2 scale which includes aspects, namely preference for online social interaction (POSI), mood regulation, cognitive preoccupation, compulsive internet use, negative outcomes.

Participants were asked to evaluate how much they agreed with the situation described in the item, such as an example of an item from the POSI aspect, namely "I prefer to interact socially online rather than interact face to face". The response answers were modified by the researcher

using a Likert scale to avoid participant errors when choosing answer options. The scale has a score range of 1 (strongly disagree), 2 (disagree), 3 (agree), and 4 (strongly agree).

This shows that the higher the score obtained, the higher the individual's problems in using the internet, and vice versa, the lower the score obtained, the lower the individual's problems in using the internet. The results of the analysis on the PIU variable using the Generalized Problematic Internet Use Scale 2 (GPIUS 2) obtained a Cronbach's Alpha reliability value $\alpha = 0.921$.

Sleep quality is supported using the Pittsburgh Sleep Quality Index (PSQI) adaptation scale developed by Famodu et al (36). This scale measures an individual's sleep quality, and was developed to evaluate several aspects measured such as sleep duration and efficiency, sleep latency, sleep disturbances, waking up in the middle of the night, coughing or snoring, daytime dysfunction.

The type of measuring instrument (questionnaire) is closed and open, where in open questions, participants are asked to fill in short answers related to the questions asked, such as an example of an item from the sleep duration and efficiency aspect, namely "What time do you usually start to sleep at night?". In closed questions, participants are asked to choose one of the available answers.

There are several items along with answer choices that researchers modify, for example, such as the response answers modified by researchers using a Likert scale to avoid participant errors when reading items and choosing answer options. Answers have a score range of 1 (never at all), 2 (never), 3 (sometimes), 4 (often), 5 (always).

This shows that the higher the score obtained, the worse the quality it has, and vice versa, the lower the score obtained, the better the quality of sleep it has. There is a sleep quality variable that is measured using an adaptation scale from the Pittsburgh Sleep Quality Index (PSQI) obtained a Cronbach's Alpha reliability value $\alpha = 0.770$.

Nomophobia was measured using an adapted scale from the Nomophobia Questionnaire (NMP-Q) developed by Yildirim and Correia (37). This scale measures the level of addiction and anxiety related to lack of access to smartphones. Some aspects measured are not being able to communicate, losing connectedness, not being able to access information, giving up convenience.

Participants were asked to evaluate how much they agreed with the situation described in the item, such as an example of an item from the aspect of not being able to access information "I feel uncomfortable when I cannot use a smartphone". The responses that participants can choose are 1 (strongly disagree), 2 (disagree), 3 (agree), and 4 (strongly agree).

This shows that the higher the score obtained, the higher the tendency of individuals to experience nomophobia, and vice versa, the lower the score obtained, the more individuals tend to experience nomophobia. The results of the analysis of the nomophobia variable with the Nomophobia Questionnaire (NMP-Q) scale produced a Cronbach Alpha reliability coefficient of 0.931.

4 Result

As for the description of the participants in this study, it can be seen in the participant characteristics table as follows:

Table 1. Description of Research Participants

Age	M = 20.77; SD = 1.550; R = 18 - 25
Gender	% Male = 21.19 (n=64)
	% Female = 78.81 (n=238)
Status of College	% Public = 41.72 (n=126)
	% Private = 58.28 (n=176)
Type of Device	% Handphone/ Smartphone = 99.66 (n=301)
	% Laptop/ Notebook = 67.89 (n=205)
	% Tablet/ Pad = 18.54 (n=56)
	% Computer/ PC = 13.58 (n=41)
Duration of Gadget Usage in a Day (24 Hours)	% <2 hours = 1.99 (n=6)
	% 2 - 4 hours = 4.30 (n=13)
	% 4 - 6 hours = 23.18 (n=70)
	% 6 - 8 hours = 32.11 (n=97)
	% >8 hours = 38.41 (n=116)

Researchers categorize respondents into three categories, namely low, medium, high. The description of data categorization is taken based on hypothetical and empirical data. The following is a description of hypothetical and empirical data in this study:

Table 2. Hypothetical and Empirical Data Description

Variable	N	Hypothetical Score Min	Max	Mean	SD	Empirical Score Min	Max	Mean	SD
Sleep Quality	302	10	50	30	10	14	48	27.38	7.14
Problematic Internet Use	302	15	75	45	15	22	66	45.98	11.50
Nomophobia	302	20	100	60	20	30	90	65.93	14.82

Table 3. Categorization of Problematic Internet Use

Categorization	Interval	Frequency	Percentage
High	$X \leq 60$	42	14%
Medium	$30 \leq X \leq 60$	236	78%
Low	$X < 30$	24	8%

Based on the score results in the table above, it can be seen that problematic internet use in respondents is mostly in the medium category, which is 236 (78%) respondents. As many as 42 (14%) respondents are in the high category, 24 (8%) respondents are in the low category.

Table 4. Categorization of Sleep Quality

Categorization	Interval	Frequency	Percentage
High	X ≤ 40	22	7%
Medium	20 ≤ X ≤ 40	243	80%
Low	X < 20	37	12%

Based on the score results in the table above, it can be seen that the quality of sleep in most respondents is in the moderate category, which is 243 (80%) respondents. As many as 37 (12%) respondents are in the low category, 22 (18%) respondents are in the high category.

Table 5. Categorization of Nomophobia

Categorization	Interval	Frequency	Percentage
High	X ≤ 80	71	24%
Medium	40 ≤ X ≤ 80	210	70%
Low	X < 40	21	7%

Based on the score results in the table above, it can be seen that nomophobia in most respondents is in the moderate category, namely 210 (70%) respondents. As many as 71 (24%) respondents are in the high category. 21 (7%) respondents are in the low category.

The normality test is carried out using the test of normality model, if the Kolmogorov-Smirnov coefficient value produces a p value>0.5, then the research data is normally distributed. Conversely, if the p value <0.5 then the data is not normally distributed. The results of the normality test can be seen in table below:

Table 6. Data Normality Test

Variable	p	Category
Problematic Internet Use (PIU)	0.186	Normal
Sleep Quality	0.064	Normal
Nomophobia	0.093	Normal

Based on the results of the normality test, it can be seen that the Problematic Internet Use (PIU) variable has a normal data distribution with a significance value of $p = 0.186$ ($p > 0.05$), in the sleep quality variable the data is normally distributed because the significance value is $p = 0.064$ ($p < 0.05$). As for the nomophobia variable, the data distribution is normally distributed with a significance value of $p = 0.093$ ($p > 0.05$). Therefore, it can be concluded that the three variables in this study are normally distributed.

Linearity test to find out whether there is a linear relationship between the variables to be tested. Both variables can be said to be linear if the p value is <0.05, and the data is not linear if p>0.05.

Table 7. Data Linearity Test

Variable	F	p	Category
Nomophobia * Problematic Internet Use	252.288	<.001	Linear
Nomophobia * Kualitas Tidur	51.481	<.001	Linear

Based on the results of the linearity test, it is shown that the nomophobia and Problematic Internet Use (PIU) variables have a linearity coefficient (F) of 252,288 and a significance value of p = <.001 (p <0.05), which means that the two variables have a linear relationship. As for the nomophobia and sleep quality variables, they have a linearity coefficient (F) of 51,481 and a significance value of p = <0.01 (p <0.05), therefore the two variables have a linear relationship.

The correlation test used was using Pearson correlation because all variables were normally distributed, the results of the correlation test can be seen in the following table:

Table 8. Pearson's Correlation Test

Variable	r	p
Nomophobia - Problematic Internet Use	0.677	<.001
Nomophobia – Sleep quality	0.385	<.001

Based on the results of the Pearson correlation test, between the nomophobia and Problematic Internet Use (PIU) variables, the correlation coefficient value is r = 0.677 which is positive, with p = <.001 (p <0.05). This shows that the Nomophobia variable is positively correlated with Problematic Internet Use (PIU) and is included in the high (strong) category, meaning that if the nomophobia variable increases, it is also followed by an increase in the PIU variable. Likewise, if nomophobia is low, it will also be followed by a low PIU variable.

Based on the results of the Pearson correlation test on the Nomophobia and sleep quality variables, the correlation coefficient value is r = 0.385 which is positive, with p = <.001 (p <0.05). This shows that the nomophobia variable is positively correlated with sleep quality and is included in the moderate (sufficient) category, meaning that if the nomophobia variable increases, it is also followed by an increase in the sleep quality variable. Likewise, if the nomophobia variable is low, it will also be followed by low sleep quality.

Additional analysis was conducted by the researcher to add to the research results by testing the correlation between each aspect of nomophobia to the problematic internet use variable and sleep quality. In the problematic internet use variable, the analysis results showed a positive correlation to four aspects of nomophobia. Among them are not being able to communicate (r = 0.444, p = <0.001), losing connectedness (r = 0.651, p = <0.001), not being able to access information (r = 0.627, p = <0.001), giving up convenience (r = 0.644, p = <0.001).

Table 9. Correlation Test of Nomophobia Aspects - Problematic Internet Use (PIU)

Aspect	r	p
Not Being Able To Communicate	0.444	<.001
Losing Connectedness	0.651	<.001
Not Being Able To Access Information	0.627	<.001
Giving Up Converience	0.644	<.001

In the nomophobia variable, the analysis results show a positive correlation with four aspects of nomophobia. Among them are not being able to communicate r = 0.257, p = <0.001), losing

connectedness (r = 0.440, p = <0.001), not being able to access information (r = 0.339, p = <0.001), giving up convenience (r = 0.357, p = <0.001.).

Table 10. Correlation Test of Nomophobia Aspects – Sleep Quality

Aspect	r	p
Not Being Able To Communicate	0.257	<.001
Losing Connectedness	0.440	<.001
Not Being Able To Access Information	0.339	<.001
Giving Up Converience	0.357	<.001

5 Discussion

The purpose of this study was to empirically determine the relationship between nomophobia and Problematic Internet Use (PIU) and sleep quality of students. The results of the correlation test showed that there was a relationship between nomophobia and Problematic Internet Use (PIU) in students, with r = 0.677 and p = <.001. This shows that the higher the nomophobia behavior, the higher the problematic internet use. The results of the nomophobia variable with sleep quality showed a positive relationship between the two, with a value of r = 0.385 p = <.001 (p <0.05).

The results of the correlation analysis of the nomophobia variable with problematic internet use support the first hypothesis (H1) proposed, namely that there is a positive relationship between nomophobia and problematic internet use. This finding is related to previous research conducted by Lesmana et al. [11], the correlation results showed that there was a positive relationship between nomophobia and problematic internet use in students in Jakarta.

For students themselves, smartphones and the internet are one of the important supporting tools, because they will help in obtaining information in lectures such as in completing lecture assignments. This is in line with Daeng et al. [1] who explained that smartphones will make it easier for students to access information related to their lecture activities.

According to Caplan [35] and Yildirim [26], it is explained that when someone depends on technology, especially on smartphones and the internet, then that person will be related to unhealthy use. In this case, nomophobia and problematic internet use that are related can show that students will always need smartphones that are connected to the internet as a source of information to support the fulfillment of their academic tasks. Therefore, it will lead to excessive smartphone use and will feel anxious when they do not have access to their smartphone, this will then lead to problematic internet use.

The results of the correlation analysis of nomophobia aspects on the problematic internet use variable. The losing connectedness aspect provides the greatest correlation to problematic internet use. This aspect is related to the feeling of loss when unable to connect to the system on the smartphone and unable to connect to social media.

Students will tend to experience problematic internet use when students feel anxious because they cannot check social media or access other information because they are not connected to their smartphone and are disconnected from their smartphone [35].

Based on the analysis in this study, the results showed a positive correlation between nomophobia behavior and sleep quality. Referring to these findings, it can be concluded that the higher the level of nomophobia behavior, the higher sleep quality in students. This finding is

certainly inconsistent with the second hypothesis (H2) proposed in this study, which initially predicted a negative correlation between nomophobia behavior and sleep quality in students.

In previous studies conducted by other researchers, such as Kurnia et al. [38], it was found that there was a positive and significant relationship between nomophobia and poor sleep quality, indicating that when nomophobia among students is high, their sleep quality tends to be poor. Many other studies have also shown similar results, which are in contrast to the findings of this study. In a cross-sectional study of 444 adult participants [39], nomophobia was significantly correlated with insomnia, but no significant association was found between nomophobia and sleep duration. This suggests that despite anxiety associated with nomophobia, sleep duration does not necessarily decrease.

A study of 215 college students compared those with mild, moderate, and severe nomophobia [40]. Although the severe nomophobia group showed significantly higher levels of sleepiness and sleep duration ($p<0.05$), there was no significant difference in sleep quality scores (PSQI) between the groups ($p>0.05$). This means that while there was an impact on daytime sleepiness and duration, subjective sleep quality did not significantly worsen depending on the level of nomophobia.

In this context, the positive relationship found in this study may be due to the influence of other factors. Individuals experiencing nomophobia may tend to use their smartphones for activities they perceive as calming, such as listening to music or watching videos, which may be associated with improved sleep quality. This is similar to the study conducted by Rais et al. [41], who designed an application aimed at improving sleep quality.

In their study, the designed application included relaxation features, such as nature sounds and meditation, to help users cope with insomnia and improve their sleep quality. Therefore, students experiencing nomophobia may tend to use their smartphones to access such applications as a form of positive coping strategy, which can contribute to better sleep quality.

The development of applications used on smartphones suggests that technology can be utilized effectively to support mental health and promote good sleep quality. Using smartphones for positive purposes, such as listening to relaxation sounds, can help individuals achieve a calm state.

Based on the findings of this study, there may also be errors in the process of converting responses into a Likert scale. For instance, if the scale is altered, errors in conversion could produce inaccurate data. Another possible explanation is the presence of social desirability bias, which may influence individuals to report good sleep quality in social situations, regardless of their actual conditions.

If respondents are faced with a situation where they are expected to answer honestly, they may still provide more favorable responses even if they are experiencing sleep disturbances. This may affect the data collected and result in a positive correlation between nomophobia and sleep quality that does not reflect the true situation [42].

In terms of sleep quality, correlations were also found between specific aspects of nomophobia and sleep quality. The *losing connectedness* aspect showed the strongest positive correlation with sleep quality. This may also be due to respondents expressing better sleep quality as a form of self-assurance, demonstrating perceived control over their digital environment. In the study by Bostan et al. [43], many respondents reported better sleep quality when they believed that limiting smartphone use was related to improved sleep.

Based on the findings of this study, there are some implications from this study. These findings reaffirm the positive relationship between nomophobia and Problematic Internet Use (PIU), supporting the theory that smartphone dependency can trigger unhealthy internet use behaviors. However, the results showing a positive relationship between nomophobia and sleep quality open up opportunities for expanding theoretical understanding. This could encourage new research exploring the role of positive coping strategies using smartphones (e.g., relaxation app) in improving sleep quality. This study contributes to the literature by presenting the context of Indonesian college students, which is still rarely researched on the issues of nomophobia, PIU, and sleep quality simultaneously.

For education institution, these results demonstrate the need for digital literacy education that focuses not only on reducing screen time, but also on more adaptive smartphone use, for example for relaxation or mental health support. For students, these findings provide insight that smartphones can be a positive tool when used wisely (for example, to listen to relaxing music), but excessive use still carries the risk of increasing PIU. For mobile application developers, this research suggests an opportunity to develop smartphone-based apps that combine relaxation and time management features to improve sleep quality while reducing the risk of PIU.

The author acknowledges several limitations in this study that need to be considered, such as the uneven distribution of the research sample. Although the study involved students from across Indonesia, the data showed that the majority of respondents were from universities in Java. The number of respondents from outside Java was not proportionate to those from within Java.

Additionally, the lack of personal research experience in selecting scales and analyzing results may have influenced the interpretation. A more cautious approach and deeper insights would be beneficial for future research. Nevertheless, this study successfully explored the relationship between nomophobia, problematic internet use, and sleep quality among university students.

Meanwhile, the implications for further research are can add mediating or moderating variables such as digital coping strategies, self-regulation, or duration of smartphone use before bed, and more careful validation of the instrument is needed, including minimizing social bias in filling out the questionnaire. Further studies with longitudinal designs are needed to determine the direction of the causal relationship between nomophobia, PIU, and sleep quality. And the sample for future research should be more geographically distributed so that the results can be generalized to the entire student population in Indonesia.

6 Conclusion

This study produced several findings regarding the relationship between nomophobia, problematic internet use, and sleep quality of students. The first finding is a positive relationship between nomophobia and problematic internet use, this shows that if students with high nomophobia scores then problematic internet use will also be high. Excessive smartphone use in students will involve problematic internet use.

This study found a positive relationship between nomophobia and sleep quality of students, this result contradicts the hypothesis proposed. The conflicting hypothesis shows that there are other factors that may have an influence, such as smartphone use that is used for better and quality sleep, as well as social desirability bias.

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Overview of Work Readiness in Vocational Students

Pratista Arya Satwika[1], Farida Hidayati, Selly Astriana[2], Rin Widya Agustin[3], Tri Rejeki Andayani[4], Risha Vania Jovita[5], Zakira Adila Jari[6]

{pratista@staff.uns.ac.id[1], farida_hid@staff.uns.ac.id[2], selly_astriana@staff.uns.ac.id[3], rinwidya@staff.uns.ac.id[4], menikpsy@staff.uns.ac.id[5], risha@student.uns.ac.id[6] , zakiraadilajari@student.uns.ac.id[7] }

Faculty of Psychology, Sebelas Maret University, Surakarta, Indonesia

Abstract. Work readiness is closely linked to unemployment, with vocational school graduates facing higher unemployment rates than those from other educational levels. This study aims to describe the work readiness of vocational students as a basis for designing learning systems that better respond to the specific competencies required in the labor market. A descriptive design was used, involving 162 vocational students selected through convenience sampling. Data were collected via an online survey using the Work Readiness Scale. Findings show that 69.14% of students demonstrate high work readiness, while 30.86% fall into the medium category. The strongest dimensions were responsibility (74.07%), health and safety (70.37%), communication (66.67%), and skills (61.11%). Flexibility and self-view were predominantly in the medium range, highlighting areas for improvement. This study contributes empirical evidence for curriculum and training development. The results imply a need for targeted educational interventions that strengthen flexibility and self-perception through contextual learning and direct engagement with the workplace.

Keywords: vocational students; work readiness; workplace

1 Introduction

As part of the National Education System, Vocational High Schools, commonly abbreviated as SMK, have a main focus on developing the ability of students to work in certain fields [1]. Therefore, in the learning process, SMK students are more involved in programs that seek to place students directly in the world of work, such as through Field Work Practices (PKL). The hope is that SMK students are more accustomed and skilled to face the real world of work than other secondary school graduates.

However, even so, according to data from the Central Bureau of Statistics, the Open Unemployment Rate (TPT) of SMK graduates is still the highest at 9.01% as of August 2024 compared to graduates at other education levels such as elementary school (2.32%), junior high school (4.11%), high school (7.05%), diploma (4.83%) and bachelor's degree (5.25%) [2]. Although the percentage is decreasing from the previous year, SMK graduates still have the highest unemployment rate, which needs to be monitored in the future.

Some research related to the factors that influence it lies in the lack of work readiness among vocational students [3, 5]. The lack of readiness of SMK graduates to face the real world of work is one of the main factors that causes the high unemployment rate [3]. According to several

previous studies, work readiness can help students develop a career identity [6], as well as being a predictor of performance in the world of work [7, 8]. Work readiness is needed when individuals enter the work environment because of the organization's need for competent individuals who can follow the culture and rhythm of organizational work [9, 29]. Work readiness can also encourage individuals to play an active role and participate in various situations at work, and increase job satisfaction [9]. This makes work readiness a very important variable for vocational students to have.

Although work readiness is an important issue in vocational education, quantitative data on the work readiness of vocational high school students are still limited. Therefore, in this study, we want to see the picture of work readiness owned by vocational students. Understanding the picture of vocational students' work readiness will help schools and the government later recognize better what potential is still limited and needs to be developed, so that it can be the basis for developing effective learning processes in schools.

2 Literature Review

Work readiness is the personal attributes, individual traits, and coping mechanisms needed to not only obtain employment but also to maintain it [11]. In another definition, Pool and Sewell explain that work readiness is an individual capacity consisting of abilities, knowledge, skills, and personality qualities needed by individuals to obtain the right job and achieve success [12].

Several factors are found to influence individual work readiness, such as internal and external factors. External factors include industrial work practices, family environment, support from people around them, knowledge, as well as information and interaction with the closest people, such as parents, peers, teachers, and so on. While internal factors include self-efficacy, self-confidence, hardiness, grit, career adaptability, interest, talent, and motivation [10, 13, 15].

Work readiness has several dimensions that vary from one figure to another. Brady found six dimensions of work readiness, namely responsibility, flexibility, skills, communication, self-view, and health and safety [11]. Meanwhile, Caballero and Walker suggested four dimensions in work readiness, namely social intelligence, personal characteristics, work competence, and organizational intelligence [16, 29].

In this study, we used the dimensions proposed by Brady, because they follow from previous research that uses more dimensions in the context of vocational students [11, 17, 19]. The six dimensions proposed by Brady are, (a) *Responsibility* – having personal integrity, being honest and trustworthy; (b) *Flexibility* – can adapt to changes and demands from the workplace; (c) *Skills* – can identify the abilities and skills to succeed on the job and has the desire to learn new job-related skills; (d) *Communication* (interpersonal relationship)– can establish good communication in the work environment, such as being able to follow orders, understand how to ask for help, can accept criticism and input, and respect all colleagues; (e) *Self-view* – realizing the ability to adjust, adapt, and perform in the world of work; and (f) *Health and safety* – being able to maintain personal hygiene and neatness, being physically and mentally healthy, and being able to follow safety procedures as required.

3 Method

This study uses a quantitative method with a descriptive analysis design to determine the picture of work readiness in vocational students. This survey was conducted online with 162 respondents from a vocational school in Surakarta using a convenience sampling technique. The majority of respondents were female (92.59%) and aged between 15 to 17 years (see table 1).

Table 1. Demographic Data (N=162)

Demographics	f	%
Gender		
Male	12	7,41
Female	150	92,59
Age		
15 years old	7	4,32
16 years old	109	67,28
17 years old	46	28,40

Data collection in the survey used a modified work readiness scale from Nasution [19] based on the theory of Brady [11] with six aspects, namely responsibility, flexibility, skills, communication, self-view, and health and safety. This scale has 30 items with a Cronbach's alpha of 0.944, and the range of item power ranges from 0.353 to 0.815.

4 Result

Work readiness research data were not normally distributed (p>0,05; Mean=96.22; SD=8.83). The results of a study of 162 student respondents at a vocational school found that the majority of vocational students have high work readiness (69.14%). Meanwhile, of the 6 dimensions in work readiness, SMK students have the highest presentation in the responsibility dimension (74.07%) and followed by Health and Safety (70.37%), communication (66.67%), and skills (61.11%) (see Table 2). Two dimensions need development in the dimensions of flexibility and self-view, the majority of which are still in the moderate category.

Table 2. Categorization of Work Readiness of Vocational Students (N=162)

Variable and Dimension	Low	Medium	High
Work Readiness	0%	30,86%	**69,14%**
Responsibility	0%	25,93%	**74,07%**
Flexibility	6,79%	**68,52%**	24,69%
Skills	0%	38,89%	**61,11%**
Communication	0,62%	32,72%	**66,67%**
Self-view	0%	**62,96%**	37,04%
Health and Safety	0%	29,63%	**70,37%**

Researchers also conducted a difference test to see if there are differences in work readiness, vocational students based on gender. Based on the analysis using Mann-Whitney U, it was found that there was no significant difference based on gender (p>0,05).

5 Discussion

The responsibility dimension in work readiness is the dimension that is mostly in the high categorization (74.07%). Responsibility is having personal integrity, being honest, and trustworthy [11]. This indicates that vocational students have been able to take responsibility for their tasks or at least know that there are responsibilities that must be fulfilled in every given task. When individuals are given a task, they understand that there are responsibilities imposed on them regardless of whether they are supervised or not.

The learning that SMK students have experienced from the smallest level of education, namely elementary school, to secondary school, has instilled the value of responsibility. According to Brady, this responsibility is not limited to personal responsibility, but also to colleagues and the workplace [11]. This broader definition of responsibility is seen as an important element for workers in the 21st century [11]. In addition, the vocational school curriculum, which is oriented toward real-world tasks, has also fostered awareness of individual responsibility for one's role and function, both personally and professionally.

The second dimension that has a high categorization in SMK students is health and safety (70.37%). Individuals who have high health and safety are those who can maintain personal hygiene and neatness, are physically and mentally healthy, and can follow safety procedures as requested [11]. Based on this, it can be seen that vocational students have the awareness and willingness to choose and practice occupational health and safety behavior by following every occupational health and safety policy in the workplace. Classroom learning and work practices that have been followed by vocational students make them more familiar with the behaviors that are accepted in the workplace and those that are not. Therefore, as an important behavior in the workplace, health and safety have been understood and are being obeyed by students.

The next dimension of work readiness with high categorization in vocational students is communication at 66.67%. Communication is part of social competence to support interpersonal relationships that have been shown to positively predict job performance and satisfaction [11]. Students with high communication skills will be able to establish good communication in their work environment. These behaviors include being able to follow orders, understanding how to ask for help, being able to accept criticism and input, and respecting all colleagues [11]. Vocational students in this study have understood the basics needed to build these interpersonal relationships, so they are better prepared to face the world of work.

The skills dimension is the fourth dimension of the work readiness variable owned by vocational students in the high categorization, which is 61.11%. Skills are individual skills related to their work and their willingness to learn new skills according to job demands. One of them is their willingness to participate in employee training and continuing education programs [11]. According to self-determination theory, competence is one of the three basic needs of individuals [11, 20]. Based on this, it means that the SMK students who were respondents in

this study have recognized their job skills and have a willingness to acquire new skills and engage in training. This will further improve their readiness to enter the workforce.

Meanwhile, two dimensions of work readiness of vocational students were also found to be in the moderate category, namely flexibility and self-view. Flexibility is the ability of students to be able to adapt to changes and demands from the workplace [11]. This may be due to learning patterns that are still too structured, a lack of exposure to situations that require improvisation or adaptation, and limited access to information on current job trends. Today's world of work, which tends to change quickly, also requires individual flexibility. On the one hand, a high level of self-direction and autonomy is needed to maintain continuity between the world of vocational education and the work environment, but on the other hand, there is a growing need to change and learn to face new vocational development tasks [21]. Vocational students who are currently in the medium category in the flexibility dimension need up-to-date information about the world of work. Vocational students also need to develop the ability to be open to learning new things and build open and adaptive communication. According to research, the ability of individuals to be adaptable can increase individual work readiness [13, 22, 25]

The last dimension in work readiness that is still in the moderate category is self-view. Self-view is the ability of students to realize their potential. This will later be useful in adjusting, adapting, and presenting themselves optimally in the world of work [11]. These results indicate that most students do not yet have strong confidence in their abilities and potential. This may be due to a lack of reflective processes in learning, such as a lack of strength-based assessment or a lack of psychosocial support from teachers and the school environment. This low self-view can hinder students' active involvement in learning and the world of work. Meanwhile, students who have a positive assessment of themselves and feel confident in their abilities will be able to act independently in their learning or practical tasks. These students also tend to be more courageous in making decisions and expressing opinions [26]. Mahdi and Armalita's research found that confidence in making career decisions is positively correlated with students' perceptions of their readiness to enter the workforce [27].

We also tested for differences in work readiness based on gender and found no significant differences between men and women related to work readiness. This result is consistent with previous studies that also found that, rather than being determined by gender, work readiness is more determined by skills, knowledge, and the capacity to process information [28]. The absence of significant differences in work readiness also indicates that men and women now have equal opportunities to engage in the career development process [28].

6 Conclusion

The results of descriptive analysis in this study indicate that the work readiness of vocational students is high. The dimensions that have the highest percentage are responsibility, health and safety, communication, and skills. Meanwhile, development is needed in the dimensions of flexibility and self-view, the majority of which are still in the moderate category. This study found that flexibility and self-view are still underdeveloped, even though both are important for surviving and thriving in a rapidly changing work environment. This raises concerns about the long-term adaptability of vocational graduates and indicates that the current curriculum may not be sufficient in developing students' capacities. Therefore, this study not only provides empirical evidence for curriculum development but also highlights the urgent need for educational

interventions. Particularly those prioritizing adaptability, reflective thinking, and other essential personal development aspects in preparing students for the uncertainties of the future workforce.

This study cannot be separated from several limitations, one of which is the limited sample size. Future research should use a larger sample size and expand the scope, and not be limited to one school or region. This is done to increase the generalizability of the findings to a wider population. In addition, this study used Brady's questionnaire [11]. Although this questionnaire is suitable for use in the context of vocational students, these results can also be compared when the research is conducted with other questionnaires, such as Caballero and Walker. Therefore, the suggestion for future research is to use different questionnaires in measuring vocational students' work readiness to get more comprehensive results.

In addition to these limitations and research suggestions, this study also provides important contributions and implications for policymakers in the field of education, such as schools or teachers. The empirical data found in this study can be used to develop more relevant curriculum and training, such as creating work readiness programs that refer to the dimensions of work readiness mentioned above. In addition, the empirical data in this study can be utilized in developing educational intervention programs that emphasize strengthening flexibility and self-view through contextual learning and direct work experience. Career adaptability or self-efficacy development programs for vocational high school students can take the form of several activities. The government, through its ministries, has implemented the Merdeka Belajar program, which provides flexibility in curriculum development. These findings support the need to integrate programs that focus on developing students' flexibility and self-perception into the vocational high school curriculum. For other researchers, the results of this study can also be used as a basis for building work readiness models, especially for vocational students in Indonesia.

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Understanding Coping Strategies in Islamic Boarding School Adolescents: Literature Review

Shafira Aurellia Indaryanto Putri[1], Novi Qonitatin[2]

{shafiraaurellia98@students.undip.ac.id[1], noviqonitatin@lecturer.undip.ac.id[2]}

Faculty of Psychology, Universitas Diponegoro, Semarang, Indonesia [1, 2]

Abstract. Adolescents in pesantren face unique stressors, and understanding how they cope with these challenges is crucial for developing targeted psychological support programs to improve their well-being. The purpose of this scoping review is to synthesize existing research on stress and coping strategies among adolescents in Islamic boarding schools, identify research gaps, and map emerging patterns or trends that may inform future studies and interventions. This study employed a scoping review methodology, analyzing ten relevant research articles through predefined keywords on Google Scholar. The review found that students experience stress from academic demands, strict rules, and social pressures. Most use emotion focused coping strategies, such as religiosity and social support, while some use problem focused coping. This study highlights the coping strategies used by adolescents in Islamic boarding schools, emphasizing the role of religious practices in managing stress. Future research should explore the long-term effectiveness of these strategies and the impact of institutional support on enhancing student well-being.

Keywords: coping stress, adolescents, islamic boarding school

1. Introduction

Indonesia is the largest Muslim-majority country in the world, with over 244,41 million adherents of Islam in 2024 [1]. This demographic reality is deeply reflected in the country's education system, where religious-based institutions play a significant role in shaping the character and development of the younger generation [2]. Among these institutions, *pondok pesantren* (Islamic boarding schools) hold a prominent and historical place in providing not only religious education but also moral and social values that are considered essential in Indonesian society [3,4].

Recently, data from the Indonesian Ministry of Religious Affairs (Kementerian Agama RI) reported more than 36,000 *pesantren* [5] operating across the archipelago, accommodating over 5 million students (*santri*) [6]. These institutions, spread throughout urban and rural areas, offer a unique living-learning environment where students many of whom are adolescents reside in dormitories under the close supervision of religious teachers (*kiai* or *ustadz*), follow strict daily routines, and adhere to religious obligations as an integral part of their education [7].

Adolescence is a critical developmental period marked by significant physical, emotional, and social changes [8]. During this stage, individuals are highly vulnerable to stress due to academic demands, identity formation, peer relationships, and family expectations [9]. For adolescents who reside in Islamic boarding schools, or pesantren, these stressors may be

compounded by the unique living environment, strict daily routines, and religious obligations that distinguish pesantren life from conventional schooling systems [10,11].

At the same time, they must adapt to the demanding life within a boarding school environment, which includes separation from family, reduced personal freedom, structured activities from dawn until night, and high expectations both academically and religiously [12,13]. These conditions can present significant psychological challenges. Studies in Indonesia have shown that pesantren adolescents often report moderate to high levels of stress due to homesickness, academic and religious pressures, interpersonal conflicts, and the overall rigidity of their environment [14].

If not addressed adequately, such stress can lead to negative psychological outcomes, including anxiety, depression, fatigue, reduced academic motivation, and social withdrawal [15,16]. These issues not only affect students' academic achievement but also their overall well-being and long-term development [17,18]. Therefore, understanding how adolescents in pesantren cope with stress becomes essential. Coping refers to the mental and behavioral efforts employed to handle both internal and external sources of stress [19]. These strategies may vary significantly depending on personal traits, social support, religious beliefs, and environmental factors specific to *pesantren* life [20,21].

This article is a literature review that aims to gather and synthesize existing research related to stress and coping strategies among adolescents living in Islamic boarding schools. By identifying common coping patterns, examining their effectiveness, and exploring culturally and religiously contextual factors, this study seeks to provide a deeper understanding of psychological resilience in pesantren adolescents. Ultimately, the findings are expected to contribute to the development of psychological support and intervention programs that are responsive to the needs of adolescents in religious boarding school environments in Indonesia. Despite the growing number of studies on adolescent stress and coping in pesantren environments, there remains a lack of synthesis regarding how these findings relate to each other, the consistency of outcomes across studies, and the extent to which religious coping strategies are integrated. This review is needed to systematically map the findings, identify consistencies and variations, and clarify research gaps—particularly in the operationalization of religious coping strategies.

2. Literature Review

Stress is a natural response experienced by individuals when faced with demands that exceed their coping resources. To manage stress effectively, individuals often utilize coping strategies psychological and behavioral techniques aimed at reducing the adverse effects of stress [22]. Coping is broadly defined as the mental and behavioral efforts employed to manage internal and external stressors [23].

According to Cardile et al. [24] coping strategies involve improving one's coping skills through processes such as mastery, reduction, and minimization of stress via both psychological and behavioral means. These strategies are not only reactive but can also serve preventive functions by preparing individuals to face future stressors more effectively [25].

Lazarus described one of the most influential figures in coping research, conceptualized coping as a dynamic and situational process that includes both problem solving efforts and emotion regulation strategies [26]. He described coping as the most realistic and simplest form

of problem-solving, involving active management of thoughts and behaviors in order to overcome or adapt to stress-inducing situations. Coping, therefore, includes both cognitive and behavioral components and functions to help individuals endure or mitigate pressures whether real or perceived [22].

Lazarus and Folkman proposed two major types of coping [27] namely (1) problem focused coping, which aims to deal directly with the source of stress by changing the situation or one's interaction with it, and (2) emotion focused coping, which is aimed at managing the emotional response to the stressor, particularly when the source of stress is beyond the individual's control.

The effectiveness of coping strategies depends on several factors, such as personality traits, the nature and intensity of the stressor, and the social and cultural context [28]. Inappropriate selection of coping strategies where the chosen method does not fit the nature of the stressor can lead to ineffective stress management, and may even result in additional psychological problems [29]. In the context of adolescents, especially those living in highly structured environments like Islamic boarding schools (*pesantren*), coping becomes a critical skill that supports both psychological well-being and academic success.

3. Methods

This study employed a set of inclusion and exclusion criteria to guide the selection of articles for review. The inclusion criteria consisted of the following: (1) the article discusses the concept of students or santri in Islamic boarding schools (pesantren); (2) the article provides an explanation of stress coping strategies within the pesantren context; (3) the article contains complete sections, including abstract, methodology, results, and discussion; and (4) the article was published within the time frame of 2023 to 2025. The screening process followed four stages: identification, screening, eligibility, and inclusion. From an initial pool of 47 articles, 28 were removed due to duplication or irrelevance. After applying inclusion criteria, only 10 full-text articles met all the requirements and were included in the final synthesis. Thematic synthesis was used to analyze the extracted data from each article.

Meanwhile, the exclusion criteria comprised the following: (1) student theses or undergraduate final projects (non-peer-reviewed scientific publications.and (2) the article is incomplete or lacks essential structural components.

The literature search was conducted using Google Scholar as the primary database. Keywords used for the search included "*santri*", "*strategi coping*", and "*pondok pesantren*". Articles retrieved from the database were first screened to avoid duplication by identifying and removing those with identical titles. The selected articles were then further filtered based on the predefined inclusion and exclusion criteria. Articles that presented only abstracts without full text were excluded from the analysis.

Following this filtering process, the remaining articles were subjected to data extraction. The extracted data were organized in a table that included information such as the author(s) of the article, the year of publication, the aim of the study, the research methodology used, and the main findings. This process allowed for a structured synthesis of the literature on stress coping strategies among adolescents in Islamic boarding schools.

4. Result

This study is a literature review in the form of a narrative review. The articles were retrieved from the Google Scholar database. The selected articles were written in Indonesian and published between the years 2023 and 2025. The keywords used in the article search were "santri", "coping strategies", and "pondok pesantren". In total, 10 articles were included in this review. From these articles, information was extracted for analysis, including the title of the literature, year of publication, research subjects, research design, and findings. The extracted data were then analyzed for their relevance to the review topic, followed by conclusions and suggestions based on the analysis of the ten previous studies that aligned with the issues discussed in this literature review. These 10 articles were identified through a systematic search process, where articles were filtered using inclusion and exclusion criteria, and further selected based on full-text availability and relevance to the topic of adolescent stress and coping in pesantren settings.

Table 1. Extraction findings article

No.	Author's	Year	Purpose	Method	Result
1	Aisyah Putri, Nina, dan Susaldi	2025	to determine the relationship between coping strategies, social support, religiosity and anxiety levels in facing exams in class 9 of SMP Pondok Pesantren Cendekia Amanah Depok.	The research employed a quantitative design using a correlational method and a cross-sectional approach. A total sampling technique was used, involving 30 respondents from SMP Pondok Pesantren Cendekia Amanah, Depok. Following the proposal defense in October 2024, data collection was conducted on January 22, 2025.	The results of the study indicate that coping strategies (p-value = 0.000), social support (p-value = 0.000), and religiosity (p-value = 0.000) all have p-values < 0.05. Therefore, it can be concluded that there is a significant relationship between coping strategies, social support, and religiosity with the level of anxiety in facing exams among 9th-grade students at SMP Pondok Pesantren Cendekia Amanah Depok.
2	Alwi Mahardhika Sodiq ,Mochamad Widjanarko ,Suharsono	2023	This study aims to examine the origins of stress and elucidate coping mechanisms employed by	This study used a descriptive qualitative approach with semi-structured interviews involving four santri in Kudus. Data were collected through observation,	Findings reveal that stress arises from three sources: internal factors, familial influences,

	students experiencing monotony and pressure in Islamic boarding schools.		interviews, and documentation. The interviews explored motivations, challenges, and coping strategies in memorizing the Qur'an. Data were analyzed through categorization and interpreted using Lazarus and Folkman's coping theory, with validity ensured through triangulation and member checks.	and environmental pressures. The coping strategies implemented by the subjects involve regulating interactions between individuals and the environment through problem-solving, decision-making, and direct actions.	
3	Putri Syarifah, Ira Darmawanti	2023	The purpose of this research is to get an overview of the coping strategies used by students at Islamic Boarding School X.	The research method used is a qualitative research method using a case study approach. The participants in this study were 4 students who memorized the Al-Qur'an as well. Data was collected using a semi-structured interview technique to participants and SO (Significant Other). The data analysis technique in this study uses thematic data analysis. The test used for the validity of the data in this study is triangulation of sources and using reference materials.	The study found that all four participants used both problem-focused and emotion-focused coping strategies. Problem-focused coping involved repeating readings when memorization was difficult. Emotion-focused coping varied among individuals, including calming down, withdrawing, staying silent, sharing with others, and praying to Allah SWT for peace and help.
4	Rina Priarni, Ayep Rosidi, & Serani Dara Listya	2024	This study seeks to explore and explain in depth the application of stress coping strategies as a means to address bullying behavior among children at the	This study adopts a qualitative approach. Data were gathered through observations, in-depth interviews, and document analysis. The collected data were then interpreted to derive meaning, from which conclusions were	The findings of the study indicate that the application of stress coping strategies at Al-Hikmah Gedanganak Islamic Boarding

				Al-Hikmah Gedang Islamic Boarding School in Ungaran.	formulated.	School primarily involves emotion-focused coping techniques, such as self-control, seeking social support, positive reinterpretation, acceptance, and denial.
5	Yanti Asmarani, Ros Mayasari, Aulia Afriany, Khairunnisa Syamsu	2024	This study aims to explore the stress dynamics experienced by new students at Pondok Pesantren Modern Al-Ikhlas Labunti.	A qualitative approach was employed using narrative inquiry to understand the personal experiences of students in depth.	New students at Pondok Pesantren Modern Al-Ikhlas Labunti experience stress due to frustration, difficulty adapting, and challenging physical and social environments. Symptoms include physical discomfort, emotional distress, and behavioral changes. Their coping strategies mainly involve emotion-focused coping, positive reappraisal, and accepting responsibility.
6	Sri Ratnawati	2024	To describe the stress coping strategies of students who successfully completed their education.	Quantitative descriptive study with 63 second-grade high school students as the sample.	Students used both emotion- and problem-focused coping; confrontational coping was the most commonly used strategy.
7	Nurul Izah,	2023	This study aims	Using a qualitative	To cope, students

	Dewi Khurun Aini, Baidi Bukhori		to describe the stress and coping strategies of female students at the Tahfidzul Qur'an Putri Islamic Boarding School in Semarang.	phenomenological method with Amadeo Giorgi's analysis, participants were selected purposively—female residents aged 18–25.	use both emotion-focused strategies (such as reading the Qur'an, listening to murottal, and engaging in spiritual practices) and problem-focused strategies (such as tahajjud prayer, seeking advice from ustadzah, and managing time wisely by reducing distractions like social media).
8	Anisa Aulia, Priyadi Nugraha Prabamurti, & Aditya Kusumawati	2024	The study aimed to analyze the coping behaviors of female tahfiz students who face stress from balancing their Quran memorization with college responsibilities.	This research utilized a quantitative approach with a cross-sectional design, involving 60 female tahfiz students selected through total sampling.	The study found that age (p = 0.036) was associated with emotion-focused coping behaviors but not with problem-focused coping. Other factors, including college major, knowledge, attitudes, facilities, access to information, and support from close individuals, did not significantly relate to coping behaviors. The study suggests that Islamic boarding schools reconsider the minimum age

					requirement for tahfiz programs and implement mental health promotion efforts in collaboration with health and educational institutions.
9	Finanin Nur Indana, Fitri Husnun Halimah	2024	The purpose of this study was to examine the stress coping strategies used by female santri at the Salafiyah Syafi'iyah Sukorejo boarding school.	This research employed a descriptive quantitative approach. The study's population consisted of santri aged from adolescence to adulthood, with a sample size of 140 out of 216 students selected using a proportionate stratified random sampling technique.	The study found that 72.9% of santri used emotion-focused coping, while 66.4% used problem-focused coping. There was a significant difference in coping behaviors between adolescent and adult students (p = 0.033). The study concluded that effective coping strategies can reduce stress levels.
10	Aisyatin Kamila, Faidatul Hasanah	2023	This study aims to identify and describe the psychological problems faced by students in the language dormitories at Salafiyah Syafi'iyah Islamic Boarding School, Sukorejo	A qualitative approach was used, involving 7 students who had been in the dormitory for at least 2 years, aged 17 and over. Data was collected through observation and interviews.	The students primarily used emotion-focused coping strategies, often diverting their problems and stressors by creating new issues to manage them.

Situbondo, and the coping strategies they use.

Based on Table 1, it is shown that among the 10 reviewed research articles, 4 articles (40%) were published in 2023, 5 articles (50%) in 2024, and 1 article (10%) in 2025. Regarding research methods, 7 articles (70%) employed a qualitative approach, while the remaining 3 articles (30%) used a quantitative research approach. Based on the study by Putri, Nina, and Susaldi [30] , there is a significant relationship between coping strategies, social support, and religiosity with exam anxiety among 9th-grade students at SMP Pondok Pesantren Cendekia Amanah Depok (p < 0.05). Based on the study by Sodiq, Widjanarko, and Suharsono [31], stress among santri originates from internal, family, and environmental factors. Coping strategies involve problem solving, decision-making, and direct actions, as explained through Lazarus and Folkman's coping theory. Based on the study by Syarifah and Darmawanti [32], students at Islamic Boarding School X used both problem focused and emotion focused coping. Problem focused coping involved repeating Qur'anic recitations, while emotion-focused coping included calming down, withdrawing, sharing with others, and praying to Allah SWT. Based on the study by Priarni et al [33], stress coping strategies among children at Al-Hikmah Gedang Islamic Boarding School primarily involve emotion focused coping, including self control, seeking social support, positive reinterpretation, acceptance, and denial. Based on the study by Yanti Asmarani et al [34], new students at Pondok Pesantren Modern Al-Ikhlas Labunti experience stress due to adaptation challenges and environmental pressures. Their coping strategies predominantly involve emotion-focused coping, positive reappraisal, and accepting responsibility. Ratnawati [35] found that students who successfully completed their education used both emotion and problem focused coping strategies, with confrontational coping being the most commonly used method. Izah et al [36] found that female students at the Tahfidzul Qur'an Putri Islamic Boarding School in Semarang cope with stress using both emotion focused strategies (e.g., reading the Qur'an, listening to murottal, spiritual practices) and problem-focused strategies (e.g., tahajjud prayer, seeking advice from ustadzah, time management). Aulia et al [37] found that age was significantly associated with emotion focused coping behaviors among female tahfiz students balancing Quran memorization and college responsibilities, while other factors like major, knowledge, and social support showed no significant relation. Indana & Halimah [38] found that female santri at the Salafiyah Syafi'iyah Sukorejo boarding school predominantly used emotion focused (72.9%) and problem focused (66.4%) coping strategies, with significant differences in coping between adolescents and adults (p = 0.033). Kamila & Hasanah [39] found that students in the language dormitories at Salafiyah Syafi'iyah Islamic Boarding School primarily used emotion-focused coping strategies, often managing stress by diverting problems or creating new ones as a form of distraction. Islamic boarding schools are characterized by their full-time residential system, spiritual-based curriculum, and discipline-focused routines. Students are expected to memorize the Qur'an, participate in religious rituals, and adhere to a highly structured environment guided by Islamic values and teachings.

5. Discussion

Causes of stress

Based on the findings from the ten reviewed articles, the discussion regarding the causes of stress among students in Islamic boarding schools (*pesantren*) reveals that academic demands and social environmental factors are the primary stressors.

Several studies, such as those by Ratnawati [35] and Sodiq [31], highlight strict regulations and high academic pressure as the main contributors to stress. This is supported by the findings of Putri et al [30], Kamila & Hasanah [39], and Izah et al [36], which point to heavy Qur'an memorization loads, numerous school subjects, and difficulty in adapting as significant stressors for students.

Additionally, environmental discomfort also contributes to stress, as mentioned by Asmarani et al [34], where unclean surroundings and poor adaptation were stress-inducing factors. Bullying was also identified as a cause of stress in the study by Priarni et al [33].

In responding to these stressors, most students tended to use emotion focused coping strategies, such as increasing religiosity, being patient, praying, reading the Qur'an, and seeking social support. Problem focused coping strategies, such as reviewing memorization or seeking help from peers, were used less frequently. Interestingly, problem-focused strategies were more actively employed in contexts of higher stress or dual academic demands (e.g., Qur'an memorization alongside college obligations), as seen in the studies by Syarifah & Darmawanti [32] and Izah et al [36].

In conclusion, the main sources of stress for pesantren students stem from internal institutional pressures and the dual roles they must fulfill as students and Qur'an memorizers, and these stressors are predominantly addressed through spiritual and emotional coping mechanisms rather than direct problem solving approaches.

Coping stress used by *santri*

The findings of the reviewed studies indicate that emotion focused coping strategies are the most commonly used by students in Islamic boarding schools (pesantren) to manage stress. These strategies include religious practices (e.g., praying, reading the Qur'an, listening to murottal, performing tahajjud), emotional regulation, patience, and seeking social support from friends, ustadzah, or family members. Such approaches are deeply rooted in the religious and cultural context of the pesantren environment, where spiritual activities are integral to daily life.

Emotion focused coping was particularly dominant in studies by Asmarani et al [34], Putri et al [30], Kamila & Hasanah [39], and Indana & Halimah [38], who found that students tended to turn inward or upward (toward God) when faced with stressors related to academic pressure, adaptation difficulties, and environmental discomfort. Even in cases of bullying, as noted by Priarni et al [33], emotional coping was the preferred strategy.

On the other hand, problem focused coping was used less frequently but emerged in certain contexts especially when students were actively seeking solutions to specific challenges, such as managing study schedules or improving memorization outcomes. For example, Syarifah &

Darmawanti [32] and Izah et al [36] reported that some students managed stress by continuing their memorization routines or seeking practical help from peers.

One study by Ratnawati [35] identified confrontive coping as a dominant strategy, which involves facing stressors directly with assertive actions. This suggests that while emotional coping dominates, some students also develop more active strategies depending on personal characteristics or situational demands.

Overall, the studies reveal that pesantren students rely more heavily on emotion-focused coping, especially those involving religious and spiritual practices, reflecting the influence of their unique educational and cultural environment. However, the combination of both emotion and problem focused coping appears to be most effective, especially in complex or chronic stress situations. From an Islamic perspective, stress is often viewed as a test of faith (fitnah) and an opportunity for spiritual growth. The pesantren environment reinforces this view through religious practices such as dhikr, prayer, and recitation of the Qur'an, which not only serve as coping strategies but also as forms of worship and inner purification (tazkiyatun nafs). Thus, the dominant use of emotion-focused coping in these settings aligns with Islamic teachings on patience (sabr) and reliance on God (tawakkul).

6. Conclusion

This scoping review explored stressors and coping strategies among adolescents in Islamic boarding schools. The review found that students commonly experience stress due to strict regulations, academic pressure, homesickness, high routines, environmental discomfort, bullying, and difficulty adapting. In response, most students predominantly use emotion focused coping strategies, particularly those rooted in religious practices such as Qur'an recitation, prayer, and seeking spiritual support, while a smaller number employ problem focused strategies like time management and seeking academic help.

These findings highlight the importance of religious and cultural context in shaping how students manage stress within pesantren environments. The study contributes to the field by identifying coping trends specific to Islamic boarding school settings, which may inform the development of context sensitive psychological support programs.

Future research is recommended to explore the effectiveness of these coping strategies in the long term and to examine the role of institutional support in enhancing student well-being.

Acknowledgments

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Predictors of Academic Stress: The Role of Emotion Regulation and Hardiness in Thesis Writing

Siti Ambiyah Ramadhanti[1], Hariz Enggar Wijaya[2]

{19320092@alumni.uii.ac.id[1] , hariz.wijaya@uii.ac.id[2]}

Fakultas Psikologi dan Ilmu Sosial Budaya, Universitas Islam Indonesia[1,2]

Abstract. Thesis writing is a complex activity that requires cognitive, emotional, and behavioral skills. This study investigated the role of emotion regulation and hardiness as predictors of academic stress in final-year students. A total of 105 participants in this research by an online survey consisting of the Perception of Academic Stress Scale ($\alpha = 0.78$), Emotion Regulation Questionnaire Scale ($\alpha = 0.80$), and Dispositional Resilience Scale ($\alpha = 0.72$). Multiple regression analysis techniques were used to analyze the data. The results show emotion regulation and hardiness are crucial for reducing academic stress. High hardiness students are better to endure academic stress. Meanwhile, emotion regulation did not emerge as a significant predictor of academic stress. Strategies that focusing solely on emotion regulation may not mitigate academic stress in students. Promoting hardiness may be effective to help students to cope with academic stress.

Keywords: academic stress, emotion regulation, hardiness, thesis writing

1 Introduction

Stress can occur in various contexts, including pressure in the academic environment. Academic stress is a form of stress that occurs in the academic environment and affects faculty and students in educational institutions [1]. The sources of stress can come from oneself, relationships with friends, lecturers, family, campus, physical health, or socioeconomic factors. Research on students in Malang, Jember, and Kediri showed that 51.1% of students experienced high stress levels [2]. Based on that study, the most common sources of stress are lecture load, limited time, academic difficulties, learning relationships, and academic pressure.

In addition, Aulia and Panjaitan study showed that students who experience academic stress are in the moderate-to-severe category [3]. The results showed that 77 students working on their theses experienced moderate stress (71.3%) and 16 students experienced severe stress (14.8%). Based on observations from students who were working on a thesis at UIN SGD Bandung, stress is often associated with complaints, fatigue, dizziness, anxiety, and lack of enthusiasm, with some even contemplating ending their studies [4].

Thesis writing aims to discover students' abilities to solve research problems, starting by determining the title, collecting data, and drawing conclusions. Students working on their theses must have a sense of optimism and enthusiasm, achieve achievements, and play an active role [5]. However,

many students experienced difficulties in writing their theses. The challenges faced by students are diverse, such as a lack of reading resources, many revisions, a lack of research time, a limited grasp of theoretical concepts, struggling to identify a research problem, being busy, and having difficulty meeting with the supervisors, and the supervisor is slow to respond [6]. This is in line with the research conducted by Etika and Hasibuan, who found that the problems often faced by students who work on their theses are confused about finding a title, lack of time, lack of references, the supervisor is busy, laziness, lack of motivation, difficulty in managing time, lack of focus, and fatigue [7].

The academic stress experienced by students when writing a thesis cannot be ignored because it can pose negative consequences. Academic stress can be detrimental to students because the pressure they experience prevents them from performing well, accordance to their actual capacity [8]. Consequently, thoughts arising from academic pressure can affect academic performance. Academic stress that occurs in students affects the process of working on their thesis; namely, the more neglected the thesis writing, the more hampered the cognitive process in completing the thesis due to worry, anxiety, stress, and reduced motivation to work on the thesis [9].

If not overcome immediately, academic stress could affects students' learning outcomes or achievements. Academic stress affects physical reactions, feelings, thoughts, and behaviors. The effects of academic stress are physiologically manifested by the appearance of cold sweats, stiff bodies, trembling, heart palpitations, weakness, dizziness, and pallor. Affectively, feelings of sadness, anxiety, sensitivity, anger, and frustration appeared. Cognitively, students have difficulty focusing on learning, thinking negatively about themselves and their environment, and understanding and remembering materials. In addition, behavior affects avoidance, procrastination, laziness, and excessive pleasure seeking [10].

2   Literature Review

According to Gadzella and Baloglu, stress can arise from internal and external factors [10]. Internal factors include frustration, conflict, pressure, and *self-imposed stress*. External factors include family demands, school, and the physical environment. According to Oon, academic stress factors are divided into two categories: internal factors, which include mindsets, personalities, and beliefs, and external factors, which include environmental and physical factors [11].

To overcome academic stress experienced by students, regulating one's emotions is crucial. According to Gross, emotion regulation is an individual's ability to consciously or unconsciously regulate feelings [12]. If students have good emotion regulation, they can maximize positive emotions, minimize negative emotions, and overcome difficulties they feel well. However, if the ability to regulate emotions is low, the individual will experience constant stress and will tend to experience stress under pressure. According to Greenberg and Stone [13], the opinion reinforces that emotion regulation can reduce stress levels in students because individuals can express their emotions verbally and in writing. By expressing their feelings, individuals can help improve their psychological and physical health when dealing with traumatic events in their lives, as well as help cope with the mental stress experienced.

Emotion regulation and stress are interrelated, and emotion regulation can play an essential role in creating awareness among students about how to respond to and overcome stress appropriately [4]. Therefore, the ability to regulate emotions can reduce academic stress. This finding is in line with Sari study, that there is a negative relationship between emotion regulation and academic stress [14]. Therefore, high emotional regulation affects academic stress. In addition, Pratama and Suprihatin's research showed that there is a relationship between emotion regulation and academic stress among students [15]. Students with good emotion regulation are aware of their emotional state, process emotions, turn emotions into productivity, and build good relationships that can affect academic stress [15]. Likewise, studies on new students [16] and on final students [9] showed that *hardiness* was significantly and negatively related to academic stress. This means that the higher the hardness of the final students, the lower their academic stress levels. This is because, with hardiness, students can control, have a commitment to complete their thesis, and change stressful situations, showing results that are not very different; there is a negative correlation between emotional regulation and academic stress. Anggraini and Widyastuti's study corroborated the finding that emotion regulation has a significantly negative relationship with academic stress [17].

In addition, academic stress can be minimized through individual personalities. This can be seen in many previous studies showing that other variables play a role in academic stress, namely, personality. According to Taylor, this is reinforced by the fact that one factor of academic stress is influenced by personality [18]. A person's personality can determine their level of stress tolerance. This is supported by research conducted by Parkes, which states that personality can affect an individual's perception of problems, and personality characteristics that can reduce the impact of stress from a problem are those that can deal with sources of stress and control the source of stress [19]. According to Kobasa, hardiness is a vital personality type for dealing with stress [20]. Hardiness is a personality characteristic that can make individuals stronger, more stable, and more resistant to stress, thereby reducing its harmful effects [21].

Students with a hardiness personality show commitment to themselves, can see the challenges of a problem, have a positive attitude towards the environment, and can control the situation (20). This means that when facing problems while working on a thesis, students will commit to doing their thesis well and assess changes as challenges, thereby reducing academic stress. Therefore, based on the problems and pressures faced by final students in completing their thesis, an authoritarian, tenacious personality and the ability to manage emotions are needed to survive various difficulties.

As mentioned above, several studies have been conducted on academic hardiness and stress. Similarly, research on emotion regulation and academic stress has been conducted widely. However, research examining the simultaneous role of these two variables in academic stress remains underexplored. Therefore, this study aimed to investigate the role of emotion regulation and hardiness in predicting academic stress in students working on their theses.

3 Method

2..1. Participants

The participants in this study were undergraduate students in their final year, who were working on their theses. Convenience sampling was used in this study. The total number of participants who filled out the questionnaire was 126, but 21 participants were excluded because they did not meet the research criteria. The final number of participants in this study was 105. They were aged 20-23 years, with the majority being 88.6% female (n=93) and the remaining 11.4% male (n=12).

3.2. Measurement

There are three scales to collect data. The Perception of Academic Stress Scale (PAS), Emotion Regulation Questionnaire (ERQ), and Dispositional Resilience Scale (DRS-15). All were administered online.

The Perception of Academic Stress Scale (PAS) was used to measure academic stress. It was developed by Bedewy and Gabriel [22]. The PAS has an overall internal consistency of 0.78. The correlation between the items on this scale ranged from 3.8 to 4.8. The instrument was translated into Indonesian using a forward-backward translation procedure. This scale consists of three aspects: academic expectations, perception of workload and examinations, and academic self-perception. The total number of items was 18, with five alternative answers. There are five alternative responses: 1= Strongly Disagree, 2= Disagree, 3= Slightly Agree, 4= Agree, and the highest score is 5= Strongly Agree.

Emotion regulation was measured using a scale created by Gross and John [23], namely the Emotion Regulation Questionnaire (ERQ). It has been adapted in the Indonesian context by Salsabila, Iqbal, and Widiasmara [24]. Cronbach's alpha of ERQ was 0.80. This scale consists of two subscales: Cognitive Reappraisal and Expressive Suppression. The total number of items on this scale is 10 items, with seven alternative responses: 1= Strongly Disagree, 2= Disagree, 3= Somewhat Disagree, 4= Neutral, 5= Somewhat Agree, 6= Agree, 7= Strongly Agree. The higher the total score, the higher the emotion regulation score.

Hardiness was measured using The Dispositional Resilience Scale 15 (DRS-15), which was developed by Barthone based on Kobasa, Maddi, and Khan's aspects [25]. The DRS-15 has been adapted into Indonesian by Ramadhany [26]. The Cronbach's alpha coefficient is 0.72. The correlation between items ranged from 0.75 to 8.73. The scale comprises three aspects: commitment, control, and challenge. The number of items is 15, with four alternative responses: 1= Strongly Disagree, 2= Disagree, 3= Agree, and 4= Strongly Agree. The higher the score the subject received, the more complex the subject was perceived to be.

3.3. Data analysis

The data obtained will be analyzed using multiple regression analysis. Regression was used to determine whether the regulation of emotion and hardiness together can predict academic stress, as proposed in the previous hypothesis. Data analysis calculations were conducted using the Statistical Package for the Social Science (SPSS) 25.0 for Windows computer program.

Result

Table 1. Participants demography

Aspecs	Category	Total	Percent
Gender	Male	12	11.4%
	Female	93	88.6%
Age	20	9	8.6%
	21	63	60%
	22	30	28.6%
	23	3	2.8%

Based on Table 1, participants of this study were dominantly female (88.6%) and 21 years old (60%). Before we analyze the data, all regression assumptions were checked for normality, linearity, multicollinearity, and heteroscedasticity. The residual data met normal distribution with a p-value of 0.20 (p> 0.05). The linearity test also indicated that all three variables were linear. The results of the multicollinearity test showed that the three variables had no multicollinearity, since the *tolerance value* was > 0.10, and the VIF value was <10. The heteroscedasticity test was performed using the Glycer test, where all variables were greater than 0.05, so that heteroscedasticity did not occur.

A hypothesis test was conducted using multiple linear regression with the enter method. The analysis results showed that the R Square value was 0.26, which showed that the contribution of both variables, namely hardiness and emotion regulation, could explain 26% of the variance of the academic stress.

Table 2. Prediction of the subscale of self-regulation and hardiness to academic stress

Prediktor	B	SE	β	p
expressive suppression	0.18	0.20	0.08	0.39
cognitive reappraisal	0.05	0.17	0.03	0.77
hardiness	-0.77	0.14	-0.51	0.00
F	12.02			
R^2	0.26			

Based on Table 2, it can be found that the F value is 12.02, and the significance is 0.00 (p < 0.05). Based on the value of the regression coefficient produced, the hypothesis is acceptable, where the two variables, namely, the subscales of emotion regulation and hardiness, can significantly predict academic stress. Further analysis showed that only hardiness could significantly predict academic stress, with a t-value of -5.58 and a significance value of 0.00 (sig < 0.05). The emotion regulation subscale was not a significant predictor of academic stress. The expressive suppression value of t obtained was 0.87, with a significance value of 0.39 (sig > 0.05). Cognitive reappraisal had a t-value of 0.29, with a significance value of 0.77. This demonstrates that emotion regulation variables, both expressive suppression and cognitive reappraisal, cannot significantly predict academic stress. Only hardiness predicted academic stress in students by 26%.

4 Discussion

This study aimed to determine whether emotion regulation and hardiness could simultaneously predict academic stress in students who were working on their theses. Data analysis showed that the simultaneous regulation of emotion and hardiness can predict academic stress in students who were working on their theses. However, further analysis showed that of these two variables, only hardiness could predict academic stress, but not emotion regulation. Hardiness can explain 26% variance of the academic stress.

This study corroborates Prasetya, Merida, and Novianti's study, which showed a negative relationship between hardiness and academic stress in students during distance learning [11]. Similarly, this study underlines the findings of Ramadhan and Aslamawati on academic hardiness and stress, which showed a significant negative correlation in the relatively strong category [27]. This highlights that the higher the hardiness of the students, the lower their academic stress; conversely, the lower the hardiness of the students, the higher their academic stress. Students who have high resilience in responding to stress experienced relatively lower stress than students who do not have sufficient resilience in responding to stress.

Smet stated that hardiness is a personality trait that can keep individuals healthy despite experiencing stressful events [28]. Individuals with hardiness personalities have aspects of hardiness that can minimize academic stress. This is in line with Kobasa's theory, which explains that individuals with a hardiness personality will have commitment, self-control, and be able to face challenges [20]. Students with a hardiness personality can engage in the activities they face (i.e., commitment). They are confident that they can overcome events that occur (control). Individuals can see change as an opportunity to develop themselves rather than as a threat to themselves (challenges).

Students who are fully committed to their thesis work will not experience academic stress. It is because they do not give up easily and can involve themselves with full awareness, interest, and curiosity in the process of working on their thesis. Finally, students with high self-control will survive to achieve their desired goals, even though the thesis process has pressure that can cause stress. This is because individuals can direct and manage their situations more effectively. Students with hardiness personalities can also experience stress when faced with stressful situations. However, they can deal with situations that can positively cause stress and bring comfort to themselves. In other words, hardworking students do not run away from or withdraw from stressful situations [29]. In contrast to students with low hardiness, those with high hardiness feel capable and think positively, thereby reducing stress [9].

In line with the research conducted by Muhammad, students with high hardiness will have behaviors that make them stronger in fighting stress, and they will also believe that they can control and influence all events that occur [30]. Thus, students with a hardiness personality can view problems that occur positively and have confidence in managing the situation [9].

This study also suggests that emotion regulation dimension (expressive suppression and cognitive reappraisal) cannot predict academic stress in students who were working on their theses. This finding differs from previous research, which revealed a relationship between emotion regulation and academic stress in a study conducted by Anggraini and Widyastuti on Grade XII students [17]. Several factors, such as differences in subjects, can cause differences in the results. The study used the subject of high school students in grade XII, while this study used the subject of final-year students working on their theses. Nevertheless, the results of this study support the research of Aprilia and Yoenanto [31] and Rachmawati and Cahyanti, who showed that emotion regulation does not significantly influence the academic stress of students preparing a thesis [32].

Based on the results of this study and previous supporting research, other factors are more dominant in influencing academic stress among students working on their theses. Therefore, it can be concluded that if students have high emotional regulation, this may affect their academic stress. However, it is possible that students with high emotional regulation can also experience high academic stress. In this case, the high and low emotion regulation of each individual did not affect the academic stress experienced.

Students with expressive suppression emotion regulation strategies tend to suppress their emotions, even though they do not show feelings that are felt in stressful conditions. In this case, students who use expressive suppression will store their own emotions; it is difficult to understand the emotions they feel and view them as negative. Even if an individual feels a positive emotion, they try not to express it. Releasing stress is more challenging when emotions are suppressed [33].

Gross stated that expressive suppression can consistently worsen one's conditions [12]. This is because expressive suppression attempts to inhibit, hide, or reduce emotionally expressive behaviors. In line with Gunawan and Bintari, expressive suppression strengthens the negative relationship between stress and psychological well-being [33]. This means that individuals with high stress levels who use expressive suppression strategies more often show lower psychological well-being.

In addition, based on Denson's study suggests that cognitive reapraisal can improve an individual's psychological perception of self-efficacy and control under stress, and it can increase cortisol reactivity in the short term [34]. Cortisol is a hormone involved in the stress response of the body. Cortisol is produced by the adrenal glands and released when individuals are stressed. When individuals experience stress, their cortisol levels increase. Excessively high levels of cortisol in response to stress can be harmful to an individual's physical health. This explanation supports the results of this study, which stated that the regulation of emotions, both expressive suppression and cognitive reappraisal, cannot predict academic stress among students.

Lavoue et al. explained that individuals feel emotions because of events and only when the event has benefits or can be harmful to the individual's well-being [35]. When an individual thinks that an event is depressing him, this does not mean that the same event is depressing others. Boo et al. revealed that the semester level that students undergo is the same as the psychological pressure experienced [36]. This means that the challenges students face when working on a thesis in the first

semester can differ from those faced in the second, third, fourth, and fifth semesters. The higher the student's semester level, the higher the psychological pressure experienced by first-semester students in compiling a thesis.

Based on demographic data, the participants in this study are dominated by students who are in the 8th semester, which is as many as 71.4% or 75 students, respectively. The data showed that the students were in the early second semester of the thesis process. This indicates that students who work on their thesis in the first semester do not perceive it as a treat, unlike students who have spent several semesters working on their thesis [31]. Handito and Leonardi revealed that the more semesters students take to work on their theses, the longer the graduation time, which can cause a decline in the graduation target [37]. This can lead to psychological stress. Based on this explanation, situations that can cause stress will not affect high and low emotion regulation because each individual can view and interpret the same event differently [31].

Based on the coping methods described by Lazarus and Folkman, emotion regulation was included in emotion-focused coping [38]. This is because emotion-focused coping is a way to overcome stress using emotions. Individuals who experience stress engage their emotions using their judgment of the sources of stress. Students who experience academic stress using emotion regulation strategies may be able to reduce their negative emotions, but this cannot help solve the problems they encounter. Therefore, academic stress is not appropriately resolved because it can appear in the future [31]. This finding highlights that emotion regulation cannot overcome academic stress over time.

This study has several limitations that should be considered. First, the distribution of participants was dominated by females (88.6%); therefore, the representation of male participants was small to generalize. Second, this study is correlational; therefore, it is impossible to conclude a cause-and-effect relationship between the independent and dependent variables. Third, although the academic stress measurement tool was forward-backward translated and modified according to the context of this study, it would be better in future research to validate the construct.

5   Conclusion

Overall, it can be concluded that the multiple linear regression analysis conducted in this study showed that both the variables of hardiness and emotion regulation, when considered, contributed significantly to explaining the 26% variation in academic stress. However, further partial analysis showed that only hardiness significantly predicted academic stress in students working on their theses. The two emotion regulation subscales, expressive suppression and cognitive reappraisal, cannot simultaneously predict academic stress. Campus policymakers should consider developing hardiness personality-strengthening programs to prevent or reduce student stress.

6   Suggestion

Several implications and suggestions can be drawn from this study's findings and limitations. First, there is a need to focus on developing mental strength and resilience to protect the students from stress. Efforts to improve individual hardiness can be made through educational programs that

involve learning stress management skills, improving self-efficacy, and developing adaptive coping strategies. Second, because emotion regulation in the form of expressive suppression and cognitive reappraisal had no significant influence on academic stress, further research should explore other factors that may regulate emotion and academic stress. More research is needed to understand the external factors affecting academic stress, such as social support, academic environment, and other personal factors. Third, it is essential to consider the limitations of future research. For example, a more evenly distributed sample of men and women should be examined to make the study results more gender representative. In addition, it is recommended that a specially validated academic stress measurement tool be used to measure stress levels in the context of thesis work or similar assignments. By paying attention to these implications and suggestions, further research can contribute to a better understanding of the factors that play a role in academic stress and develop effective intervention strategies to reduce academic stress in college students.

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Student Engagement and School Well-Being in Vocational High School Students: The Role of Academic Self-Efficacy as A Mediator

Devi Jati Septyningtyas[1], Tri Na'imah[2], Retno Dwiyanti[3]

{devijatiseptyningtyas@gmail.com[1], trinaimah@ump.ac.id[2], retnodwiyanti@ump.ac.id[3]}

Faculty of Psychology, Universitas Muhammadiyah Purwokerto, Purwokerto, Indonesia[1,2,3]

Abstract. Low levels of student engagement, academic self-efficacy, and school well-being are prevalent among vocational students, which may hinder their academic success. This study aims to examine the effect of student engagement on school well-being, mediated by academic self-efficacy. Using a quantitative approach, data were collected from 118 11th-grade students at SMK Negeri 1 Purwokerto via validated Likert-scale instruments. Mediation regression analysis revealed that student engagement significantly predicts both academic self-efficacy ($t = 10.791$, $p < 0.001$, $R^2 = 0.708$) and school well-being ($t = 7.392$, $p < 0.001$, $R^2 = 0.566$). Academic self-efficacy also significantly affects school well-being ($t = 10.830$, $p < 0.001$, $R^2 = 0.709$), whereas the direct effect of student engagement on school well-being was not significant ($t = 1.389$, $p = 0.167$). These results indicate that academic self-efficacy mediates the relationship between student engagement and school well-being. The findings suggest that fostering student engagement and self-efficacy through supportive learning environments and psychological interventions is crucial to enhancing students' school well-being.

Keywords: Academic Self-efficacy; School Well-being; Senior High School Students; Student Engagement

1 Introduction

Schools play a critical role in adolescent development by shaping identity, self-esteem, social interactions, moral reasoning, and students' understanding of social systems [1, 2]. Understanding the factors that influence students' experiences and perceptions of school is therefore essential for establishing strategies that support their holistic development and long-term success.

School well-being extends Allardt's [3] concept of well-being, which refers to the fulfillment of both material and non-material needs necessary for optimal functioning. Konu and Rimpelä [4] further conceptualize school well-being as students' subjective evaluation of their school environment, consisting of four key dimensions: having, loving, being, and health. These dimensions encompass school infrastructure, social relationships, opportunities for self-actualization, and the absence of illness caused by academic demands [7–10]. Together, they provide a comprehensive framework for understanding students' school experiences. Furlong

et al. [5] highlight that unfavorable school conditions can provoke stress, boredom, alienation, loneliness, and depression, underscoring the importance of fostering environments that promote student well-being. Supporting school well-being can be achieved through various pathways, such as strengthening community support, promoting prosocial attitudes, ensuring safety, and cultivating meaningful and healthy learning environments [6]. In vocational school contexts, these aspects are strongly linked to students' levels of engagement, which may be further enhanced through academic self-efficacy.

Student engagement is one of the primary factors influencing school well-being. It involves students' focus, effort, participation, curiosity, and enthusiasm during learning activities [14, 15]. The construct originated from early work by Tyler (1969) and Pace (1984) and has since evolved into a multidimensional concept. Engagement includes both time and effort invested by students and the policies or practices implemented by educational institutions to encourage participation inside and outside the classroom [11, 17]. Fredericks et al. [20] classify engagement into three dimensions: behavioral, emotional, and cognitive. Behavioral engagement refers to attendance, adherence to school rules, and active participation [19, 22]; emotional engagement reflects students' feelings toward teachers, peers, and the learning environment [23]; while cognitive engagement involves motivation, effortful thinking, and autonomous goal-setting [24, 25]. These dimensions form an integrated framework for understanding how students interact with their learning environment and how these interactions may influence their school well-being.

Academic self-efficacy is another factor that may strengthen the relationship between student engagement and school well-being. Bandura [26] defines self-efficacy as a belief in one's ability to plan and execute actions required to achieve specific performance outcomes. Within educational settings, academic self-efficacy refers to students' confidence in completing tasks and achieving learning objectives [27–29]. Because it shapes motivation, persistence, and coping strategies, academic self-efficacy plays a key role in how engagement translates into academic and psychological benefits.

Students with high academic self-efficacy typically show greater persistence, effort, and resilience when facing academic challenges [30–33]. This confidence contributes to better academic performance and improves students' ability to manage academic demands, making it a vital psychological resource in education [34]. Moreover, strong academic self-efficacy supports students' emotional well-being by reducing stress and anxiety and enhancing their sense of competence [35, 36]. Student engagement not only directly contributes to school well-being by fostering belonging, satisfaction, and social support, but also indirectly enhances well-being through academic self-efficacy, which mediates the relationship by reinforcing positive beliefs and helping students cope with academic pressures [37, 38]. Therefore, academic self-efficacy serves as a crucial psychological bridge explaining how student engagement can more profoundly contribute to school well-being.

2 Literature Review

2.1 School Well-Being

School well-being broadly reflects students' overall experience in the school environment, covering physical, emotional, social, and psychological facets that promote their optimal growth. Konu and Rimpelä [4] proposed a model highlighting four key dimensions: 'having,' which involves access to physical resources and a supportive, safe, and comfortable environment; 'loving,' referring to positive social relationships with peers and teachers that foster mutual support and acceptance; 'being,' which includes opportunities for self-expression, feeling valued, and engaging actively in school activities to support identity and autonomy; and 'health,' encompassing both physical and mental well-being, including feeling healthy and stress-free. They stress that school well-being results from the dynamic interaction of individual qualities and a supportive school setting, which can boost motivation, achievement, and overall quality of life. Consequently, school well-being extends beyond physical or academic factors, integrating social and emotional elements essential for students' comprehensive development.

2.2 Student engagement

Student engagement refers to the extent to which students actively participate in the learning process at behavioral, emotional, and cognitive levels. It reflects the quality of their involvement in academic activities and their connection to the school environment. Fredricks, Blumenfeld, and Paris [39] conceptualize student engagement as a multidimensional construct consisting of three core components. Behavioral engagement includes students' observable participation in school activities, such as attending classes, completing assignments, and contributing to discussions or extracurricular programs. Emotional engagement involves students' affective reactions toward school, teachers, and peers, where positive emotions—such as enthusiasm, comfort, and a sense of belonging—enhance motivation, while negative emotions—such as anxiety or alienation—can undermine well-being and participation. Cognitive engagement represents a deeper mental investment in learning, including the use of advanced learning strategies, conceptual understanding, and persistence in the face of academic challenges. These three dimensions are interrelated and serve as key indicators of students' academic success, motivation, and overall well-being [39]. Promoting balanced behavioral, emotional, and cognitive engagement can therefore support more meaningful and sustainable learning experiences for students.

2.3 Academic self-efficacy

According to Sagone and Caroli [40], academic self-efficacy refers to students' confidence in their ability to manage academic tasks and achieve learning goals. Acting as a mediator between student engagement and school well-being, academic self-efficacy influences how students cope with academic challenges, regulate stress, and sustain motivation. Sagone and Caroli [40] identify four key components that shape students' academic self-efficacy. The first is self-engagement, which reflects students' active involvement in the learning process and their commitment to completing academic tasks. The second component is self-oriented decision-making, referring to students' ability to make independent choices related to their learning. The third, other-oriented problem-solving, involves students' capacity to resolve issues that arise in social and collaborative academic settings. The final component, interpersonal climate,

emphasizes the importance of supportive relationships with teachers and peers in fostering students' academic confidence. Together, these elements form a comprehensive structure of academic self-efficacy that influences how students overcome classroom challenges and achieve their learning goals. Strengthening these components can therefore enhance students' academic performance as well as their overall well-being at school.

3 Method

The method applied in this research is quantitative research. The independent variable in this study is Student Engagement, the dependent variable in this study is School Well-being, and the mediator variable in this study is Academic Self-Efficacy. The research subjects consisted of 118 students of class XI, State Vocational High School 1 Purwokerto. The instrument used in this study was a student engagement scale based on SEM Mac Arthur. Fredricks et al., [20] developed by Zanira & Cahyadi [41], which amounted to 19 items. The reliability of the student engagement scale is 0.886.

The school well-being scale is based on aspects of school well-being. Konu & Rimpelä [4], which was later developed by Wahidah & Royanto (2019), which amounted to 32 items. The reliability of the school well-being scale is 0.853. The academic self-efficacy scale is based on aspects initiated by Sagone & Caroli [40], which was developed by Darmayanti et al., [43], which amounted to 25 items with a reliability of <0.70. The scale is arranged based on a Likert scale model with 5 alternative answers, namely: 1 = strongly disagree, 2 = disagree, 3 = neutral, 4 = agree, and 5 = strongly agree.

The data analysis used in this study is multiple regression analysis because it aims to determine much influence between variables on the dependent variable. Data analysis using the help of SPSS version 27.

4 Result

The demographic characteristics of the respondents in this study included age, gender, and grade level. Details of the distribution of respondents can be seen in Table 1.

Table 1. Demographic Characteristics of Respondents (n = 119)

Characteristics	Category	Frequency (n)	Percentage (%)
Age	15 years	4	3.4
	16 years	85	71.4
	17 years	30	25.2
Gender	Male	43	36.1
	Female	76	63.9

Based on Table 1, the majority of respondents were 16 years old (71.4%), followed by respondents aged 17 (25.2%) and 15 (3.4%). The gender composition shows that most

respondents were female (63.9%), while males accounted for 36.1%. All respondents were from grade 11 (100%). This characteristic indicates that the research sample was dominated by mid-adolescent students with a higher proportion of females, which could potentially influence student engagement levels, academic self-efficacy, and school well-being.

The results of this study begin with a descriptive analysis that outlines the frequency distribution and statistical characteristics of the main variables in this study. Table 1 below presents the minimum, maximum, mean, and standard deviation values for the Student Engagement, School Well-Being, and Academic Self-Efficacy variables.

Table 2. Descriptive Statistical Data

Variable	Min.	Max.	Mean	SD
Student Engagement	17	36	28	4
School Well-being	35	63	50	6
Academic Self-Efficacy	57	104	79	10

There are three research scales, namely, the Student Engagement Scale, School Well-being scale, and Academic Self-Efficacy Scale, with a minimum score of 1 and a maximum score of 4. The student engagement scale has 9 items, and statistical data shows a minimum value of 17, a maximum value of 36, a mean of 28, and a standard deviation of 4. The School Well-Being scale has 17 items with statistical data showing a minimum value of 35, a maximum value of 63, a mean of 50, and a standard deviation of 6. And the Academic Self-Efficacy scale has 27 items with statistical data showing a minimum value of 57, a maximum value of 104, a mean of 79, and a standard deviation of 10.

In addition to descriptive statistical analysis, this study also categorized the data into several categories to understand the distribution of scores on each variable. Table 2 below presents the percentage of respondents in the Very Low, Low, Medium, High, and Very High categories for the Student Engagement, School Well-Being, and Academic Self-Efficacy variables.

Table 3. Categorization Data

Variable	Category									
	Very Low		Low		Medium		High		Very High	
	n	%	N	%	N	%	n	%	n	%
Student Engagement	8	7%	28	24%	51	43%	25	21%	6	5%
School Well-being	9	8%	29	25%	44	37%	28	24%	8	7%
Academic Self-Efficacy	9	8%	25	21%	48	41%	29	25%	7	6%

Based on Table 2, there are 8 subjects have very low category student engagement (7%), 28 subjects have low category student engagement (24%), 51 subjects that have medium category student engagement (43%), 25 subjects that have high student engagement (21%), and 6 students have very high student engagement (5%). The categorization for the level of student school well-being is, there are 9 subjects have very low scholl well-being (8%), 29 subjects have low student engagement (25%), 44 subjects have moderate scholl well-being (37%), 28 subjects have high scholl well-being (24%), and 8 students have very high scholl well-being (7%). Also, there are 9 subjects having very low academic self-efficacy (8%), 25 subjects having low academic self-efficacy (21%), 48 subjects having moderate academic self-efficacy (41%), 29 subjects having high academic self-efficacy (25%), and 7 students having very high academic self-efficacy (6%).

The results of the data processing of the student engagement, school well-being, and academic self-efficacy scales show that grade XI students of SMK Negeri 1 Purwokerto tend to have student engagement, school well-being, and academic self-efficacy in the moderate to very high category.

Furthermore, this study conducted a simple regression test to analyze the influence of the main variables. Table 3 below presents the coefficient of determination (R^2), t-value, and significance (Sig) for the relationships between Student Engagement and Academic Self-Efficacy, Student Engagement and School Well-Being, and Academic Self-Efficacy and School Well-Being.

Table 4. Simple Regression Test

Variable	R^2	t	Sig
Student Engagement towards Academic Self-Efficacy	0,708	10,791	<0.001
Student Engagement towards School Well-being	0,566	7,392	<0.001
Academic Self-Efficacy towards School Well-being	0,709	10,830	<0.001

Student engagement is positively correlated with academic self-efficacy by 0.708 (t=10.791; p <0.001). The results show an R^2 value of 0.708, which means that academic self-efficacy is influenced by student involvement by 70.8%, and 29.2% is influenced by other variables.

Based on the table, it is known that student engagement has a significant effect on academic self-efficacy (t=7.392; p <0.001). The results also show an R^2 value of 0.566, which means that 56.6% of school well-being is influenced by student engagement and 43.4% is influenced by other variables.

Academic self-efficacy is also positively correlated with school well-being by 0.709 (t=10.830; p <0.001). The results show an R^2 value of 0.709, which means that school well-being is influenced by academic self-efficacy by 70.9%, and 29.1% is influenced by other variables. Therefore, it can be concluded that the proposed hypotheses 1, 2, and 3 are accepted.

Table 5. Multiple Regression Test

Variable	T	Sig.	R²
Student Engagement	1.389	0.167	0.511
Academic Self-Efficacy	6.698	0.000	

Based on the results of data analysis, it shows that the size of the regression coefficient in the hypothesis model shows that academic self-efficacy has a direct effect on school well-being of 0.511 (t = 6.698; p = 0.001), and student engagement has no effect on school well-being (t = 1.389; p = 0.167). Academic self-efficacy significantly mediates the relationship between student engagement and school well-being.

Next, to determine the mediating role of academic self-efficacy in the relationship between student engagement and school well-being, a mediation test was conducted using the Sobel test. The results of the mediation test are presented in Table 6 below.

Table 6. Mediation Test

Pathway	Coefficient (β)	t-value	p-value	Description
Total Effect (SE → SWB, without mediator)	0.709	10.830	< 0.001	Significant
Direct Effect (SE → SWB, with mediator)	0.128	1.389	0.167	Not significant
Indirect Effect (SE → ASE → SWB, Sobel test)	0.437	5.690	< 0.001	Significant

The analysis shows that the model without a mediator produces a significant effect of student engagement on school well-being (β = 0.709, t = 10.830, p < 0.001). However, in the model with academic self-efficacy as a mediator, the direct effect becomes insignificant (β = 0.128, t = 1.389, p = 0.167), while the indirect effect remains significant (β = 0.437, t = 5.690, p < 0.001). These findings indicate that academic self-efficacy fully mediates the relationship between student engagement and school well-being. In other words, student engagement in learning contributes to improved school well-being primarily through strengthening students' academic beliefs about their abilities.

5 Discussion

The results of the simple regression analysis indicate a significant relationship between student engagement, academic self-efficacy, and school well-being. These findings provide important

insights into how students' involvement in learning and their confidence in academic abilities contribute to their overall well-being in the school environment.

The analysis shows that student engagement significantly influences academic self-efficacy, with an R^2 value of 0.708 (t = 10.791; p < 0.001). This means that 70.8% of the variance in academic self-efficacy is explained by student engagement, while the remaining 29.2% is influenced by factors not examined in this study. Students who are highly engaged—both academically and through extracurricular participation—tend to develop stronger confidence in their academic abilities. This aligns with previous research emphasizing that active engagement in the learning process is essential for strengthening academic self-efficacy, as positive learning experiences increase motivation and readiness to overcome academic challenges.

The results also reveal that student engagement significantly affects school well-being, with an R^2 value of 0.566 (t = 7.392; p < 0.001). Thus, student engagement explains 56.6% of the variance in school well-being. Students who are socially and academically involved are more likely to form strong peer relationships, feel a sense of belonging, and receive the support necessary to navigate social and academic difficulties [44]. Consequently, higher levels of engagement are associated with improved school well-being..

Furthermore, academic self-efficacy demonstrates a significant influence on school well-being, with an R^2 value of 0.709 (t = 10.830; p < 0.001), indicating that 70.9% of the variation in school well-being is explained by academic self-efficacy. Students with strong academic confidence tend to feel more comfortable in the classroom, experience lower academic anxiety, and maintain higher intrinsic motivation. Confidence in one's academic abilities enables students to manage academic challenges and reduces psychological distress, which ultimately enhances their overall well-being [45]. Thus, strengthening academic self-efficacy may serve as an effective strategy for improving students' school well-being.

The mediation analysis further demonstrates that academic self-efficacy mediates the relationship between student engagement and school well-being. While initial regression findings indicated that student engagement directly affects school well-being, the follow-up analysis shows that this direct effect becomes non-significant when academic self-efficacy is included as a mediating variable (t = 1.389; p = 0.167). In contrast, academic self-efficacy maintains a significant direct effect on school well-being ($R^2 = 0.511$; t = 6.698; p < 0.001). This suggests that student engagement enhances school well-being indirectly by strengthening academic self-efficacy rather than through direct influence alone [38, 46]. Students who actively participate in learning develop greater confidence in their academic capabilities, which in turn contributes to improved psychological comfort and well-being in the school environment [37]. These findings support the theoretical view that self-efficacy functions as a psychological mechanism linking academic experiences to students' well-being.

Overall, the study supports all three proposed hypotheses: (1) student engagement significantly affects academic self-efficacy; (2) student engagement significantly affects school well-being; and (3) academic self-efficacy significantly affects school well-being and mediates the relationship between engagement and well-being. These findings highlight important implications for educational practice. Educators should implement strategies that enhance student engagement, such as creating supportive learning environments, facilitating active participation, and fostering confidence in students' academic abilities. Strengthening academic self-efficacy through targeted interventions may also be a valuable approach to improving

students' well-being. Guidance and counseling programs that focus on building academic self-efficacy can help students manage academic obstacles more effectively and enhance their overall learning experience.

Finally, the study opens avenues for future research to explore additional variables—such as social factors, family environment, and other psychological constructs—that may influence the interplay between student engagement, academic self-efficacy, and school well-being. A deeper understanding of these factors can contribute to improving the overall quality of education and supporting students' holistic development.

6 Conclusion

The findings of this study indicate that student engagement has a significant positive effect on both academic self-efficacy and school well-being. When students are actively involved in academic and extracurricular activities, their confidence in their academic abilities increases, and they experience greater well-being at school. Active participation also helps students build meaningful social relationships, develop a sense of belonging, and access the support needed to navigate academic and social challenges.

Academic self-efficacy also plays a crucial role in enhancing school well-being. Students with strong confidence in their academic capabilities tend to be more motivated, experience lower levels of academic stress, and feel more comfortable in the school environment. The study further reveals that academic self-efficacy mediates the relationship between student engagement and school well-being. This suggests that engagement enhances school well-being indirectly by strengthening students' academic confidence rather than through direct influence alone.

These findings offer important implications for educational practice. Educators and school practitioners should implement strategies that foster student engagement—such as creating supportive learning environments, providing opportunities for active participation, and strengthening students' confidence in their academic abilities. Interventions targeting academic self-efficacy may also serve as an effective approach for improving students' overall well-being at school. Finally, this study opens avenues for future research to explore additional factors—such as social conditions, family environment, and other psychological variables—that may influence the relationship between student engagement, academic self-efficacy, and school well-being. A deeper understanding of these elements can contribute to improving the overall quality of educational experiences and student well-being in school settings.

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The Prevalence of the Halo Effect among University Students: A Quasi-Experimental Study

Voosini Saravanan[1], Sangamitra Sathiaseelan[2], Praveena Selvom[3], Kugineeshni Gopal[4], Atasha Ayuni Jaafar[5], Md Azman Shahadan[6]

voosini@gmail.com[1], sangamitrasathiaseelan2@gmail.com[2], praveenaselvom@gmail.com[3], kugigopal@gmail.com[4], nurjaafar16@gmail.com[5], mdazman@fpm.upsi.edu.my[6]

[1]Department of Psychology, Faculty of Human Development, Universiti Pendidikan Sultan Idris, Perak, Malaysia [1,2,3,4,5]

Abstract. The Halo effect is a first impression bias where perceptions in one domain influence judgements in others, potentially leading to inaccurate assessments in organizational settings. Therefore, this quasi experiment was conducted to investigate the prevalence of the Halo effect among university students using a sample of ten female undergraduates from Universiti Pendidikan Sultan Idris (UPSI). Using a within-subjects design, each participant acted as an interviewer and evaluated two confederates portraying either a good or bad first impression in simulated job interviews. Based on the descriptive analysis, $n = 7$ chose Confederate 1 with a good first impression while only $n = 3$ chose Confederate 2 with a bad first impression. This shows the prevalence of the Halo effect on UPSI students' job recruitment decisions. This experiment offers insights into the importance of raising awareness about Halo effect among undergraduate students who may play the role of future employees and recruiters.

Keywords: halo effect, first impression, job recruitment, workplace, interview

1 Introduction

This chapter outlines the study's background, articulates the problem statement and describes the research question, research objective and significance.

1.1   Background of study

Job recruitment is the process of identifying and employing competent workers to cover available vacancies in an organization [1]. The job recruitment process encompasses every step of hiring new employees from deciding what to put in a job advertisement to setting up interview questions along with rating rubrics. Among all the steps of job recruitment, interview sessions between the employers and the job candidates are the most crucial part of the employee selection process. This is because, by meeting them in real life and listening to how someone communicates, they can be evaluated well. Evidently, one cannot tell how well they engage around people by reading what they write, instead one must listen to how they speak. Furthermore, the person's social behaviour is also examined where their basic etiquette is

counted along with their body language, speech patterns and the words they employ [2]. Hence, a thorough observation is necessary from the employer's side in order to conduct a deeper analysis on the job candidate's fit in the organization's work culture and all the related aspects.

Nevertheless, when assessing a candidate, first impressions can be highly misleading and impair the employer's objectivity [1]. One such impactful first impression bias that occurs commonly in the employee recruitment process via interview is the Halo effect, which is the propensity to let a person's overall impression or a standout quality affect how highly they are rated overall [2]. That means, the Halo effect occurs when people attribute one specific (usually positive) trait of a person onto the other qualities of that person without any concrete evidence [5].

According to several studies, people make their first impressions of someone within seconds of meeting them [6]. These quick evaluations frequently rely on a mix of nonverbal behaviour, visual clues and little spoken information. The same phenomena happen in workplace settings where interviewers may inadvertently permit superficial aspects, including a candidate's dress, physical appearance or first impression, to take precedence over impartial assessments of their qualifications and interview responses. This is further supported by existing research on human resources (HR) where evidence shows that interviewers may overestimate a candidate's personality traits, leading to inaccurate conclusions about their competence and false hiring decisions [5].

When previous studies about Halo effect were reviewed, majority of the researchers have conducted their work in organisational settings [7]. For example, literature review on past research about recruitment decisions revealed that human resource managers' recruiting decisions often susceptible to biased evaluations in organisations [7]. This is because, they are generally based on superficial features such as look and speech patterns of candidate [8]. Another study found that physical attractiveness has a substantial effect on the recruiting process in organizations, with recruiters indicating a preference for attractive candidates over unattractive ones when job qualifications are equivalent [9].

Overall, the existence and influence of the Halo effect have mostly been investigated in organizational contexts rather than in other settings. Therefore, studying the prevalence of the Halo effect among university students who are future employees and potential recruiters across various fields remains a critical area of research.

1.2 Problem Statement

The Halo effect is a cognitive bias based on one good trait or characteristic that we attribute positive judgment to other unrelated traits [10]. Although the Halo effect seems to be a harmless factor in daily life, it can have a number of detrimental effects especially in job recruitment. During the recruitment and selection process via interview, recruiters or interviewers may make mistakes that have two detrimental outcomes due to the Halo effect. The first kind is predicated on selecting the unsuitable applicant for the following stage of the selection procedure. The

second kind occurs when the right applicant is turned down throughout the hiring process [10]. Both these outcomes lead to inefficiencies and poor performance. Reduced productivity could result from the person's lack of the necessary abilities, background or disposition to carry out the job well. Their inability to meet job expectations could result in their failure to satisfy job standards which could lead to missed deadlines, mistakes, and strained team chemistry. However, if a suitable applicant is turned away, the company loses the chance to hire someone who may have made a significant contribution in the company's success. This error can impede the attainment of strategic objectives and prolong skill disparities. This theoretical and empirical basis explains how crucial it is to study the effects of first impression in selecting the job candidates as employees.

Despite much research discussed Halo effect in organizational contexts, there is a lack of study conducted on exploring the prevalence of Halo effect among students in university settings. As a result, strategies devised to eliminate Halo effect, such as structured interviews, multiple interviewers and collaborative hiring process are most applicable and relevant only in organisational environments rather than in other settings [10]. University students who are just a few steps away from setting up their careers benefit from understanding how the Halo effect would affect their professional interactions when they become employees in the future [11]. Employers, coworkers and clients frequently make quick judgements, resulting in unfair benefits or disadvantages. A polished resume and a confident demeanor might make an applicant appear more capable than they are, while a highly skilled but shy individual may be overlooked. If students are trained to recognize and overcome this cognitive bias, they will be able to assess people and situations based on competence, performance and factual data rather than superficial attributes if they become recruiters in the future [11]. To bridge this gap in empirical knowledge, a quasi experiment was conducted using UPSI students to examine the prevalence of the Halo effect during simulated job interview scenarios in universities.

1.3 Research Objective

To investigate the prevalence of the Halo Effect in UPSI students' recruitment decisions during simulated job interview scenarios.

1.4 Research Question

How does the Halo Effect influence UPSI students' preferences when selecting candidates in a simulated job interview?

1.5 Significance of Study

By emphasizing this study on university students as evaluators in simulated recruitment scenarios, this experiment potentially derives a more pronounced empirical understanding of how cognitive bias such as the Halo effect may exist and influence evaluative judgments of

undergraduate students even before their inception into the workforce. The findings highlight the reception of students to form recruitment decisions based on superficial attributes, while disregarding candidates' actual potential and competency.

Furthermore, the findings from this study can also be leveraged into future planning of intervention in mitigating cognitive biases. If students are systematically exposed to recognize the implications of the Halo effect in areas where it is concerned, they are more likely to embrace evaluative tendencies grounded in structured objectivity, critical analysis and fairness. Training and exposure as such do not only secure the quality of recruitment practices, but also reduces the risk of biased selection and poor job performance in the future.

On the whole, by expanding the scope of Halo effect beyond organizational contexts, this study does not only provide insights on cognitive judgement and behaviour towards bias, rather it is an extension to integrate professional recruitment awareness throughout the span of academic discourse among undergraduate students in university. This proactive approach on the other hand will support and encourage the cultivation of future workforce driven by objectivity, fairness and bias-free.

2 Literature Review

This chapter will describe findings from multiple studies related to Halo effect on job recruitment decisions. Essentially, it will discuss the factors leading to Halo effect in job settings and negative effects of it on job recruitment decisions as highlighted by various researchers in their studies.

2.1 Factors Contributing to Halo Effect in Recruitment Contexts

There are several important factors directly or indirectly contributing to the Halo effect in job recruitment decisions in recruitment contexts. Undeniably the primary factor contributing to the Halo effect during interviews is first impressions. When a candidate makes a strong first impression, such as through their appearance, mannerism or communication skills, interviewers may unconsciously project the perceived positive or negative trait onto other unrelated characteristics, resulting in an overall favourable or unfavourable evaluation without clear rationale [8]. For example, a research finding demonstrates that physical attractiveness considerably leads to the Halo effect when making recruitment decisions because attractive people are frequently seen as more competent and knowledgeable than they actually are [12].

Besides that, Halo effect is further encouraged by stereotypes and biases [10]. Pre-existing assumptions about specific groups might affect how interviewers evaluate job candidates. For example, if an interviewer feels that people with a certain educational background are typically more skilled, they may overlook flaws in a candidate from that background due to the Halo effect [8].

Apart from that, the Halo effect becomes part of recruitment decisions owing to restricted information processing. As indicated by a research, human resource managers generally have limited time and information during interviews [5]. This causes them to use cognitive shortcuts which in turn, leads to overgeneralization and exacerbates the Halo effect. They may make recruiting judgements based on their first impressions rather than a comprehensive review of all candidate attributes, resulting in biased and unfair hiring decisions.

2.2 Negative Impacts of Halo Effect on Recruitment Decisions

Halo effect can result in unfavourable impacts in workplace settings if not properly addressed and eliminated. Firstly, the Halo effect can result in opportunity costs for both employers and applicants, as it may cause the hiring manager to overlook essential candidate attributes and credentials owing to an overemphasis on a particular positive quality [8]. This implies that applicants who are seen positively owing to the Halo effect may be chosen more rapidly, thus jeopardising their long-term growth if they are not the best fit for the role.

Furthermore, the Halo effect can lead to recruiting decisions that favour candidates based on superficial characteristics, resulting in selecting persons who are not genuinely capable of meeting job requirements, raising training expenses and decreasing overall productivity [13].

Aside from that, the Halo effect may also reinforce stereotypes and contribute to gender discrimination, especially in male-dominated sectors, where female candidates may be unjustly rated based on their appearance rather than skills and qualifications [9].

3 Method

This chapter describes the study's design, sample, experimental procedure, data analysis and ethical consideration explicitly with clarity and transparency.

3.1 Research Design

This quasi experiment employed the within-subjects design which ensures each participant encounters every condition of the independent variable. In this experiment, the independent variable is the type of first impression created by confederates with interviewers (true participants), which is classified into two types: good first impression and bad first impression. And the dependent variable of the experiment is the impact of good and bad first impressions on interviewers' recruitment decisions. The within-subjects design for this experiment was advantageous since it is easy to implement, has fewer ethical concerns and is less expensive [14]. Besides that, methodologists like Gravetter & Forzano and Field emphasize that within-subjects designs possess significant statistical power, as each participant acts as their own control. This approach minimizes error variance and enhances the analytical sensitivity [14], [15].

3.2 Sample

Ten female undergraduates from UPSI were recruited as participants for this experiment. The experiment employed the non-probability sampling method, particularly purposive sampling, to select participants. Purposive sampling involves intentionally selecting participants based on the characteristics of a population and the objectives of the study [16]. Because there were various variables to be met, this sampling technique was used in this experiment. The inclusion criteria for this experiment included (1) being a female (2) studying semester 1 to 7 (3) pursuing an undergraduate degree in any courses offered by UPSI except from Bachelor of Psychology with honours and Bachelor of Human Resources Management. The first criterion was established due to the fact that the confederates in the simulated interviews were also female. Previous studies indicate that gender dynamics can affect first impressions and evaluation biases, therefore limiting participants to females assisted controlling for possible gender influences and ensured a higher degree of consistency in responses [17]. The second criterion was implemented because students from semester 1 to 7 were more readily available on campus for recruitment, whereas semester 8 students are typically involved in internships outside the university, making them harder to reach. Lastly third criterion was introduced because students from both of those courses are quite familiar with the Halo effect as this concept is part of their study syllabus. As a result, students enrolled in these courses have the opportunity to discover the deception tactic employed to conceal the Halo effect, which will ultimately lead to biased outcomes. The inclusion criteria rendered the chosen sample both practical and representative of the active undergraduate demographic. So, 10 undergraduate students from UPSI who are qualified in terms of these inclusion criteria and willing to participate in this experiment had become the sample for this experiment.

3.3 Experiment Procedure

This experiment consisted of five trials. In each trial, two confederates and two true participants took part. The true purpose of the study which is investigating the prevalence of the Halo effect among university students was concealed from participants using deception techniques. Instead, participants were informed that the study aimed to assess the behaviour and attitudes of job applicants during interviews.

To determine roles, all four participants drew slips from a box, each labelled "Interviewer". This role assignment was manipulated to ensure that only the true participants acted as interviewers, while the confederates consistently played the role of interviewees.

The procedure began with the interviewers (true participants) seated in a room. The first confederate (Confederate 1) entered, intentionally creating a good first impression by smiling, greeting the interviewers and dressing neatly. Despite this favourable impression, Confederate 1 provided low-quality responses to the interview questions.

Following the interview, the participants evaluated the confederate using a rubric that included both observable behaviours and non-observable traits.

Next, the second confederate (Confederate 2) entered, intentionally displaying a bad first impression by not smiling or greeting the interviewers, wearing untidy clothes and using a phone during the session. However, this confederate provided high-quality, well-structured responses to the interview questions.

To control for confounding variables, the same confederates were used throughout all trials, and their responses were kept consistent across sessions. After both interviews, the participants were asked individually to indicate which confederate they would hire for the job. Finally, a full debriefing session was conducted. Participants were informed about the use of deception, the actual purpose of the study, and the role manipulation that had taken place.

3.4 Ethical Consideration

Before participating in the experiment, all participants signed an informed consent form as a way of showing their agreement to take part. The consent form clearly outlined the purpose of the study, procedures involved, potential risks and benefits, confidentiality assurances, contact information and participants' right to withdraw at any time without providing a reason, even after signing the form. In addition, participants were also guaranteed that their responses in the experiment would remain anonymous and no identifying information such as name, identification number or address collected from them. This study employed deception as part of its design. Participants were initially informed that the experiment aimed to examine job applicants' behaviour and attitudes during interviews. The actual purpose which is exploring the prevalence of the Halo effect among university students was intentionally concealed to maintain the integrity of the research. Besides that, the role determination was also manipulated in a way where true participants always get the 'Interviewer' role. Following the experiment, participants were thoroughly debriefed, informed of the study's true purpose, and made aware of the deception and role manipulation. They were then asked to sign a debriefing consent form, reaffirming their agreement to allow their data to be used in the analysis.

3.5 Data Analysis

Due to the limited sample size of this study (n = 10 female undergraduates), inferential analyses were not performed. Instead, this experiment's data was analysed using a descriptive analysis approach to examine the prevalence of the Halo effect in participants' recruitment decisions. This choice is consistent with the exploratory objective of the study, which aimed to identify patterns and tendencies rather than to generalize the results. Although inferential analysis could yield more robust statistical evidence, it necessitates a larger sample size that guarantee reliability and validity. Consequently, descriptive analysis was deemed the most suitable method for the current research context. Therefore, a bar chart was created using RStudio software to visually compare the number of participants who selected the confederate with a good first impression versus the one with a bad first impression.

Descriptive analysis was chosen for its ability to provide a clear and concise summary of participant responses, facilitating interpretation and informed discussion [18]. The visual comparison helped highlight any observable bias in participants' choices, thereby offering insights into how first impressions may have influenced their recruitment decisions.

4 Result

This chapter represents the findings of this experiment to answer the research question introduced in chapter one.
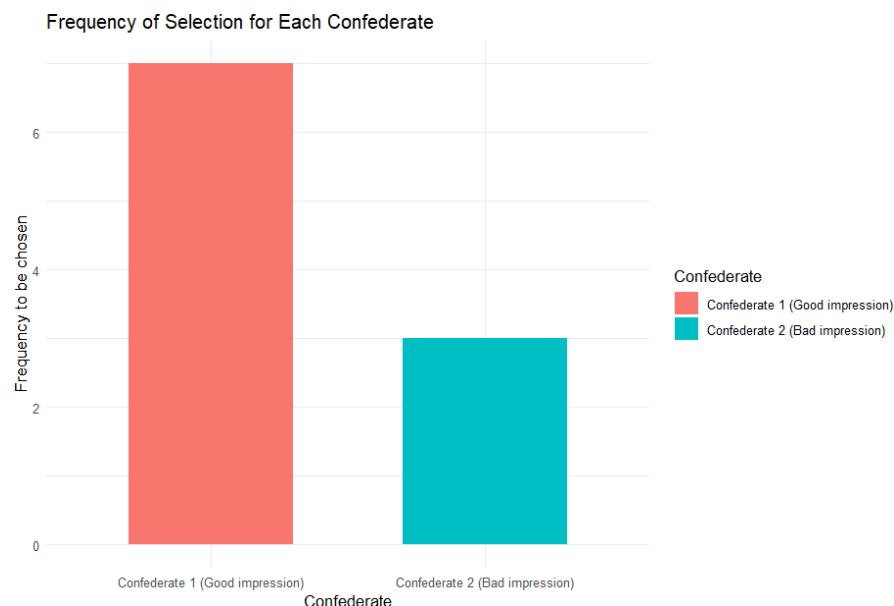
Fig. 1. Bar chart of frequency comparison between recruitment for good first impression confederate and bad first impression confederate

As shown in **Figure 1,** out of 10 study participants, $n = 7$ chose Confederate 1 with a good first impression while only $n = 3$ chose Confederate 2 with a bad first impression. This result illustrates a noticeable preference for the candidate with a favourable first impression, despite the fact that Confederate 1 provided low-quality answers, while Confederate 2 gave high-quality responses. This suggests the prevalence of the Halo effect in recruitment decisions made by UPSI students, where positive non-verbal cues and appearance may have outweighed actual candidate potential.

5 Discussion

The result obtained from the study was interpreted and discussed through this chapter. Besides that, the limitation of the experiment as well as future recommendations to counteract the

limitations were addressed.

5.1 Discussion on Halo Effect and Recruitment Decisions

The result obtained in this experiment should be explained in the context of first impression. In human interactions, first impressions have a big impact on a person's thinking or decision and nowhere is this more true than in the employment process. Interestingly, it is predicted that within the first five minutes of an interview, a significant thirty percent of interviewers form their impressions about the interviewee [19]. In particular, it is because of the Halo effect which is a type of cognitive bias, which happens when an interviewer or employer is unduly swayed by one favourable quality of a candidate and assumes that the candidate is outstanding in every way.

Besides that, the result also aligns with psychological concept such as confirmation bias, where individuals tend to seek information that supports their initial perceptions and ignore contradictory evidence (8). As in this experiment, once the participants formed a favourable impression of Confederate 1, they may have unconsciously disregarded the poor responses, reinforcing their initial bias. Furthermore, this pattern of decision making can also be explained by underlying brain mechanisms. That is, human cognition is wired to identify patterns quickly and make snap judgements based on limited information [20]. This tendency, while evolutionarily efficient, can lead to overgeneralization, especially in evaluative contexts like interviews.

These findings underscore how first impressions can significantly distort evaluative judgements, even among university students with no formal recruitment training. The prevalence of this bias highlights the need for structured, objective evaluation methods in both educational and professional settings.

5.2 Limitation of Experiment

Although the findings of this experiment provide valuable insights on understanding the prevalence of Halo effect among university students, several limitations are crucial to be acknowledged and considered when interpreting the findings. In spite of the significance of these findings, it is important to emphasize that this experiment may accommodate limited generalizability, due to the fact that only ten female undergraduate students recruited as participants. Therefore, the findings cannot be confidently applied to broader populations, including male students or individuals from different educational institutions. In addition, due to the small number of participants, inferential analysis has not been conducted for this experiment. Another potential limitation of this experiment can be explained through demand characteristics. This could have happened if the participants had been even slightly conscious of the deception used to conduct this experiment. So, the participants may have acted upon perceived expectations of the experiment rather than making genuine recruitment decisions

which compromises the purpose of the experiment.

5.3 Future Recommendations

However, future studies could extend the research on this discourse under better and revised circumstances. To counter the lack of generalizability in this experiment, future studies can include more participants from diverse samples, incorporating data from both female and male participants. This would allow for comparative analysis of potential gender differences in recruitment decisions influenced by the Halo effect. Besides that, future studies may also pursue studies as such, in a more controlled environment, bound by the actual settings of the hiring process to yield accurate measures of first impression influence in recruitment decisions. In addition to generalizing the experiment, future researchers can introduce cross-cultural variables, such as how recruiters from individualistic and collectivistic cultures respond to first impression bias during interviews. A greater emphasis on these cultural variables can contribute to studying the prominence and extent of influence of the Halo effect across cultures.

As a means to conclude the discussion, it is important to acknowledge that the findings of this experiment indeed suggests that first impression bias exist in hiring decisions made by UPSI students. Therefore, future studies should explore these effects on a broader perspective owing to diverse settings, samples and cultural background to gain a more comprehensive understanding.

6 Conclusion

This experiment explored the prevalence of Halo effect on job recruitment decisions made by UPSI students during a mock interview session. And the analysis of the experiment's results demonstrated, out of 10 participants $n = 7$ chose Confederate 1 who made a good first impression but provided low-quality responses, while only $n = 3$ chose Confederate 2 who made a bad first impression but provided high-quality responses. The result reveals the potential prevalence of Halo effect among UPSI students when making recruitment decisions. The findings of the experiment highlight the need for creating awareness about Halo effect and its negative impact in university settings among students as they are going to lead the workforce in the future as employees or recruiters. To acquire a fuller understanding, future experiments or research should investigate the Halo effect from a broader perspective, taking into account the diversity of cultural backgrounds, gender, socioeconomic status and age groups.

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Appendix A

The Prevalence of the Halo Effect Among University Students: A Quasi-Experimental Study

POSITION: HOTEL MANAGER, BUNGA VILLAS HOTEL

Interview Questions

No./*Bil*	Questions/*Soalan*
1.	Can you tell us a little about yourself and your professional background in hospitality ? *Bolehkah anda ceritakan sedikit tentang diri anda dan latar belakang kerjaya anda dalam bidang hospitaliti?*
2.	What is your approach to motivating your staff to deliver exceptional service? *Apakah pendekatan anda untuk memberikan motivasi kepada kakitangan anda supaya memberikan perkhidmatan yang cemerlang?*

3.	Can you share an example of a new idea or initiative you want to implement to improve our hotel services? *Bolehkah anda kongsikan contoh idea atau inisiatif baharu yang anda boleh laksanakan untuk meningkatkan perkhidmatan hotel kami?*
4.	Let's say you face a very difficult customer who is always pestering you about the service. How do you think you will handle this situation? *Sekiranya anda berhadapan dengan pelanggan yang sangat sukar dan sentiasa mengadu tentang perkhidmatan, bagaimana anda fikir anda akan menangani situasi ini?*
5.	How do you handle double-booking or unexpected issues, such as staffing shortages or system failures? *Bagaimana anda menangani masalah seperti tempahan "double-booking" atau isu yang tidak dijangka, seperti kekurangan kakitangan atau kerosakan sistem?*
6.	How do you measure and track customer satisfaction? *Bagaimana anda akan mengukur kepuasan pengalaman pelanggan semasa di hotel kami?*

Appendix B

Scoring Rubrics

Candidate's Name:

Professional tone and body language			
3	**2**	**1**	**Remarks**
Maintains a professional tone throughout, consistent eye contact, and positive body language. *Menjaga nada profesional sepanjang masa, memastikan kontak mata yang konsisten, dan "body language" yang positif.*	Tone and body language are somewhat professional but inconsistent. There are moments of hesitation or distraction. *Nada dan "body language" yang agak profesional tetapi tidak konsisten. Terdapat saat-saat ketidakyakinan atau gangguan.*	Unprofessional tone, lack of eye contact, or distracting body language that impacts the candidate's credibility. *Nada tidak profesional, kurang kontak mata, atau "body language" yang mengganggu atau menjejaskan kredibiliti calon.*	
Communication and active listening			
3	**2**	**1**	**Remarks**

Demonstrates attentive listening and appropriate responses. *Menunjukkan perhatian yang bagus dan memberikan respons yang sesuai.*	Moderately attentive, with some lapses in focus or relevance. *Kurang perhatian, dengan beberapa kekurangan dalam fokus atau yang berkaitan.*	Poor listening, with responses that are off-topic or unrelated. *Perhatian yang lemah, memberikan respons yang tidak relevan atau tidak berkaitan.*	
Initiative and Leadership (Question 2 and 3)			
3	**2**	**1**	**Remarks**
Proactively leads by example, taking initiative to inspire others and drive positive change. *Proaktif dalam memimpin menggunakan teladan, mengambil inisiatif untuk memberi inspirasi kepada orang*	Shows leadership when needed, but may lack consistent initiative or proactive solutions. *Menunjukkan kepimpinan apabila diperlukan, tetapi mungkin kekurangan inisiatif yang konsisten atau*	Hesitant to take initiative, lacks clear leadership or struggles to motivate others. *Ragu-ragu untuk mengambil inisiatif, kekurangan kepimpinan yang jelas atau bergelut untuk memotivasi*	

lain dan mendorong perubahan positif.	*penyelesaian yang proaktif.*	*orang lain.*	
Practical application of skills and knowledge (Question 5)			
3	**2**	**1**	**Remarks**
Consistently applies skills and knowledge to streamline operations, improve efficiency, and achieve optimal outcomes. *Sentiasa mengaplikasikan kemahiran dan pengetahuan untuk memperkemas operasi dan pengurusan, meningkatkan kecekapan untuk mencapai hasil yang optimum.*	Applies skills and knowledge to daily tasks, but may need occasional guidance to handle complex situations. *Mengaplikasikan kemahiran dan pengetahuan dalam tugas harian, tetapi mungkin memerlukan bimbingan sekali-sekala untuk menangani situasi yang kompleks.*	Struggles to apply skills and knowledge consistently, resulting in inefficiencies or mistakes in daily operations. *Sukar untuk mengaplikasikan kemahiran dan pengetahuan secara konsisten, mengakibatkan ketidakcekapan atau kesalahan dalam operasi harian.*	
Problem solving and critical thinking (Question 4)			
3	**2**	**1**	**Remarks**

| Quickly identifies issues, analyzes them thoroughly, and develops innovative solutions.

Cekap dalam mengenal pasti isu, memberikan analisis dengan teliti, dan mengusahakan penyelesaian yang inovatif. | Identifies and addresses problems but may rely on conventional solutions or struggle with complex issues.

Mengenal pasti dan menangani masalah tetapi mungkin bergantung pada penyelesaian konvensional atau menghadapi kesukaran dengan isu yang kompleks. | Struggles to analyze problems effectively and often provides inadequate or delayed solutions.

Sukar untuk menganalisis masalah dengan berkesan dan sering memberikan penyelesaian yang tidak mencukupi atau tidak efisien. | |
|---|---|---|---|
| **Openness to feedback and criticism (Question 6)** | | | |
| **3** | **2** | **1** | **Remarks** |
| Handles criticism professionally, remains calm, and uses it as an opportunity for improvement.

Menangani kritikan secara profesional, kekal tenang, dan menggunakannya sebagai | Accepts criticism without major issues but may not always act on it or fully embrace it.

Menerima kritikan tanpa masalah besar tetapi mungkin tidak selalu bertindak atau | Struggles with receiving criticism, often reacting defensively or not using it constructively.

Sukar untuk menerima kritikan, sering bertindak secara defensif atau tidak | |

peluang untuk penambahbaikan.	*menerima sepenuhnya.*	*menggunakannya secara konstruktif.*	
Personal judgements			
3	**2**	**1**	**Remarks**
• Kindness/*Baik hati* • Politeness/*Berbudi bahasa* • Commitment/*Komitmen* • Trustworthy/*Bole h dipercayai* Consistently demonstrates high standards, exceeding expectations. *Sentiasa menunjukkan standard yang tinggi, melebihi jangkaan.*	• Kindness/*Baik hati* • Politeness/*Berbudi bahasa* • Commitment/*Komitmen* • Trustworthy/*Bole h dipercayai* Meets expectations but has room for improvement. *Memenuhi jangkaan tetapi mempunyai ruang untuk penambahbaikan.*	• Kindness/*Baik hati* • Politeness/*Berbudi bahasa* • Commitment/*Komitmen* • Trustworthy/*Bole h dipercayai* Falls below expectations, showing significant weaknesses. *Di bawah jangkaan, menunjukkan kelemahan yang ketara.*	

Total points:

Appendix C

Answer Scheme for the Confederates BAD IMPRESSION

CONFEDERATE

1. Can you tell us a little about yourself and your professional background in hospitality?

I have over 8 years of experience in the hospitality industry, starting as a front desk and gradually became a manager. My previous position was as an operations manager at a luxury hotel, where I successfully implemented new service protocols that increased customer satisfaction by 20%. I am passionate about creating memorable guest experiences and fostering a motivated, high-performing team.

Saya mempunyai lebih daripada 8 tahun pengalaman dalam industri hospitaliti, bermula sebagai pembantu kaunter hadapan dan secara beransur-ansur naik ke peranan pengurusan. Jawatan saya sebelum ini adalah sebagai pengurus operasi di sebuah hotel mewah, di mana saya berjaya melaksanakan protokol perkhidmatan baru yang meningkatkan kepuasan pelanggan sebanyak 20%. Saya bersemangat untuk mencipta pengalaman tetamu yang bagus dan turut membentuk pasukan yang bermotivasi tinggi.

2. What is your approach to motivating your staff to deliver exceptional service?

I believe in leading by example and creating a positive work environment where staff feel empowered and appreciated. Regular training, clear communication of expectations, and recognizing outstanding performance are key strategies I use to keep the team motivated..

Saya percaya dalam pimpinan melalui teladan dan mewujudkan persekitaran kerja yang positif di mana staf merasa diberi kuasa dan dihargai. Latihan secara berkala, komunikasi jelas, dan pengiktirafan terhadap prestasi cemerlang adalah strategi utama yang saya gunakan untuk memastikan pasukan tetap bermotivasi..

3. Can you share an example of a new idea or initiative you want to implement to improve our hotel services?

I would like to implement a personalized guest experience program that uses guest preferences and feedback to tailor their stay. For example, offering customized welcome amenities or personalized dining options to enhance their overall experience.

Saya ingin melaksanakan program pengalaman tetamu yang istimewa menggunakan keutamaan dan maklum balas tetamu untuk menyesuaikan penginapan mereka. Contohnya, menawarkan

kemudahan sambutan yang disesuaikan atau pilihan makan yang peribadi untuk meningkatkan pengalaman keseluruhan mereka.

4. Let's say you face a very difficult customer who is always pestering you about the service. How do you think you will handle this situation?

I would listen attentively to their concerns, empathize with their situation, and take immediate action to resolve the issue. Staying calm and professional while ensuring the guest feels heard is key to turning a difficult situation into a positive one.

Saya akan mendengar dengan teliti kebimbangan mereka, menunjukkan empati terhadap situasi mereka, dan mengambil tindakan segera untuk menyelesaikan masalah tersebut. Kekal tenang dan profesional sambil memastikan tetamu merasa didengari adalah kunci untuk mengubah situasi yang sukar menjadi positif.

5. How do you handle double-booking or unexpected issues, such as staffing shortages or system failures?

I prioritize clear communication and quick decision-making during such situations. For double-booking, I would immediately offer alternative solutions, such as upgrades or partner accommodations. For staffing shortages or system failures, I rely on a solid contingency plan and ensure the team is trained to handle such emergencies.

Saya mengutamakan komunikasi yang jelas dan membuat keputusan yang cepat dalam situasi seperti itu. Untuk tempahan berganda, saya akan segera menawarkan penyelesaian alternatif, seperti "upgrade" bilik. Untuk

kekurangan staf atau kegagalan sistem, saya akan bergantung pada pelan kontingensi yang kukuh dan memastikan pasukan dilatih untuk menangani kecemasan tersebut.

6. How do you measure and track customer satisfaction?

I use tools like guest surveys, online reviews, and direct feedback during their stay. Tracking trends in feedback helps identify areas for improvement and ensures we consistently meet or exceed guest expectations.

Saya akan menggunakan cara seperti soal selidik tetamu, ulasan dalam talian, dan maklum balas langsung semasa mereka menginap. Memantau trend dalam maklum balas membantu mengenal pasti kawasan yang perlu diperbaiki dan memastikan kami sentiasa memenuhi atau melebihi jangkaan tetamu.

GOOD IMPRESSION CONFEDERATE

1. Can you tell us a little about yourself and your professional background in hospitality?

I've worked in a few hotels, mostly doing front desk work, but I haven't been in a management position before. I've learned some things, but I haven't really had the chance to manage a team. I'm hoping to learn more in this role.

Saya telah bekerja di beberapa hotel, kebanyakannya dalam tugas kaunter, tetapi saya belum pernah memegang jawatan pengurusan sebelum ini. Saya sudah belajar banyak tentang perkhidmatan tetamu dan pengurusan, tetapi saya belum berpeluang untuk memimpin pasukan. Saya berharap dapat mempelajari lebih lanjut selepas dapat jawatan ini.

2. What is your approach to motivating your staff to deliver exceptional service?

Well, I guess I'd try to lead by example and hope they follow. I'm not exactly sure what else would work to motivate them, but I think... maybe some incentives could help, like bonuses or something.

Saya rasa saya boleh berikan motivasi kepada staf dengan menunjukkan penghargaan dan, ermmm, saya akan cuba memimpin dengan teladan, tetapi saya rasa... mungkin beberapa insentif boleh membantu, seperti bonus atau sesuatu.

3. Can you share an example of a new idea or initiative you want to implement to improve our hotel services?

I think I would need to observe things for a while to see what needs to change. Maybe we could improve how we

deal with guest complaints, but I'd have to think more about it when I'm already hired to work here.

Saya rasa saya perlu melihat keadaan terlebih dahulu untuk melihat apa yang perlu diubah. Mungkin kita boleh meningkatkan cara kita menangani aduan tetamu, tetapi saya perlu fikirkan lebih lanjut mengenainya selepas saya sudah bekerja dekat sini.

4. Let's say you face a very difficult customer who is always pestering you about the service. How do you think you will handle this situation?

I think I'd try to stay calm. Maybe I'd apologize and try to offer something to make them happy, but I will work on what else I could do at that time.

Saya rasa saya akan cuba untuk tetap tenang, mungkin saya akan minta maaf dan cuba menawarkan sesuatu untuk membuat mereka gembira, tetapi saya tidak tahu apa lagi yang boleh saya lakukan.

5. How do you handle double-booking or unexpected issues, such as staffing shortages or system failures?

I'd probably just try to find a solution as best I can. If there's a double-booking, I'd maybe offer the guest a different room, but for staffing shortage. I guess I'd just try to manage somehow with the staff that's already there.

Saya mungkin hanya cuba untuk mencari penyelesaian sebaik yang saya boleh. Jika ada tempahan berganda, saya mungkin akan menawarkan bilik yang lain kepada tetamu, dan jika berlaku kekurangan staf. Saya rasa saya hanya akan cuba mengendalikan sebaik mungkin dengan staff yang sedia ada.

6. How do you measure and track customer satisfaction?

Nowadays there are many ways to track customer satisfaction, but I guess I'd look at reviews or ask guests how their stay was. Maybe we could give out surveys, but that doesn't mean they would give honest answers.

Zaman ini ada beberapa cara untuk ukur kepuasan tetamu, mungkin saya rasa saya akan melihat ulasan atau bertanya kepada tetamu mengenai pengalaman mereka. Mungkin kita boleh beri borang soal selidik, tetapi tidak bermaksud tetamu akan memberikan jawapan yang jujur.

The Effect of Watching *Mantappu Academy* YouTube Educational Videos on Students Mathematics Learning Outcomes

Alifatul Wazni Bilqisty[1], Kemal Zia'ul Umam[2], Tesa Nurul Huda[3]

{awb.bilqisty@gmail.com[1,] ziaulumamkemal@gmail.com[2], tesa.nh@ump.ac.id[3]}

Universitas Muhammadiyah Purwokerto, Banyumas, Indonesia[1,2,3]

Abstract. Mathematics learning is often perceived as difficult and tedious by many students, particularly when delivered using conventional methods that lack visualization and interactivity. With the advancement of digital technology, platforms like YouTube have been increasingly utilized as engaging and accessible learning media. This study aims to examine the effect of educational videos on YouTube on students' mathematics learning outcomes. This research employed an experimental method with a post-test only control group design. The participants were 21 tenth-grade students from MA Muhammadiyah Purwokerto, divided into two groups: a treatment group (10 students) who received instruction through YouTube-based educational videos, and a control group (11 students) who received conventional instruction. Data were collected through post-tests and analyzed using the Independent Samples T-Test. The analysis indicated that the data met the assumptions of normality and homogeneity. The t-test result showed a significant difference between the two groups (t = -2.11; p = 0.024), with the treatment group scoring higher (M = 67.7) than the control group (M = 53.6). These findings suggest that using YouTube-based educational videos significantly improves students' mathematics learning outcomes compared to conventional teaching methods.

Keywords: mathematics, educational video, YouTube, learning outcomes, experimental research

1. Introduction

Mathematics is often considered a difficult and even scary subject for most students [1]. This bad stigma is evidenced by students' low learning outcomes compared to other subjects. Low math learning outcomes have the potential to reduce student confidence and motivation in the learning process. Learning approaches and media that are more in line with the characteristics of today's digital generation are needed [2]. In today's digital era, the use of technology-based media in education is growing rapidly. Learning media is a tool used to channel messages from sender to receiver so that it can arouse students' thoughts, feelings, attention and interest in learning [3]. According to the *Association for Educational Communications and Technology* (AECT), media refers to all forms and channels used to convey messages or information. In the context of learning activities, media can be understood as a communication tool used in the teaching and learning process to convey information from teachers to students [4].

The use of video media plays an important role in supporting effective learning by helping students focus more on the material and making the learning process more interesting. [5] state that students' comprehension and memory significantly increase when information is conveyed through the senses of hearing and sight. One of the popular video media among students is YouTube, which is widely used as an alternative to reinforce understanding of subject matter, including difficult subjects such as math [6].

The reality is that in many schools, including high schools, students' math learning outcomes are still relatively low. Students often have difficulty understanding concepts, which has an impact on low grades and interest in the subject. This is also the case at MA Muhammadiyah Purwokerto, where the research was conducted, where the average grade X student's math score is still below the KKM. The contributing factors include uninteresting learning methods and the lack of media that is in accordance with the learning style of the current generation, which in turn can reduce students' motivation and confidence in learning.

Video and multimedia media are effective in improving student motivation and learning outcomes , especially when combined with innovative learning methods such as *Program Based Learning* (PBL). Video media, especially YouTube, has been proven effective in improving student learning outcomes, especially in subjects that require high visualization. According to [7] YouTube is a popular and potential medium in education because it encourages teacher creativity, increases learning activities, and helps students understand the material quickly. Every day, around 100,000 videos are watched and in the last 24 hours around 65,000 new videos were uploaded, showing the high dynamism of this platform. One of the featured educational channels is Mantappu Academy, initiated by Jerome Polin, a Mathematics graduate from Waseda University, which provides engaging and easy-to-understand learning videos to motivate the younger generation to love and understand math.

While the benefits of YouTube and video media in learning have been widely researched, the effectiveness of content from popular educational channels such as Mantappu Academy has rarely been studied. This study aims to fill this gap by examining the effect of Mantappu Academy math videos on learning outcomes of grade X high school students. The study focuses on whether there is a difference in learning outcomes between students who watched the video and those who did not. The main objective is to find out whether the video can improve the mathematics learning outcomes of grade X students.

2. Literature Review

Math Learning Outcomes
According to [8] learning outcomes are the level of mental development of a person that shows improvement compared to before participating in the learning process. Specifically, mathematics learning outcomes refer to students' academic achievements that can be measured after they complete the learning process in that subject. Mathematics has long been considered a difficult subject among students, often perceived as abstract and intimidating [1]. Traditional teaching methods, such as lecture-based teaching, are often criticized for being monotonous and uninteresting, especially for students who come from the digital generation [9] Mathematics learning outcomes refer to students' academic achievements that can be measured after undergoing the mathematics learning process.

Watch YouTube Educational Videos
The use of audio-visual media in mathematics learning is influenced by both supporting and inhibiting factors. Supporting elements include adequate facilities, student enthusiasm, and

teacher professionalism. However, challenges such as students' inconsistent focus and the time-consuming nature of video use require careful preparation by teachers to ensure efficient learning. One of the innovations in education is the utilization of audio-visual media integrated with the internet, such as YouTube. This platform provides an opportunity for educators to increase student engagement in learning and help them focus more on understanding the material efficiently [6]. YouTube as a medium for mathematics learning has shown positive results at various levels of education. One study conducted in the fourth grade at SDIT Al-Furqon found that interactive videos on YouTube were able to increase students' interest in learning mathematics. Teachers reported that students were more interested and active when the material was delivered through videos, especially when explaining abstract concepts. In addition to increasing student engagement, this medium also helps students who previously had difficulty understanding the material more concretely through the illustrations displayed [10].

3. Method

The independent variable in this study is watching learning video media from YouTube channels. Learning video media from the YouTube channel is a digital technology-based learning media that utilizes an online video platform as a means of delivering teaching material audio-visually. While the dependent variable is student math learning outcomes. Learning outcomes are the level of student success in learning subject matter at school which is expressed in the form of a score obtained from the results of a test on a number of subjects that have been previously studied. This study employed a true experimental design using a post-test only control group design. Participants were randomly assigned to two groups (experimental and control) using a simple counting method. Each participant took turns counting sequentially from one to two, and those who counted "one" were placed in the experimental group, while those who counted "two" were assigned to the control group. The randomization process ensured that each student had an equal chance of being in either group, thus minimizing potential selection bias.

Table 1. Research Design

Group	Randomization	Treatment	Post-test
Experiment	R	X (Learning Video Media)	O_1
Control	R	- (Conventional Learning)	O_2

Description:
R = Randomization, performed in the assignment of subjects to experimental and control groups
X = Treatment in the form of learning using videos from the *Mantappu Academy* YouTube channel
O_1 = Post-test in the experimental group
O_2 = Post-test in the control group

The independent variable in this study is watching a video from *Mantappu Academy* with the title "EXPONENT ITU ASYIK! Discuss Grade 10 Exponents Study With Jerome Polin" at the following link https://youtu.be/AlrOq3W7IZ4?si=BqQkMNY9tbVGyP9I. The video was

selected based on the suitability of the material with the grade X curriculum, has a duration of 12 minutes 34 seconds, and contains educational and interactive elements. To ensure that participants really received and paid attention to the treatment, a manipulation check was carried out before the mathematics test was carried out in the form of short questions related to the content and appearance of the video, such as the duration of the video, the color of the main character's clothes, and the learning topics presented.

Table 2. Participants Characteristics

Demographic Characteristics	Experimental Group (n = 10)	Control Group (n = 11)	Total (n = 21)
Gender	Female (100%)	Female (100%)	Female (100%)
Grade Level	10th Grade	10th Grade	10th Grade
School	MA Muhammadiyah Purwokerto	MA Muhammadiyah Purwokerto	MA Muhammadiyah Purwokerto
Boarding Status	Santriwati (boarding students)	Santriwati (boarding students)	Santriwati (boarding students)

This research was conducted at MA Muhammadiyah Purwokerto with a subject of 21 class X students. This research procedure was carried out through several stages, starting from the planning, implementation, to the evaluation of the results. In the planning stage, researchers compiled an experimental design, prepared question instruments, tested the validity and reliability of the questions, and took care of licensing from the school. On the day of implementation, the activity began with an introduction of the research team, an explanation of the purpose of the research, and a request for willingness to participate from participants (informed consent). After obtaining consent, participants were randomly divided using the counting method into two groups: experimental (10 students) and control (11 students). The experimental group was given the treatment of learning through videos from YouTube Mantappu Academy, while the control group followed conventional learning. To ensure that the participants really paid attention and received the treatment, a manipulation check was conducted before the post-test. Manipulation check was conducted by giving some short questions about the content and appearance of the video, such as the duration of the video, the color of the main character's clothes, and the topic of learning presented.

The data collection instrument was a math learning outcome test consisting of 10 essay questions. This instrument has gone through a validity test using the Item-Total-Correlation correlation technique, with the results showing that all items have a significant correlation value. Furthermore, the reliability test was carried out using Cronbach's Alpha, with the result of the reliability coefficient of 0.754 which indicates good enough reliability. This means that the ten items (A1-A10) have adequate internal consistency. This instrument is suitable for measuring mathematics learning outcomes because it is stable and fairly consistent.

4. Result

Data analysis was conducted by comparing post-test results between two groups, namely the treatment group (who watched the video) and the non-treatment group (who did not watch the

video). Before conducting the difference test, the assumptions of normality and homogeneity were tested.

Table 3. Research Test Result

Group	N	Mean	Median	SD	SE	Statistic	df	p
Control	11	53.6	60	17.7	5.32	-2.11	19.0	0.024
Experiment	10	67.7	66.5	12.0	3.78			

Normality test using Shapiro-Wilk showed a significance value of 0.169, which means the data is normally distributed because $p > 0.05$. The variance homogeneity test using Levene's Test resulted in a significance value of 0.387, which indicates that the variance of the two groups is homogeneous ($p > 0.05$). With the assumptions of normality and homogeneity fulfilled, it can proceed to the t test.
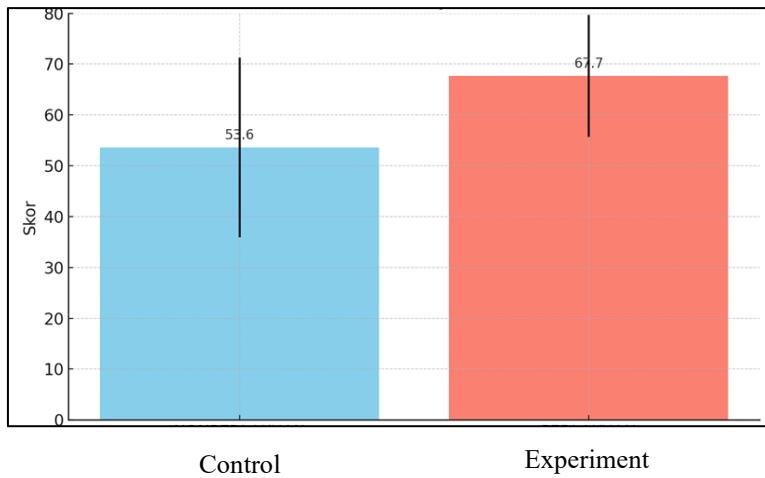
Fig.1. Average mathematics learning outcomes

The results of descriptive analysis showed that the non-treatment group had an average learning outcome value of 53.64, while the treatment group obtained an average value of 67.70. Based on the results of the Independent Samples T-Test test, a significance value of 0.024 was obtained. Because the p value <0.05, it can be concluded that there is a significant difference between the math learning outcomes of students who watch *Mantappu Academy* educational videos and students who do not watch them.

5. Discussion

The results of this study indicate that YouTube-based video learning materials from the Mantappu Academy channel have a significant positive effect on students' mathematics learning outcomes. The videos from this channel help students better understand the material presented verbally, as they are packaged in an educational and interactive manner and interspersed with humor by Jerome Polin. The use of videos as a learning medium has proven to be an important

factor in enhancing motivation and learning outcomes, especially for students in today's digital age. This finding aligns with previous research by Dian Yuliana and Noer Fajri Aminullah (2020), which showed that the use of YouTube media contributes to increased motivation and learning outcomes among students.

One of the factors contributing to the success of these videos is Jerome Polin himself, who is highly relatable to many Indonesian students. His personal experiences studying abroad and overcoming various challenges in understanding mathematics make him an inspiring figure. Jerome's approach, which uses simple language and aligns with the communication style of young people, makes the material easier to comprehend. The videos presented have a systematic structure, starting with an explanation of basic concepts, followed by graded example questions, and concluding with a recap of key points through engaging visualizations. Jerome also frequently provides concrete examples of how the material being studied can be applied, making this approach not only enrich understanding but also strengthen students' retention of the material. This approach is supported by research by (11) which states that the use of YouTube as a learning medium plays an important role in complementing students' knowledge, helping them obtain information related to assignments, monitoring information development, exploring material in depth, and providing concrete examples of material application.

Additionally, according to (12) the use of YouTube as a learning medium has proven effective in capturing students' attention, as the platform presents images and sound simultaneously and is easier to access compared to traditional learning methods such as reading textbooks or listening to lectures without visuals. Videos can reduce students' cognitive load. They do not need to imagine or visualize concepts on their own because the video presents them directly, allowing students to focus more on understanding the material. Therefore, there is a very clear and significant difference in mathematics learning outcomes between students who learn using YouTube videos from Mantappu Academy and those who learn through conventional teaching methods. Students who watched Mantappu Academy's educational videos showed statistically superior learning outcomes. This study provides strong evidence that utilizing educational videos from YouTube channels such as Mantappu Academy can be a highly effective strategy for improving mathematics learning outcomes.

The results of this study are also in line with several other studies, such as those conducted by (7) and (6) which show that the meaningful use of educational videos can improve students' understanding and learning outcomes, including in subjects considered difficult, such as mathematics. Other benefits of video media include flexibility in terms of time, learning materials, and concept development through animation or visualization, which is not possible with conventional methods. Flexibility in terms of time, learning materials, and concept development through animation or visualization, which is not possible with conventional methods.

6. Conclusion

Based on the results and discussion of the research, it can be concluded that the use of educational videos from the Mantappu Academy YouTube *channel* significantly improves the math learning outcomes of grade X MA Muhammadiyah Purwokerto students. This is indicated by the average value of the *post-test* of the treatment group which is higher (67.7) than the

control group (53.6), as well as the results of the Independent Samples T-Test test with a value of p=0.024 (p<0.05). Educational, interactive, and humorous learning videos are proven to be effective in improving students' understanding and memory of mathematics materials.

For future research, it is recommended to apply this method to students at different educational levels, such as junior high school or elementary school, to explore whether similar improvements in learning outcomes and motivation can be observed among younger learners. Additionally, there is a growing need to develop more localized and culturally relevant educational video content, which not only aligns with national curricula but also resonates with the digital habits and interests of Indonesian students.

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The Development and Psychometric Properties of the Academic Dishonesty Scale (Indonesian Version) in Emerging Adulthood Students

Philicia Christanti Martajaya[1], Jason Dionnicius Young[2], Sandi Kartasasmita[3], Didik Brahmantio Saryono[4], Tasya Viviana[5]

{philicia.705220219@stu.untar.ac.id[1] , jason.705220224@stu.untar.ac.id[2] , sandik@fpsi.untar.ac.id[3]}

Undergraduate of Psychology, Universitas Tarumanagara[1,2,3], Faculty of Psychology, Universitas Tarumanagara[4], Doctoral Degree Programme, Faculty of Psychology, Universitas Muhammadiyah Malang[4]

Abstract. Academic dishonesty has become a substantial issue in educational institutions. AI technologies have come up with additional challenges to academic integrity, requiring the use of updated measuring tools. Currently, no validated Academic Dishonesty Scale exists in Indonesia, encouraging the development of an Indonesian version. This study aims to develop an Academic Dishonesty Scale (ADS) Indonesian version for emerging adulthood students and examine its psychometric properties. The scale highlights current AI challenges in education. Following analysis, 18 items were retained across three categories, including (a) integrity compromised, (b) misuse of AI, and (c) general cheating with 18-items. This study involved 288 emerging adult students, consisting of 59 males (20.5%) and 229 females (79.5%), aged 18-25 years (M = 19.70 years). Cronbach's alpha was .814 and CFA showed excellent fit: CFI = .950, RMSEA = .047, SRMR= .047, and GFI = .937, supporting the three factor structure.

Keywords: Academic Dishonesty, Artificial Intelligence, Emerging Adulthood Students, Psychometric Properties

1 Introduction

Dishonesty, defined as acts or attempts to act without honesty [1], has become common phenomena in society, and when occurs in academic settings, it is recognized as academic dishonesty, representing a violation of educational integrity. Academic dishonesty is an existing global problem in education [2]. Exacerbated by increased academic pressure and workload which often heighten students' temptation to cheat [3]. Encompassing traditional behaviors such as plagiarism, exam cheating, fabrication, and unauthorized collaboration [4],[5]. In Indonesia, academic dishonesty represents a persistent challenge in higher education specifically in university [6], especially technological advances such as AI play an important role in educational environment but are also a major concern in educational institutions because they lead to unethical behavior [7], moreover the accessibility of artificial intelligence (AI) tools encourage students to ignore essential learning processes by using this technology to quickly complete assignments or achieve high grades, which can ultimately compromise the

development of basic academic skills such as analytical logics, independent research methods, and original creative expression. In addition, it has also increased the compromised ideals of academic integrity, making it easier for students to participate in plagiarism and other sorts of cheating.

The emergence of artificial intelligence (AI) tools has introduced qualitatively different forms of academic misconduct that cannot be adequately captured by existing measurement approaches. Students today certainly benefit from the ease of learning, finding information, and other academic assistance from technological advances such as AI, but this also become concern and refers to ease of unethical behavior in the learning system [8], sometimes labeled 'AI-giarism' that traditional measurement scales fail to capture [4]. Current instruments, such as the Academic Dishonesty Scale developed [29], assess conventional misconduct dimensions but exclude AI-related behaviors, creating a significant measurement gap in contemporary educational contexts.

This gap is particularly critical in the Indonesian context, where existing scales do not address AI misuse among emerging adult students navigating complex technological and cultural landscapes. Therefore, this study aims to develop a culturally relevant Academic Dishonesty Scale for Indonesian emerging adults that integrates traditional misconduct dimensions with a new AI-related subscale, providing a comprehensive instrument for measuring contemporary academic dishonesty and supporting institutional efforts to foster academic integrity.

2 Literature Review

Academic dishonesty is fraudulent behavior to gain an unfair academic advantage [9], traditionally categorized into plagiarism and cheating [10]. There are some factors that influence academic dishonesty. First there are personality factors [11],[12]. Research consistently demonstrates that personality traits significantly predict academic misconduct. Students exhibiting higher levels of honesty, humility, friendliness, conscientiousness, openness to experience, and extraversion show reduced likelihood of engaging in academic misconduct [12], while those with higher impulsiveness (likely to take risks without considering the consequences) and ruthlessness (can act aggressively, especially when focused on success) demonstrate increased levels of academic dishonesty during college [13].

Second, there are academic motivation values that explain that perceptions of widespread cheating are positively associated with goal persistence and reward reactivity (action taken to claim the reward) while at high achievement motivation increases dishonest behavior when combined with reward reactivity [14]. It's also explained that students with low learning motivation engage in academic shortcuts such as cheating, whereas those with higher intrinsic motivation maintain greater academic integrity.

Third, cultural context plays a significant role in how students respond to cheating behaviors among their peers [15],[16].

It is revealed that the influence of perceived peer cheating varies depending on the cultural environment students inhabit. Students from collectivistic societies show a stronger tendency to be influenced by their peers' cheating behaviors compared to those from individualistic cultures. Also, the cultural dimension of power distance significantly affects this phenomenon. In societies characterized by high power distance, students demonstrate an even greater susceptibility to peer cheating influence [15]. Religious involvement demonstrates protective

effects against academic misconduct through reinforcement of ethical behavioral norms (3), with active participation in religious activities correlating with reduced dishonesty rates [17]. Study also reveals that academic motivation values, and personality factors predict academic dishonesty behavior differently across cultures and countries [18].

Lastly, artificial intelligence represents the capability of computational systems to process data inputs, develop understanding through experience and modify their processes to accomplish designated goals [19]. However, the increasing use of AI in everyday life brings concerns about the need for proper and biased regulation [19]. While AI virtual assistants enhance educational experiences through improved accessibility, efficiency, and student engagement, they also simultaneously create substantial challenges for academic integrity within educational institutions [20],[21]. AI-powered tools like ChatGPT exemplify this dual nature, dramatically improving research and writing efficiency while raising fundamental questions about authenticity and ethical academic practice, thereby highlighting the continued importance of human oversight and critical analysis [22]. AI language models support asynchronous communication, boosting student engagement and collaboration, yet they enable new forms of academic misconduct through the submission of work that isn't their own [23], [24], [25]. Followed by existing academic pressures, as demanding educational environments characterized by strict deadlines and concurrent coursework create conditions that inadvertently encourage academic dishonesty [26]. Research across various educational contexts reveals substantial misconduct prevalence, particularly among first-semester students and students taking introductory courses [27]. These results draw attention to the dual nature of artificial intelligence: while technology facilitates learning and increases study efficiency, it also creates possibilities for academic dishonesty that schools and universities must address carefully and deliberately.

These emerging AI-related challenges expose critical limitations in existing measurement approaches for academic dishonesty. While academic dishonesty has attracted significant attention from various disciplines over decades, existing measurement scales lack the psychometric sophistication necessary to address technology-mediated misconduct. Researchers have developed reliable instruments for measuring traditional forms of academic dishonesty, as well as studies revealing increasing misconduct rates over three decades [28], established tools like McCabe and Treviño's 1993 Academic Dishonesty Scale as widely used tool for assessing offenses such as cheating and plagiarism in various cultural contexts, making it a valuable tool in cross-cultural studies [29] and Bashir and Bala's 2018 multidimensional expansion address only conventional components such as plagiarism, examination cheating, assignment falsification, unauthorized internet copying, improper collaboration, and data tampering [30], [31], [32],[33].

Existing measurement approaches do not fully capture the complex interplay of factors driving contemporary academic misconduct. Despite extensive research investigating how personality [12],[13], motivation [14], culture [3],[18], and AI [22],[23],[24],[25] affect academic dishonesty, significant gaps remain in understanding these multifaceted relationships, particularly as AI tools proliferate and potentially obscure new forms of dishonest behavior [20]. These issues highlight the urgent need for better tools that are culturally relevant, reliable, and capable of reflecting the realities of today's digital learning environment. So, future research should take a broader and longer-term view to better understand how all these factors combine and change over time, especially in different cultural settings.

The interrelationship between personality, culture, and technology factors indicates the need for a multidimensional approach that can include the complexity of contemporary academic cheating. Based on a review of existing research, three main factors emerge: First is Integrity Compromised includes behavior that opposes integrity values, which consist of honesty, trust, equity, respect, responsibility, and courage [9]; lying to others in the context of task completion [34]; plagiarism, which involves taking someone else's words or ideas without acknowledging the source [10],[34],[35]; claiming all or part of someone else's work as one's own [34]. Second, misuse of AI includes behavior that uses information or ideas from AI without mentioning the source, quotation, attribution, and claiming that the information or ideas are purely one's own [20]; manipulating data and/or materials using AI [36]; and using AI as an external assistance in completing tasks without personal contribution [9],[10],[35]. Last is general cheating includes behavior involving dishonesty, unfairness, and violation of rules to gain personal advantage, such as giving and/or receiving information during assessments or exams and using exam materials/content/answer keys illegally [9],[34].

3 Method

3.1 Participants

The research participants are emerging adult students from several universities in Jakarta, Bogor, Depok, Tangerang, and Bekasi. The cities are selected because they have a high population density with many educational facilities to provide a broader picture of the students' behavior. Non-probability sampling method, specifically purposive sampling, was applied due to age and academic status restrictions. The initial participants are 345 emerging adult students from 17 universities. However, only 288 participants were involved in the study because of inconsistent responses. There are 59 males (20.5%) and 229 females (29.5%), with an age range of 18-25 years. The mean age of the participants is 19.70 years old (SD = 1.241). The demographic characteristics of participants are shown in Table 1.

Table 1. Demographic Characteristic of Participants

Demographic		Frequency	Percentage
Gender	Man	59	20.5
	Woman	229	79.5
	Total	288	100.0
Age (years)	18	44	15.3
	19	101	35.1
	20	71	24.7
	21	49	17.0
	22	19	6.6
	23	1	.3
	24	2	.7
	25	1	.3
	Total	288	100.0

3.2 Instrument and Procedures

The Academic Dishonesty Scale (Indonesian Version) is initially generated from an extensive literature review about theoretical foundations of academic dishonesty and based on the previous ADS measurement development [29], which consists of six dimensions with a total of 23 items originally in English. The translation process followed a forward-backward translation procedure, in which the English version was first translated into Indonesian and then back into English by independent translators who were proficient in both the source and target languages. This procedure was carried out to ensure the accuracy of the statements in reflecting the intended construct.

To adapt the scale to the Indonesian context and address contemporary issues where AI is increasingly utilized in academic settings, four additional items were generated to represent a new dimension, "misuse of AI". The first and second item were written to emphasize the practice of plagiarism, specifically in using AI [20], which indicates a modern form of intellectual dishonesty that overcomes typical plagiarism detection methods, resulting in diminished originality and prioritizing rapid task completion over genuine learning. The third item highlighted the practice of falsification using AI [36], which indicates a sophisticated form of academic deception that undermines the fundamental ethical standards and evidence-based inquiry that are considered as the foundation of academic integrity. The fourth item addressed the use of AI as an unauthorized external assistance in completing assignments (9,10,29,35), which violates academic expectations and fosters excessive dependency that affects the development of academic skills and critical thinking abilities.

Following the translation and development of the four new items, experts with backgrounds in educational psychology and measurement were involved in an expert review. The experts evaluated all 27 items for semantic, conceptual, and cultural clarity, as well as relevance in the Indonesian higher education context.With the addition the misuse of AI dimension, the instrument initially compromised 27 items across seven dimensions: cheating in examination (9,10,29,34,35), plagiarism (9,10,29,34,35,36), outside help (9,10,29,35), prior cheating (29), falsification (9,29,36), lying about academic assignments (9,29,35), and misuse of AI (20,23).

Each item was rated on a 5-point Likert scale (1 = "Never"; 2 = "Rarely"; 3 = "Sometimes"; 4 = "Frequently"; and 5 = "Always"). Data collection was conducted by distributing online questionnaires of the Academic Dishonesty Scale (ADS) using the Google Form platform, which included the "Name/Initial", "Gender", "Age", "Domicile", "University origin", "Faculty", and an informed consent statement that confirms the participants' voluntary agreement to participate in this study. After exploratory testing and item analysis, items with poor factor loadings were removed, reducing the scale to a final set of 18 items with adequate psychometric properties.

3.3 Validation

The internal structure of ADS was examined in this study through factor analysis, including Exploratory Factor Analysis (EFA) and Confirmatory Factor Analysis (CFA). The Kaiser-Meyer Olkin (KMO) and Bartlett Test of Sphericity were conducted as preliminary testing to look into suitability for factor analysis. Factor analysis is considered inappropriate if the KMO value falls below 0.5, while values less than 0.6 indicate miserable sampling requiring improvement [37],[38]. KMO values between 0.6-0.69 indicate mediocre sampling adequacy, values between 0.7-0.79 indicate middle sampling adequacy, and values between 0.8-1.0

indicate adequate sampling for factor analysis [37]. Additionally, Bartlett Test of Sphericity must show significance (p < .05) to proceed with factor analysis [38]. EFA with maximum likelihood extraction and orthogonal varimax rotation was applied to determine the optimal factor structure [39], with items retained if they demonstrated factor loadings ≥ 0.3 [38]. CFA was subsequently conducted to assess the fit of the factor model using multiple fit indices with established thresholds: Comparative Fit Index (CFI ≥ 0.95), Goodness of Fit Index (GFI ≥ 0.90), Root Mean Square Error of Approximation (RMSEA ≤ 0.06), and Standardized Root Mean Square Residual (SRMR ≤ 0.08) [39–41]. Discriminant validity was assessed by examining factor correlations, where low correlations demonstrate that each factor is a sufficiently distinct construct [38,42]. Moreover, internal consistency was assessed using Cronbach's alpha [43] to measure the extent to which items within ADS are consistent with one another and ensure that participants' response patterns remain consistent across all scale items [39]. The scale is considered internally consistent if Cronbach's alpha exceeds the acceptable 0.7 threshold [43–45]. JASP version 0.18.3.0 was used for the validity and reliability analysis of the ADS.

4 Result

4.1 Exploratory Factor Analysis

Exploratory Factor Analysis (EFA) with maximum likelihood factoring method and orthogonal varimax rotation was applied to determine the factor structure. The suitability test adequacy of sample size was assessed by the Kaiser-Meyer Olkin (KMO) test, which obtained an overall KMO value of .811, indicating adequate sampling for factor analysis [37]. Individual item KMO values ranged from .559 to .884, with item P4 showing the lowest KMO value and item LAA4 having the highest KMO value. All values exceeded the threshold of .5, confirming the appropriateness of data to be used for factor analysis. The detailed result of the KMO test is shown in Table 2.

Table 2. Kaiser-Meyer Olkin (KMO) Test Result

Items	Measure of Sampling Adequacy (MSA)
Overall	0.811
CE1	0.877
CE2	0.794
CE3	0.824
CE4	0.584
CE5	0.843
P1	0.779
P2	0.578
P3	0.881
P4	0.559
OH1	0.804
OH2	0.818
OH3	0.759
OH4	0.659
PC1	0.644
PC2	0.773
PC3	0.832
F1	0.848
F2	0.783

Items	Measure of Sampling Adequacy (MSA)
F3	0.601
LAA1	0.833
LAA2	0.835
LAA3	0.860
LAA4	0.884
MA1	0.867
MA2	0.829
MA3	0.796
MA4	0.810

The suitability test correlation matrix between variables was assessed by the Bartlett Test of Sphericity, which obtained a significant value of $p < 0.001$, indicating significant correlation between variables and the data set and confirming that the data set is suitable for factor analysis. The result of Bartlett Test of Sphericity is shown in Table 3.

Table 3. Bartlett Test of Sphericity Result

X^2	df	p
2053.910	351.00	<.001

The EFA revealed a three factor structure with eigenvalues above 1.0, explaining 52.6% of total variance. All factor loadings exceeded 0.3. Based on the EFA results, it was revealed that a total of 27 items were grouped into 3 main factors. The first factor consists of nine (9) items, including items LAA3, LAA2, CE3, LAA4, F1, LAA1, F2, OH1, and P1. In this factor, the items are compiled from a combination of several initial dimensions, such as lying about academic assignments (LAA), cheating in examinations (CE), falsification (F), outside help (OH), and plagiarism (P). The factor loadings value of items in the first factor are ranged between .339 (P1) to .728 (LAA3). The second factor consists of four (4) items, including items MA1, MA2, MA3, and MA4. All items are from one initial dimension, namely misuse of AI. The factor loadings value of items on Factor 2 are ranged between .507 (MA4) to .773 (MA2). The third factor consists of five (5) items, including items PC3, CE2, CE1, CE5, and PC2. The items are compiled from a combination of two initial dimensions, such as prior cheating (PC) and cheating in examination (CE). The factor loadings value of items on Factor 3 are ranged between .363 (PC2) to .663 (PC3). Nine (9) items were eliminated because the factor loadings are below 0.3. At last, the total of 18 items were formed into three (3) factors. The EFA results with eigenvalues, factor variances, and factor loadings are shown in Table 4.

Table 4. Exploratory Factor Analysis (EFA) Results: Factor Loadings

Items			Eigenvalues	Factor Variances	Factor Loadings		
					1	2	3
Factor 1			5.763	0.147			
LAA 3	I pay someone to help on writing papers or working on my academic assignments.	Saya membayar jasa seseorang untuk bantu dalam penyusunan makalah atau mengerjakan tugas akademik saya.			0.728		

	Items		Eigenvalues	Factor Variances	Factor Loadings		
					1	2	3
LAA 2	I purchased projects/tasks/papers by online means and then submitted them as my own individual work.	Saya membeli proyek/tugas/makalah secara online lalu mengumpulkannya serta menganggapnya sebagai tugas individual saya.			0.655		
CE3	I exchanged my exam paper with another student in order to get a better grade on the exam.	Saya menukar kertas ujian milik saya dengan mahasiswa/i lainnya untuk meraih nilai yang lebih bagus dalam ujian.			**0.560**		0.353
LAA 4	I gave my lecturer a fake excuse to get extra time to complete a project or assignment.	Saya memberikan alasan palsu kepada dosen untuk mendapatkan tambahan waktu dalam menyelesaikan proyek atau tugas.			0.556		
F1	I submitted the assignment on my own name after it was completed by my friend.	Saya mengumpulkan tugas atas nama saya sendiri setelah tugas tersebut dibuat oleh teman saya.			0.554		
LAA 1	I made excuses that were not true when I was late submitting an assignment because I had already passed the deadline.	Saya memberikan alasan yang tidak sesuai dengan kenyataan, ketika terlambat mengumpulkan tugas karena sudah melewati batas waktu pengumpulan yang ditentukan.			0.472		

	Items		Eigenvalues	Factor Variances	Factor Loadings		
					1	2	3
F2	I limited the information sources available to my friends by disrupting their library resources so that they could not obtain the information they needed.	Saya membatasi sumber informasi yang dibutuhkan oleh teman saya dengan merusak sumber kepustakaannya sehingga mereka tidak mendapatkan informasi yang dibutuhkan.			0.417		
OH1	I tried to commit bribery (bribe) to get special assistance.	Saya mencoba melakukan suap (menyuap) untuk mendapat bantuan khusus.			0.381		
P1	I copied summaries of stories/poems/chapters from textbooks and claimed them as my own work.	Saya menyalin ringkasan cerita/puisi/bab dari buku teks lalu mengakuinya sebagai hasil karya saya.			0.339		
Factor 2			2.144	1.150			
MA2	I have used AI to complete academic assignments without any understanding of the work itself.	Saya pernah menggunakan AI untuk menyelesaikan tugas akademik tanpa memahami isinya.			0.378	**0.773**	
MA1	I have used AI to complete academic assignments without any personal contribution.	Saya pernah menggunakan AI untuk menyelesaikan tugas akademik tanpa memberikan kontribusi pribadi.			0.367	**0.704**	
MA3	I have used AI to modify research data so that the results match the research hypothesis that was formulated before.	Saya pernah menggunakan AI untuk memperbaiki data penelitian agar hasilnya sesuai dengan hipotesis penelitian yang				0.575	

	Items		Eigenvalues	Factor Variances	Factor Loadings		
					1	2	3
		telah disusun sebelumnya.					
MA4	I feel less capable of doing academic work without the assistance of AI.	Saya merasa kurang mampu mengerjakan tugas akademik tanpa bantuan dari AI				0.507	
Factor 3			1.684	0.229			
PC3	Before the exam, I encouraged my classmates to cheat.	Sebelum ujian, saya mengajak teman-teman sekelas saya untuk menyontek.			0.443		**0.633**
CE2	I used prohibited items, such as hidden notes, calculators, and other electronic devices during the exam.	Saya menggunakan benda-benda yang dilarang, seperti catatan tersembunyi, kalkulator, dan perangkat elektronik lainnya selama ujian berlangsung.			0.338		**0.558**
CE1	During the exam, I used special codes to obtain answers from my classmates.	Selama ujian, saya menggunakan kode khusus untuk memperoleh jawaban dari teman-teman saya.					0.532
CE5	I copied answers from other students during the exam.	Saya menyalin jawaban dari mahasiswa lain selama ujian berlangsung.					0.510
PC2	I swapped seats to strategic locations to get better grades in the exam.	Saya menukar tempat duduk saya dengan tempat duduk strategis untuk mendapatkan nilai yang lebih baik dalam ujian.					0.363

4.2 Confirmatory Factor Analysis

The Confirmatory Factor Analysis (CFA) was applied to three factors extracted from EFA. The new structure of ADS which has three dimensions with a total of 18 items was assessed by Confirmatory Factor Analysis (CFA) and obtained the following results. CFA results obtained several fit indices of the factor model. The indices of the model were Comparative Fit Index (CFI) = .950, Goodness of Fit Index (GFI) = .937, Root Mean Square Error of Approximation (RMSEA) = .047, and Standardized Root Mean Square Residual (SRMR) = .047. This shows that the three-factor model provides a suitable and precise evaluation of the ADS structure as all fit indices exceeded its acceptable threshold. The CFA results and fit measures value are shown in Table 5. Factor correlations ranged from .120 to .185, as shown in Table 6, indicating adequate discriminant validity as the correlations were sufficiently low to demonstrate that each factor measures distinct aspects of academic dishonesty.

Table 5. Confirmatory Factor Analysis (CFA) results: Fit indices

CFI	GFI	RMSEA	SRMR
0.950	0.937	0.047	0.047

Table 6. Factor Correlations Matrix

	Factor 1	Factor 2	Factor 3
Factor 1	-		
Factor 2	.185	-	
Factor 3	.120	.138	-

4.3 Reliability Analysis

The overall reliability of the ADS with all 18 items was α = .814, indicating good internal consistency by exceeding the 0.7 threshold [43–45]. ADS consists of three factors: Factor 1 (9 items) with α = .772, Factor 2 (4 items) with α = .775, both indicating good reliability, and Factor 3 (5 items) with α = .695, which approached the acceptable threshold. Individual item reliabilities (if item dropped) ranged from .789 to .816. The reliability analysis result is shown in Table 7.

Table 7. Overall, Subscales, and Individual Items Reliability Statistics

Subscale/Items	Items in Subscale	Coefficient α	Coefficient α (if item dropped)
Overall	18 items	0.814	-
Factor 1	9 items	0.772	-
LAA3			0.802
LAA2			0.805
CE3			0.808
LAA4			0.804
F1			0.805
LAA1			0.800
F2			0.812
OH1			0.812

Subscale/Items	Items in Subscale	Coefficient α	Coefficient α (if item dropped)
P1			0.807
Factor 2	4 items	0.775	-
MA2			0.789
MA1			0.793
MA3			0.810
MA4			0.816
Factor 3	5 items	0.695	-
PC3			0.800
CE2			0.805
CE1			0.810
CE5			0.809
PC2			0.807

5 Discussion

The Exploratory Factor Analysis (EFA) of the Indonesian version of the Academic Dishonesty Scale (ADS) revealed a three-factor solution comprising 18 items, which differed from the original dimensions. Factor 1 was newly named as Integrity Compromised, consisted of nine (9) items from five (5) different dimensions (lying about academic assignments, cheating in examinations, falsification, outside help, and plagiarism) that are combined into one (1) factor, suggesting that these dishonest behaviors are perceived as a unified construct in the Indonesian context and refers to every behavior that violates the values of honesty, trust, fairness, respect, accountability, and courage [9]; prevaricate behaviors to others when it comes to completing assignments, plagiaristic behavior, taking other's words or/and ideas without acknowledging the sources; and claiming a whole or part of the work as one's own [34]. Factor 2 was named as Misuse of AI, consisted of four (4) items, defined as any behaviors that use information or ideas from AI without stating the source, citation, attribution, and claiming it as one's own [20]; manipulating data or/and materials using AI [36]; and the use of AI as external assistance in completing assignments without any self-contribution (9,10,29,35,36), it is also emerged as a distinct dimension not explicitly present in earlier ADS versions, highlighting the growing relevance of AI-related academic misconduct. Factor 3 was newly named as General Cheating, consisted of five (5) items from two (2) dimensions integrates prior cheating and cheating in examination, refers to every fraudulent, unfair, rule-breaking behavior to gain personal advantages, such as giving or receiving information during assessment and unauthorized use of assessment materials/content (9,29,34).

This restructuring suggests a context-specific clustering of dishonest behaviors and the recognition of AI misuse as a novel and critical form of academic dishonesty. The translation process followed a forward-backward translation procedure, in which the English version was first translated into Indonesian and then back into English by independent translators who were proficient in both the source and target languages. Also, experts with backgrounds in educational psychology and measurement were involved in an expert review. The experts evaluated all 27 items for semantic, conceptual, and cultural clarity, as well as relevance in the Indonesian higher education context. The Indonesian version of the Academic Dishonesty Scale (ADS) already has adequate psychometric information. Confirmatory Factor Analysis (CFA) supported the three-factor structure, with fit indices (CFI = .95, GFI = .937, RMSEA = .047, SRMR = .047) indicating strong model-data alignment. The scale also demonstrated high

internal consistency (Cronbach's α = .814 overall), comparable to or exceeding reliability coefficients reported in prior ADS validations, confirming its suitability for use in Indonesia. However, in general, the internal consistency reliability was lower as compared to the origin scale [29]. This instrument can be used to identify the frequency of academic dishonesty behaviours in Indonesia. Compared with earlier versions of the ADS, this adaptation not only reorganizes existing behavioral categories but also introduces AI misuse as a distinct and measurable factor. This addition enhances the instrument's relevance in contemporary academic settings, where technology-mediated misconduct is increasingly prevalent.

In this study, the Indonesian version of Academic Dishonesty Scale (ADS) has proven valid and reliable to be used in Indonesian context. However, this scale still has its limitations. The first limitation is that ADS is a self-report questionnaire, therefore the responses given by respondents may be skewed by social desirability bias. In order to mitigate this bias, data collection was carried out with guarantees of respondent anonymity and response confidentiality. Secondly, the measurement outcomes of ADS are limited to identify the frequency of academic dishonesty behaviors, unable to determine the underlying intentions or internal drives that motivate individuals to engage in academic dishonesty behaviors. Thirdly, Factor 3 demonstrated marginally acceptable internal consistency (α = .695). Fourthly, convergent validity has not been adequately examined, test-retest reliability has not been tested, and there is currently insufficient evidence of the instrument's external validity. Lastly, this study involves a relatively insufficient number of participants and obtained by regional sampling. To provide a more comprehensive view of Indonesian students, future research should involve a larger population and more geographically diverse samples, consider item optimization for Factor 3, investigate measurement invariance across different groups (multi-group invariance), and conduct longitudinal validation.

6 Conclusion

Based on the conducted validity and reliability assessments, it can be concluded that the Indonesian version of Academic Dishonesty Scale (ADS), consisting of three (3) dimensions with a total of 18 items is a valid and reliable measurement tool among emerging adulthood students in Indonesia. The participants in this study were exclusively emerging adulthood students. However, future research is still needed to broaden the scope of testing populations to improve the quality of instrument application in a variety of contexts, particularly by validating the instrument across different educational levels, including elementary, middle, and high school students.

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Time Management and Academic Stress among Final-year University Students in Yogyakarta

Eni Anggraini[1], Narastri Insan Utami[2]

{190810702@student.mercubuana-yogya.ac.id[1], narastri@mercubuana-yogya.ac.id[2]}

Faculty of Psychology, Mercu Buana University Yogyakarta[12]

Abstract. This study aims to analyze the relationship between time management and academic stress among final-year university students in Yogyakarta. A quantitative correlational approach was used, with a sample of 211 students selected through purposive sampling. Data were collected using the Time Management Behavior Scale (TMBS) and the Student Academic Stress Scale (SASS). Pearson correlation analysis revealed a significant negative relationship between time management and academic stress, with a correlation coefficient of $r = -0.856$ and a significance level of $p < .001$. These results support the hypothesis that better time management is associated with lower academic stress. The time management variable explained 73% of the variance in academic stress. The findings highlight the importance of developing time management skills as a strategy to reduce stress among final-year university students.

Keywords: Time management, academic stress, final-year students, correlational study, higher education

1. Introduction

University students are individuals enrolled in higher education institutions who are undergoing a formal learning process [1] In their academic journey toward earning a bachelor's degree, students are required to complete a final project, often in the form of a thesis, as a graduation requirement [2] [3], thesis writing requires students to demonstrate their ability to identify problems, conduct research, and analyze data scientifically. [4] emphasize that final-year students are expected to work independently under limited time constraints, which increases the pressure experienced during the thesis-writing process. [5] also state that academic stress arises when students face high academic demands, performance expectations, coursework, and peer competition.

Previous studies have reported a high prevalence of academic stress among university students. [6] found that 75% of students experienced moderate to high stress [7] reported 88% of students experienced academic stress, while [8] found 71.3% of final-year students experienced high stress. These results demonstrate that academic stress remains a significant issue, especially for final-year students.

Interviews with seven final-year students from various universities in Yogyakarta revealed various symptoms of academic stress, such as nausea, dizziness, emotional instability, and

withdrawal from social interaction. These findings indicate that academic stress affects physical, emotional, and behavioral aspects. One key factor that may influence this condition is time management. Therefore, this study aims to quantitatively examine the relationship between time management and academic stress among final-year university students in Yogyakarta.

2. Literature Review

2.1 Academic Stress

Academic stress is a type of stress that arises from academic demands that exceed an individual's coping capacity [9]. [10] define academic stress as an imbalance between academic demands and available resources, resulting in physiological, emotional, and behavioral responses.

Factors such as workload, performance pressure, limited time, and competition contribute to this stress [11]. This stress can lead to mental health issues such as anxiety, depression, and physical exhaustion [12].

Final-year university students are particularly vulnerable due to the increasing complexity of tasks, such as thesis writing and the pressure to graduate[13]. This group frequently experiences symptoms such as disrupted sleep patterns, reduced motivation, and an increased risk of mental health problems like anxiety and depression [14]. Therefore, effective coping strategies such as prioritization, relaxation techniques, and seeking social support are essential [15]

Sarafino [9]) identified four dimensions of academic stress: biological (e.g., fatigue, headaches), emotional (e.g., anxiety, frustration), cognitive (e.g., poor concentration), and behavioral (e.g., avoidance, procrastination).

a. Biological: Physical responses to stress, including elevated heart rate and cortisol levels.
b. Emotional: Stress often leads to emotional reactions such as anxiety, fear, or frustration. In academic situations, students can feel pressured when facing a large task or a difficult test. Feelings of anxiety, frustration, or fear, particularly before exams or deadlines [16]
c. Cognitive: Stress also affects cognitive processes, such as the ability to concentrate, remember, and make decisions. Impaired focus, memory, and decision-making abilities [17]
d. Behavioral: Stress can be seen from behavioral changes, such as delaying work, avoiding tasks, or even isolating yourself, while adaptive behaviors, such as managing time well, can be strategies to reduce stress, including academic stress. Avoidance behaviors, procrastination, or social withdrawal, which can exacerbate stress if not addressed adaptively.

According [18] explained that time management significantly affects academic stress, as it includes planning, prioritizing, avoiding procrastination, and monitoring time effectively. This is because according to [18]time management effective time management not only reduces stress but also improves academic performance. [19]showed that with effective time management students can avoid the accumulation of tasks and deadlines that can cause stress.

2.2 Time Management

Time management is a critical factor influencing academic stress. According to [18], explained that time management significantly affects academic stress, as it includes planning, prioritizing, avoiding procrastination, and monitoring time effectively. [19] define time management as the process of planning, organizing, and allocating time efficiently to complete tasks and achieve goals. [20] emphasizes the prioritization of tasks based on their importance, while [19] argues that effective time management involves aligning daily tasks with long-term personal values and goals, thereby improving not only productivity but also life satisfaction. Time management consists of three main factors: short-range planning, time attitude, and long-range planning [19].Effective short-term and long-term planning, supported by a positive attitude toward time, allows students to handle workloads systematically and avoid stress :

a. Short-Range Planning: includes the organization of activities carried out in the near future, such as daily or weekly, focusing on prioritization and management of daily tasks.
b. Time Attitudes: Reflect how a person views and appreciates the use of their time. In addition, individuals with a positive attitude towards time tend to be more aware of the importance of effective time management. Proactive attitudes towards time are associated with lower stress levels, whereas passive attitudes often correlate with poor academic performance and heightened stress [22].
c. Long-Range Planning: involves the ability to set goals and strategies over a longer period of time, such as monthly or annually, as well as Plan steps to achieve them.

2.3 Relationship between Time Management and Academic Stress

Several studies support the negative correlation between time management and academic stress. Inability to manage time is often the main cause of stress in this group, because time management involves the ability to plan, organize, and control time to achieve certain goals, and this is closely related to academic stress [21] This is confirmed by the research of Misra, and McKean (2000), who showed that effective use of time as a behavioral strategy can help college students reduce the pressure of a heavy academic workload. According to [21] time management has three aspects, namely short-range planning, time attitudes, and long-range planning, the first aspect of short-range planning is to include the arrangement of activities carried out in the near future, such as daily or weekly, with a focus on prioritization and management of daily tasks. According to [22] short-range planning is an important element of effective time management, as it helps individuals strategically allocate time to complete urgent tasks and avoid the onset of academic stress.

The second aspect, time attitudes, reflects how individuals perceive and value the use of their time. [22] also highlighted the importance of attitudes toward time in reducing academic stress. They found that students with proactive attitudes toward time were better able to plan their tasks, prioritize effectively, and meet deadlines without experiencing excessive pressure. In contrast, passive time attitudes such as indifference to time use were associated with decreased academic performance and increased stress levels.

The third aspect, long-range planning, involves the ability to set goals and strategies over extended periods, such as monthly or yearly, and to plan the necessary steps to achieve them. [18] also found that effective long-range planning is associated with better academic performance and reduced stress levels. Their findings suggest that students who engage in long-range planning are more likely to break down large tasks into smaller, more manageable parts, thereby improving work efficiency and reducing stress. As a result, they are better equipped to avoid feelings of being overwhelmed when facing major assignments, which are often a source of academic stress.

Based on the explanation above, it can be concluded that time management has a significant impact on academic stress among final-year university students in Yogyakarta [23]found that students with better time management skills reported significantly lower levels of academic stress. This finding aligns with previous literature suggesting that enhancing students' time management capabilities can be an effective strategy for stress reduction.

Based on the aforementioned theoretical framework, the hypothesis proposed in this study is: "There is a significant negative relationship between time management and academic stress among final-year university students in Yogyakarta"

3. Method

3.1 Participants

The participants were 211 final-year students from several universities in Yogyakarta who were currently working on their theses. The inclusion criteria were: (a) students enrolled in the final year of undergraduate studies, and (b) students in the process of completing a thesis. Data were collected using purposive sampling between March and May 2024.

3.2 Instruments

Two standardized instruments were used:

a. Time Management Behavior Scale (TMBS) – Developed by (Britton and Tesser, 1991), this 33-item scale assesses short-range planning, time attitude, and long-range planning on a 4-point Likert scale (1 = Strongly Disagree to 4 = Strongly Agree). Cronbach's $\alpha = 0.86$. Example: "I make a list of things I need to do each day."
b. Student Academic Stress Scale (SASS) – Adapted from Misra, and McKean (2000), this 40-item scale measures physiological, emotional, cognitive, and behavioral stress. Items are rated on a 4-point Likert scale (1 = Strongly Disagree to 4 = Strongly Agree). Cronbach's $\alpha = 0.88$. Example: "I feel anxious before examinations."

Two psychological scales were utilized in the study: the Time Management Behavior Scale (TMBS) and the Student Academic Stress Scale (SASS). The scoring system is outlined below:

Table 1. Scoring Criteria for Questionnaire Responses

No	Responses	Score
1	Strongly Agree (SA)	4
2	Agree (A)	3
3	Disagree (D)	2
4	Strongly Disagree (SD)	1

Source : Sugiyono (2019)

3.3 Data Analysis

Pearson Product-Moment correlation was used to examine the relationship between time management and academic stress using SPSS 26. Normality and linearity tests confirmed data suitability.

4. Result

4.1 Assumption Testing

Normality Test

Based on the Kolmogorov-Smirnov test, the significance value was 0.200 ($p > 0.05$), indicating that the data is normally distributed.

Linearity Test

Linearity test results showed a significance value of 0.000 ($p < 0.05$), indicating a linear relationship between time management and academic stress.

4.2 Hypothesis Testing

The Pearson product-moment correlation analysis revealed a significant negative correlation between time management and academic stress among final-year students in Yogyakarta ($r = -0.856$, $p < 0.05$). This indicates that the better the time management skills, the lower the level of academic stress experienced. The coefficient of determination (R^2) was 0.730, meaning that time management accounted for 73% of the variance in academic stress. The remaining 27% is likely influenced by other factors not examined in this study.

4.3 Categorization of Variables

Academic Stress Levels
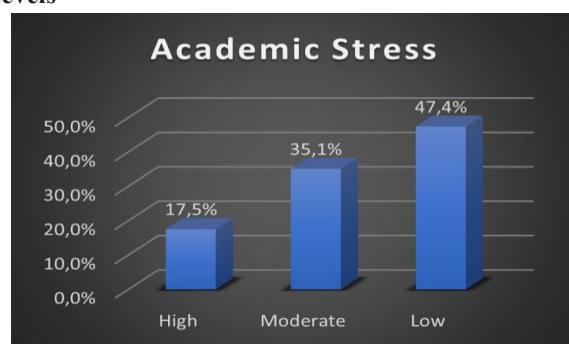
Chart 1. Academic Stress Levels among Final-Year Students

As illustrated in Chart 1, the majority of final-year students (47.4%) experienced low levels of academic stress. Meanwhile, 35.1% of students fell into the moderate stress category, and 17.5% reported experiencing high levels of academic stress.

Time Management Levels

Chart 2. Time Management Levels among Final-Year Students

As presented in Chart 2, most students (47.4%) demonstrated high time management skills. This was followed by 37.4% of students with moderate time management skills, and 15.2% with low levels of time management ability.

4.4 Summary of Findings

These findings support the hypothesis that there is a significant negative relationship between time management and academic stress among final-year university students. Effective time management appears to be a key factor in reducing academic stress, as shown by the high proportion of students with low stress and good time management capabilities.

5. Discussion

The results of this study indicate a significant negative relationship between time management and academic stress among final-year students in Yogyakarta, with a correlation coefficient (rxy) = -0.856 and significance level p = 0.000 (p < 0.05). These findings confirm the proposed hypothesis that better time management is associated with lower academic stress, and vice versa.

This study found a significant negative correlation between time management and academic stress among final-year students. Students with better time management reported lower stress levels, consistent with findings by [21], [25], [22]. Effective planning and positive attitudes toward time reduce academic pressure by minimizing procrastination and workload accumulation.

The results also show that most students had moderate to high time management and low to moderate academic stress. This suggests that many students are capable of adapting to academic

challenges through structured time use. However, the reliance on self-report data may introduce bias, and the correlational design limits causal inference. Future research could use longitudinal or experimental methods to examine the causal relationship between time management and stress.

Practically, universities should implement workshops to improve time management skills among final-year students, focusing on scheduling, prioritization, and long-term planning. The participant composition shows a predominance of male students (70.6%) over female students (29.4%). [26] notes that female students excel in metacognitive strategies and time management skills. However, this study does not specifically state that males are better at planning, and it is important to note that such differences are generalizations and may not apply to every individual.

Furthermore, 72.5% of students live with family, while 27.5% live in boarding houses. This is consistent with research conducted by [27] at the Faculty of Medicine, Andalas University, which showed that 64.4% of students living with their parents experienced stress, compared to 53.7% of students living independently. Another study [28] at the Faculty of Health, Jenderal Achmad Yani University Yogyakarta, found that students who migrated from other regions experienced more severe stress (10.64%) compared to non-migrant students (6.92%). Nonetheless, no statistically significant differences were found. According to [29] stress results from the individual's evaluation of their ability to cope with environmental demands.

Time management in this study was assessed through three key factors: short-range planning, time attitude, and long-range planning. Each factor significantly affected academic stress:

a. Short-range planning helps avoid last-minute stress by managing daily academic tasks efficiently (26). Students with effective short-range planning skills tend to avoid academic procrastination and complete their assignments more systematically [22]. This directly contributes to a reduction in academic stress, as tasks do not accumulate within a limited timeframe. In contrast, students with poor short-range planning skills are more likely to experience heightened pressure as deadlines approach [25].

b. Time attitude refers to an individual's outlook on time, including how well they value and utilize the time available to them. [30] stated that individuals with a positive attitude toward time tend to experience lower levels of stress because they are more efficient in managing academic responsibilities. Poor attitudes toward time such as a tendency to procrastinate or a lack of appreciation for time can increase academic stress, as students feel less prepared when deadlines draw near [31]. Therefore, one's attitude toward time is a crucial factor in determining the effectiveness of time management and its impact on students' academic well-being.

c. Long-range planning refers to students' ability to plan for long-term academic tasks, such as preparing a thesis or other major projects. According to [32] long-range planning can reduce stress by ensuring that students do not rush through assignments that require extended periods to complete. Students who are able to plan their studies over the long term tend to be more structured in completing their theses, thereby avoiding the academic stress caused by poor preparation [22]. Conversely, students who lack long-range planning often

experience higher levels of academic stress, especially during the final stages of their studies, as they do not have a clear strategy for completing their final projects [18)].

The coefficient of determination ($R^2 = 0.730$) indicates that time management accounts for 73% of the variance in academic stress. The remaining 27% is explained by other unexamined factors. From the categorization results, 17.5% of students experience high academic stress, 35.1% moderate, and 47.4% low. In terms of time management, 47.4% of students possess high abilities, 37.4% moderate, and 15.2% low. This suggests that most final-year students in Yogyakarta exhibit low academic stress and high time management skills.

6. Conclusion

This study concludes that time management has a significant negative relationship with academic stress among final-year university students in Yogyakarta. Students with stronger time management abilities tend to experience lower stress during the thesis process.

Universities are encouraged to provide time management training as a preventive strategy for academic stress. Future research should explore additional variables such as coping, motivation, and social support using diverse methodologies.

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Mental Health and Resilience of Families with Schizophrenia: A Literature Review

Lenny Syamsuddin

{lennysyamsuddin11@gmail.com}

Universitas Muhammadiyah Gorontalo, Gorontalo, Indonesia

Abstract. Schizophrenia is a chronic mental disorder that has a significant psychological, emotional, and finansial impact on families psychologically, emotionally, and financially. Families face prolonged stress, role changes, social stigma, and limited access to mental health services. Therefore, family resilience is essential to meet these challenges. Based on a systematic review study from the past five years resilience is influenced by internal (communication, emotional support, expectations) and external factors (social support, education, role of health workers). Family-based interventions such as psychoeducation, stress management, and peer group support have been shown to strengthen family resilience. Strong resilience improves family mental health and the quality of life of sufferers. Collaboration between families, health workers, and the community is needed to strengthen comprehensive support.

Keywords: Mental Health, Resilience

1 Introduction

Schizophrenia cases in Indonesia are reported to be on the rise in recent years. Basic Health Research records the occurrence of schizophrenia as having risen from 1.7 per 1,000 people in 2013 to 6.7 per 1,000 people in 2018 [1]. This increase poses a concern for the well-developed mental health system in Indonesia which continues facing serious hurdles in dealing with mental issues due to the high relapse rates most patients experience that impedes recovery. Schizophrenia, as well as anxiety, depression, and trauma, are other commonly found psychological disorders in the Indonesian society. The emotional mental disorders prevalence in Indonesia is roughly 9.8% according to data by the Indonesian Psychiatric Specialists Association [2]. This fact highlights the need for mental health care in Indonesia.

Mental health is defined as a state of physical, mental, and emotional well-being which allows a person to function in accordance with life's demands and his or her optimal potential [3]. People with adequate mental health are able to handle stress, are generally productive, and actively participate in social activities. Unfortunately, families carrying the burden of caring for patients with chronic mental disorders like schizophrenia may face the most difficult challenge of all. This condition not only impacts the person suffering from it, but also drastically lowers the family's quality of life and mental health as they bear the emotional and sociological strain [4].

Schizophrenia is one of the significant global public health issues [5]. The prevalence of this psychotic disorder is not as high as other mental disorders, but it has a severe impact and causes

a heavy disease burden [6]. It's estimated that globally, 450 million people suffer from some form of behavioral and mental disorder and India has the highest burden of these cases [7]. Mental health disorders have increased by roughly 13% over the past few decades which now is amongst the leading cause of disability worldwide [8].

Anxiety and depression account for approximately 6% of emotional mental disorders within the population of Indonesia [7]. The social misconception and stigma associated with mental disorders remains strong; hence those suffering from one tend to be neglected. Often they are too embarrassed to seek formal help and prefer alternatives such as social media support systems which may be dubious [9].

Schizophrenia occurs in approximately 0.2% to 2% of the global population [10]. This disorder is associated with intense behavioral and emotional disturbances including hallucinations and delusions. Clinical symptoms of schizophrenia can be divided into two principal classifications: positive symptoms, including hallucination and delusion, and negative symptoms, such as social withdrawal and loss of affect. Both enhance the deterioration in social functioning and quality of life of the patients [11]. The consequences of these symptoms also affect family and friends who are subjected to heightened emotional and social stress [12].

Treating schizophrenia heavily relies on antipsychotics, with recent years favoring typical antipsychotics [13]. Here, the family functions as the main informal caregiver whose support is essential in the multidisciplinary management of the patient. Patients with schizophrenia that does not likely remit with treatment can significantly improve their quality of life if they have supportive and well-functioning families willing to help them manage their illness [14]. The burden borne by the family, however, is quite significant. Relatives tend to suffer high levels of stress and mental health issues such as depression, anxiety, and other severe consequences of caregiving burden which, worsen their financial situation and leads to social withdrawal and isolation [14]. These forms of social support are crucial, including companionship and emotional and instrumental support, as well as aid that enables family members to maintain their health despite being in this challenging role [15].

One of the most important terms that need to be covered in relation to the challenges faced by families is family resilience or a family's ability to adapt and recover from stress and trauma [16]. This resilience entails strong family ties, effective conflict resolution, and mobilization of both internal and external assets to address and confront issues [17]. Such families are capable of sustaining relational harmony and well-being despite significant stress. These families are able to develop even in the context of numerous challenges [17]. Various approaches aimed at improving family resilience have been constructive in strengthening social support, coping mechanisms, and the ability to communicate and resolve conflicts [16].

Bishop and Greeff [18] state that international studies highlight families with greater resilience levels enhance clinical outcomes for patients, including relapse risks, and medication adherence. Key considerations underpinning family resilience include strong social support, effective family communication, and flexible coping mechanisms [18].

Research on family resilience has not received much attention considering the social and cultural diversity dimensions. The bulk of these studies has been done in Western countries, completely ignoring the culture and social support systems available in Indonesia and the rest of Asia [19]. Further, past studies tend to homogenize the family as an unanalytical unit and fail to recognize the varying lived experiences and roles within the family unit age, gender, status reshaped [19]. To close this gap, there is a need for research designed qualitatively. This design allows the detailed examination of families' lived experiences and the social and cultural factors that shape their resilience and mental health [20]. This allows a more comprehensive

understanding of the process of development of family resilience and its effects on mental health.

Healthy self-esteem and self-concept, adaptive behavior, emotional stability, as well as satisfying social contacts, define one's psychological state. This condition is for sure helpful and impacts the well being and quality of life of individuals and their families profoundly [20]. Sociopsychological repercussions need family reconstruction to improve the resilience of the family towards understanding the schizophrenia sociopsychology. To that question, I would respond that it is more efficient and targeted to allow family members to take on the caregiving role with the right support and instruction respectful of Indonesian culture and society [21].

2 Literatul Review

Schizophrenia is one of the diverse and long-lasting enduring mental health disorders due to its weakening impact on core cognitive functions disturbing the patient's thought processes, perception, emotions, and social relationships. Schizophrenia adversely affect not only the patients, but also the families and primary caregivers who provide chronic care and support that eventually results in a significant burden [22]. The emotional burden of family members suffering sorely from anxiety and depression compared to families od individuals without chronic mental disorders and enduring intense stress is greatly elevated as well [22].

As noted by Walsh [23], family resilience is essential in describing how families are able to function normally despite the considerable strain schizophrenia symptoms exert on the family system [23]. As noted by Walsh [23], family resilience is essential in describing how families can withstand and operate efficiently even in the scenarios when schizophrenia creates substantial stress on the family system [23]. Social support is fundamental in developing resilience and protecting the mental well-being of families. Past research has indicated that families with considerable social support tend to have a lighter psychological burden and are more adaptable psychologically (24). Family communication patterns are equally important; warm, supportive, and constructive communication helps increase the family's manageability of stressors which reduces the probabilities of patient relapse [25].

Context is perhaps the most important factor that shapes a family's coping mechanisms with schizophrenia. Chen [25] emphasized that in collectivistic cultures, the extended family network offers much stronger emotional and practical support, thus enhancing family resilience. But the impact of social stigma surrounding schizophrenia poses a significant challenge, likely increasing psychological stress for the family and contributing to social seclusion [26].

As stated by Patterson [26], family resilience is not a feature that exists in isolation, but rather a phenomenon that develops through the combination of challenges faced by the family and the resources they access. The FAAR model explains how families strive to evenly distribute stressors to their resources to address various issues, including chronic illnesses such as schizophrenia [26]. In this case, family resilience is strengthened through psychoeducational interventions that provide relevant information about schizophrenia and coping mechanisms [27]. Furthermore, family interventions that offer support to empower caregivers also reduce relapse rates in these patients [28]. Family members tend to suffer from considerable emotional strain, with a greater likelihood of suffering from mental illnesses like depression or anxiety [29]. A caregiver's mental health can be positively impacted by having optimism, flexibility, and a sense of spirituality [18].

Qualitative research reveals that families who find meaning and purpose in the caregiving role report higher levels of resilience and better mental well-being [30]. However, access to support services for families is still very uneven, especially in countries with limited resources, which negatively impacts family resilience and mental health [30]. Involvement of families as active

participants in patient care requires the use of a family-centered care approach, as this greatly addresses the challenges at hand [31]. More recent systematic studies draw attention to the integration of socio-cultural context as an important factor when designing any intervention aimed at reinforcing family resilience [32].

Technological advancements in the digital sphere provide online education, social networking, and stress management services which can be accessed and used at the user's discretion. These advancements have been shown to aid in supporting families [33]. The available literature suggests that family mental health and family resilience are two constructs that are interrelated in terms of reasoning and are multifactorically influenced by psychosocial elements. Appropriate interventions can shift the burden of schizophrenia to some extent improve the direct mental health impacts on caregivers and patients simultaneously [25]. Thus having sound persistent strategies requires understanding robust family resilience deeply. A family's resilience is critical to the development of effective and enduring intervention strategies.

3 Method

This research utilises a systematic literature review approach to collect, evaluate, and synthesise the available literature on the mental health and resilience of families with schizophrenia caregivers. It strives provide a comprehensive overview of the literature regarding about the caregivers' mental health issues and the caregiving-specific resilience psychosocial factors on schizophrenia family caregivers. Search for literature was done on several international journal databases such as PubMed, Scopus, Web of Science, and PsycINFO.

To ensure the authenticity and dependability of the review outcomes, this particular research adheres to the PRISMA protocols (Preferred Reporting Items for Systematic Reviews and Meta-Analyses) alongside utilising study evaluation instruments such as the Critical Appraisal Skills Programme (CASP) to assess the methodological quality of the reviewed article.

4 Result

A systematic literature review uncovered a plethora of papers focusing on the concepts of mental health and familial coping mechanisms in the context of caregiving for individuals afflicted with schizophrenia. From the analysis of these articles, it is evident that the families who take care of patients suffering from schizophrenia tend to experience a considerable degree of psychological distress which includes anxiety, stress, and depression. Some studies suggest this mental strain is associated with caregiving duties that are continual and the perpetual uncertainty about the caregiver's health status [22].

Research has shown that families caring for patients with schizophrenia face stress and mental health disorders above the norm compared to other health disorders. The emotional strain is often made worse due to sociocultural misconceptions regarding schizophrenia (social stigma), which leads to greater social withdrawal [26]. At the same time, the literature discusses more positive phenomena such as the adaptive mechanisms promoting family mental health, which are termed family resilience. This deals with a family's capability of enduring stressors of chronic illnesses and severe mental disorders. Such families tend to safeguard and sustain family functions and associated quality of life even amidst considerable challenges [23].

Various studies show important elements such as approachable and supportive communication, strong family bonds, and effective coping that impact family resilience. Families that command proper communication and have emotional connections alongside each other are more likely to be resilient [25]. Assistance from external social networks has been noted as one of the required factors that strengthen family resilience. The presence of support from relatives, friends, and

the community assists families cope with the caregiving responsibilities and helps to alleviate psychological stress [24].

Studies indicate that families who view social support as being sufficient have a lower probability of having mental disorders and are better able to maintain family functioning over time [18]. Accordingly, the formation of social relations and active community participation is an important strategy in family counseling plans. The importance of psychoeducational interventions has received considerable attention in the literature. For instance, increasing family understanding of schizophrenia's symptoms and its therapies has been shown to improve resilience and decrease fear and misconceptions that have historically heightened the psychological strain on families [28].

Besides educational aspects, coping strategies and effective communication techniques taught as part of family intervention programs have shown to decrease the relapse rates among patients and enhance the mental health of families [22]. This intervention also aids caregivers in dealing with the stress and conflict during the caregiving process. Still, the evidence suggests that there is a lack of access to services and support for families, particularly in lower and middle-income countries. This creates gaps in the quality of care and support that families receive [30]. In addition, the stigma that exists in society significantly hinders families from getting the help they need and also worsens the social isolation [34]. This situation calls for culturally informed efforts that integrate systematic approaches to lessen the stigma (34). In the context of collectivist Asian cultures, several studies indicate that extensive family networks and social values emphasizing family solidarity provide advantages in strengthening resilience and social support [22]. However, these cultural variations also require interventions tailored to local norms and values to be effective.

Families who are able to derive meaning and purpose from the caregiving role demonstrate greater resilience and better mental health [30]. This meaning is often associated with values of religion or spirituality that are life-giving and hopeful. With families in mind, digital technology is being used to offer online education, social networking, and even stress relief activities. This technology has both convenience and adaptability, particularly for those families who are limited by time and distance [33].

In this literature review, the findings acknowledge the substantial interplay between the mental health of the family and the resilience in the caregiving for a person with schizophrenia. As noted in the review, education, social support, and psychosocial interventions added to the caregiver's meta-empowerment which fostered resilience and improved the psychological well-being of the caregivers, thereby minimizing the chances of the patient relapsing. Nonetheless, barriers such as insufficient access to services still exist, along with enduring social stigma. Hence, strategies that effectively assist families must focus on the development of detailed intervention programs that are culturally relevant and community oriented.

5 Discussion

The results of this literature review support prior research outcomes affirming that families supporting individuals with schizophrenia suffer profound psychological stress, including heightened levels of strain, anxiety, and depression in comparison to the general population [22]. These findings are in line with other studies demonstrating that the stress burdened on caregivers negatively impacts their personal health and further diminishes the quality of care provided to the patients [25]. Hence, safeguarding the mental health of the families forms an integral part of the comprehensive care strategy for managing schizophrenia. Furthermore, the concept of family resilience as a dynamic adaptation process that includes cohesion, communication, and problem-solving abilities is highly relevant in this context [23].

Resilience not only enhances coping abilities but can also significantly reduce the psychological burden on caregivers [35]. This aligns with family systems theory and literature that positions resilience as the fundamental foundation for families to endure mental health crises.

Findings regarding the role of social support and family communication patterns also add significance to interpersonal interactions in building resilience. Supportive social networks serve as a buffer that shields families from severe stress [24], while open communication aids in mitigating conflict and enhancing familial cooperation [25]. This emphasis supports a therapeutic approach that actively involves families and optimizes social networks as part of holistic care. But, the added burden of social stigma is a prominent hindering factor [26]. Stigma does more than foster social alienation and humiliation; it obstructs many families from utilizing needed healthcare services and community resources. This highlights the need for initiatives that go beyond clinical care toward socio-cultural interventions that confront societal barriers and damaging attitudes.

Important implications suggest that families who derive meaning and purpose in caregiving experience greater resilience and mental well-being [36]. It suggests that coping involves psychological and existential elements. This enables the development of holistic approaches, including a therapeutic intervention focused on the patient's meaning in life. The primary obstacle noted is lack of access to help and support services, especially in low-income countries[37]. It proves paradoxical concerning the help that caregiver families need versus what is made available to them, and this contradiction may exacerbate the mental burden that they carry [37]. Therefore, it becomes crucial to design structured services that fit the ecosystem of the region.

The employment of digital technology as an auxiliary resource for families indicates promising potential [33]. Flexibility enables the improvement of access to various educational resources, social networks, and stress alleviating measures through digital channels. Yet, equity is an issue that must be addressed in order to prevent the widening of the gap, as equal opportunity and accessibility along with technology literacy are elements that require attention.

The aspects of spirituality and optimism act as psychological buffers, which are emphasised by the literature [18]. Even beyond these findings, it is clear these interventions should be multifaceted and integrate faith and individual values to improve family resilience. Cultural adaptation in family interventions is a very important aspect. Chien [24] emphasize that interventions tailored to the local socio-cultural context show greater effectiveness [24]. These findings emphasize that a one-size-fits-all approach is inadequate, especially in societies with high cultural diversity like Indonesia.

The difference in resilience levels among families within the same culture is one of the most surprising findings because it showed that their structural factors impact the resilience process on both an individual and social level. This invites additional research to explore the effects of variables such as race, economic position, and relations within the family. The main limitation of this research is that as a literature review, the results are highly dependent on the quality and scope of the available studies. Many studies conducted in Western countries may not adequately represent the socio-cultural context of Asia or Indonesia, thus requiring careful interpretation of their findings [38]. Furthermore, not all studies take into account individual differences within families, such as age and the roles of family members.

Therefore, further empirical research that is longitudinal and qualitative is highly recommended to understand the dynamics of family resilience and mental health more deeply in the local context. Mixed methods can provide a comprehensive picture that integrates both quantitative and qualitative elements. Moreover, further research can explore the role of social media and other forms of digital technology in assisting families, considering its effectiveness within

various cultures and levels of digital literacy. It is also important to assess the initiatives that incorporate spirituality and other cultural frameworks.

In general, these findings affirm that mental health and family resilience are complex constructs involving various psychosocial and cultural factors. Effective interventions must be holistic and sustainable, not only improving the individual patient's condition but also strengthening the family as the primary unit of care. Taking into account the local sociocultural context not only helps improve the efficacy of an intervention but also lowers stigma while increasing access to services for families. This is why the community and stakeholders should be consulted when designing the mental health programmes.

The current study highlights that increasing family resilience helps improve the caregivers' mental health while simultaneously aiding the recovery of schizophrenia patients. Further research and actions need to be directed towards the family caregivers' multidimensional issues focusing on caregiver family systems.

6 Conclusion

This study indicates that the families providing care for individuals with schizophrenia face enormous psychological burden, including heightened stress, anxiety, and depression relative to the general population. The presence of cohesive families that communicate and adapt as well as other resilient families positively influences the mental health of the caregivers and aids in the recovery process of the patients. These results underline the need for greater focus on the interventions that improve the resilience of the family, strengthen social support, and enhance communication.

This study uniquely contributes through the synthesis of different psychosocial and cultural elements that affect family mental health in the context of caregiving for schizophrenia patients while considering barriers like social stigma and insufficient support services. With regard to the mitigation of caregiver burden, a holistic approach encompassing educational and community resources, as well as technology, is recommended.

In practice, these findings can inform the design of community-based family intervention programs that are culturally appropriate and economically accessible, as well as facilitate the use of technology to enhance support access. Additionally, it will be important to examine the personal and social implications related to resilience, including the regional implementation of digital interventions. In general, this study provides an in-depth understanding of the relationship between mental health and family resilience in facing schizophrenia. The conclusion of this study focuses on deepening the understanding of strengthening the family as the core unit of care in context and outlining comprehensive and holistic strategies.

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Mental Health and Moral Awareness in Juvenile Offenders: A Systematic Review of Literature

Sri Nugroho Jati

{noenoempsi@gmail.com}

Universitas Muhammadiyah Pontianak

Abstract Juvenile delinquency intersects moral development and mental health, with growing evidence linking deficits in moral reasoning and psychological vulnerability. This systematic review synthesizes 38 empirical studies from 2015 to 2025, exploring the relationship between moral awareness and mental health in juvenile offenders. Using Kohlberg's moral development theory and Bandura's moral disengagement framework, findings show that disrupted self-conscious emotions such as guilt and shame, along with distorted moral reasoning, contribute to antisocial behavior. Incarcerated adolescents experience high rates of depression, anxiety, PTSD, and substance abuse, which are higher than the general adolescent population. Risk factors include dysfunctional family environments, peer pressure, childhood adversity, and limited access to mental health care. Although the need for targeted interventions is increasing, programs addressing moral emotions remain scarce and lack strong empirical validation. This review emphasizes the urgency of trauma-informed and developmentally appropriate psychosocial interventions to support rehabilitation and promote psychological well-being and prosocial reintegration.

Keywords: Mental Health, moral awareness, juvenile offenders, systematic literature review

1 Introduction

Moral reasoning and development have been the subject of significant research over the past two decades, especially under the influence of Kohlberg's theory of the stages of moral development. Morality emerges as a set of skills and motives for cooperating with others and develops through increasingly complex cognitive thinking to make moral judgments and decisions [1]. Refers to the theory of delay or immaturity in moral judgment and egocentric bias, deficits and distortions in the processing of social information, and lack of social skills in juvenile delinquency behavior. Nas et al provide an overview that morality contributes an important role in the social life of adolescents [2]. Referring to Kohlberg's theory of moral development [3], early adolescence to adulthood is at a conventional stage that has the task of developing good interpersonal relationships and maintaining social order. Bandura and Gerwitz [4] introduced the concept of *moral disengagement* as a mechanism of detachment from moral control, so that individuals can commit immoral acts without feeling guilty. These mechanisms include moral justification, the use of subtle language, the release of responsibility, distortion of consequences, dehumanization and attribution of blame. This moral control can be prevented through self-regulation mechanisms such as moral standards, self-supervision and self-sanctions (*guilt* and *pride*). On the other hand, individual moral standards are formed through the internalization of social norms, universal moral laws and prevailing cultural values [5]. Rest

defines moral awareness as a process of recognizing a situation as a moral issue and serves as the basis for ethical decision making [6] According to Rest's Four component model, moral sensitivity is the ability to recognize the impact of one's action on others, making it a key component of moral behavior [7].

Romeral et al's research on mental health and moral reasoning in juvenile offenders reveals significant insights into the psychological and developmental factors that influence juvenile delinquency behavior. A meta-analytical review showed a significant negative correlation between moral reasoning and juvenile delinquency, suggesting that lower moral reasoning was prevalent among offenders. Moral reasoning itself is defined as a cognitive process that allows individuals to make morally acceptable decisions in response to a particular situation. On the other hand, the moral aspect, particularly moral disengagement, plays a critical role in maintaining delinquent behavior patterns [8]. Baron et al., sees that when the level of guilt is low, it predicts a high level of antisocial so that there will be moral violations and *moral disengagement.* Thus, the higher the moral level of disengagement, the lower the feelings of guilt and regret [9].

Moral sense in childhood based on the moral stages of Kohlberg is shown by the orientation to the direct consequences of an action, avoiding punishment and trying to obey the rules to avoid sanctions. Children will learn about good and bad behavior, rewards and punishments and learn to build good social relationships including learning about empathy. Trivedi-Bateman and Crook explain the finding between empathy and crime in lawbreakers, that weak empathy is closely related to antisocial behavior and criminality. Empathetic interventions are more effective when started early, especially in childhood [10].

Lefebvre's study findings explain that as we age, moral identity becomes increasingly supported by internal rather than external motivations [11]. Some individuals believe that morality is personally important and has important implications for moral emotions, decision-making and behavior [12]. In particular, moral reasoning has been linked to criminal behavior [13, 14]. Thus, moral reasoning is one of the most important and decisive elements of moral behavior.

In Indonesia**,** the number of child prisoners between 2020 and 2024 shows a fluctuating but generally an increasing trend, rising from 1.400 in 2020 to 1.826 in 2024 [15]. This upward pattern highlights the persistence of child imprisonment and emphasizes the importance to examine not only the legal aspects but also the psychological dimensions relating to moral development such as moral awareness. Therefore, this study aims to systematically review the relationship between mental health and moral awareness among juvenile offenders, to provide a deeper understanding and to offer directions for interdisciplinary approaches when addressing this issue.

2 Literature Review

2.1 Adolescent Morality and Mental Health

Adolescents are in a transition period between preconventional and conventional in the stages of Kohlberg's moral development so they need good moral reasoning in making behavioral decisions. What is the relationship between moral and mental health of adolescents (question 1). Research from Barra et al assessed mental health among young offenders while incarcerated and analyzed their criminal careers up to 15 years after release. The findings found a high level of mental health problems, especially externalization problems, but also concerned patterns of drug and alcohol use and personality disorders [16]. Furthermore, the study by Dembo R et al

in their study explains that the majority of children in the U.S. juvenile justice system suffer from mental health and labeling problems after incarceration, which are largely related to their recidivism [17]. Furthermore, this research explores the impact of labeling on children's prejudices against themselves, and whether these prejudices affect children's recidivism rates [18]. In addition, positive assessments, adolescents' involvement in community-based programs, employment opportunities, and education can help reduce their recidivism by addressing adolescents' low self-esteem and self-esteem due to labeling [19].

In addition, the link between *imprisonment* and mental health has been shown in several research results [20, 21, 22, 23, 24]. The WHO states that problems related to mental health are seven times more likely to arise in the prison population than in the general population. Grisso et al mentioned that the prevalence rate of adolescents with mental disorders in the justice system was found to show a fairly high number compared to the figure in the prevalence of adolescents in general, which refers to the figure of 40%-80% of adolescents who face the law to have at least one mental health disorder (25). Furthermore, it was stated that it is estimated that around 50-75% of the 2 million adolescents in the justice system meet the criteria for mental health disorders, including depressive disorders, anxiety disorders, post-traumatic stress disorder (PTSD), and suicidal ideation. In Indonesia, although specific data were limited, similar findings were reported at the Children's Special Development Institute (LPKA), where 57% of adolescents experienced symptoms of severe depression and 36% reported persistent suicidal ideation [26].

Some studies show that children who are in conflict with the law (CICL) will indirectly experience mental health problems. About 70% of juvenile offenders have at least one diagnosed mental disorder, such as anxiety, depression, or ADHD [27]. In Indonesia, BPS data (2013–2019) shows an increase in juvenile delinquency cases by 10.7% per year, including theft, brawls, and narcotics abuse. A study of adolescent inmates in Indonesia found that 73.4% experienced depression in middle adolescents and 87.7% in late adolescents [28]. WHO defines mental health as a condition of individual well-being regarding the awareness of one's own potential in coping with normal life pressures, being able to work productively and contributing to one's community [29] The high prevalence of these mental disorders not only exacerbates delinquent behavior but also creates a cycle of recidivism that is difficult to break. The study in Jordan [26] showed that 57% of adolescents in rehab experienced symptoms of moderate to severe depression and 36% reported persistent suicide.

This condition is exacerbated by an unstable family background, social conflicts, and exposure to violence or poverty [26, 30]. Another study that examined the prevalence of mental and behavioral disorders in the prison environment found that the prevalence of mental disorders showed a high percentage of 90% of inmates experiencing one or more mental disorders such as severe depression (44%), anxiety (30-44%), substance abuse (53-87%), PTSD 23.9%), personality and psychotic disorders (8-56%). Adolescents who are in conflict with the law need social support to be able to have positive expectations in their lives. Schuster sees positive influences and expectations contributing to psychological adjustment and positive development in adolescents so that they can predict better mental health [31]. This includes understanding past experiences that may have influenced their behavior and creating a positive environment for growth.

2.2 Factors Contributing to Morale and Mental Health in Juvenile Offenders

Various factors contribute to the occurrence of juvenile delinquency, including family, individual, and school environment factors, what are the factors that contribute to moral awareness and mental health in juvenile offenders (Question 2). Some of the main factors identified are lack of parental involvement, parental divorce, peer pressure, involvement in criminal groups, as well as a history of parental involvement in criminal acts [32]. In this context, the attachment of norms and social to families, schools, and prosocial entities will reduce juvenile delinquency.

Chiang et al in their study explain that poor parental attachment increases mischievous behavior and school commitment decreases mischievous behavior in adolescents [33]. In addition, external factors such as a history of family violence, *bullying*, and structural poverty also contribute to the accumulation of psychopathological risks [25]. Azeredo, Moreira and Barbosa conducted a systematic review of the influence of genetic and environmental factors on the development of delinquent behavior showing that environmental factors such as parenting style, economic status, family conflicts have a strong influence on delinquent behavior, as well as genetic factors contribute to impulsive behavior and emotional regulation in addition to the effect of peer association which also has a very strong influence [34]. There are factors that affect juvenile delinquency and can cause adolescents to face the law in Lobos' research that *peer pressure* is the most dominant factor causing juvenile delinquency, while family and relatives exert a significant, though not predominant, influence, whereas schools have only a minor impact on deviant behavior [35].
These factors increase the risk of adolescents engaging in unlawful behavior. Factors on individual aspects, family, and community and community influences can play a role in preventing children from conflicting with the law. Deepa et al stated that it is very important to understand the reasons behind unlawful actions committed by children and adolescents. One of the important factors that can underlie lawbreaking behavior committed by adolescents is the lack of instilling moral values in them [36].

Patowary & Gopalan [37] conducted a qualitative analysis of psychosocial factors that play a significant role in juvenile delinquent behavior and in shaping perceptions of offending, involving 30 aged 10-17 years who were involved in offenses such as rape, and murder, theft, kidnapping, physical assault, and cybercrime. The study found that factors The study found that factors like poor anger control, low tolerance, weak academic performance, media influence, low socioeconomic status, family illness, and crime in the environment increased the risk of delinquency. In addition, it is known that juvenile offenders have a sense of responsibility, poor understanding or understanding, and awareness related to these mischievous acts.

Several other studies have revealed the factors that cause juvenile delinquency including (35) *peer pressure*, family problems, school, and socioeconomic status. In addition, family role dysfunction factors are directly related to the mental health of adolescents involved in court (38). This is certainly still a limitation of research, even according to Carbonell et al, seeing that there is no service model that supports mental health in juvenile justice [38].

Bentley conducted a literature review to examine racial disparities in access to mental health services for minority adolescent offenders. Studies have found that minority youth are more likely to experience mental health disorders but have limited access to needed services. Causative factors include federal policies, community resources and socioeconomic status [39].

2.3 Moral Awareness and Mental Health Intervention Programs in Juvenile Offenders

Although there has been a lot of research on children facing the law, there is still a research gap in understanding social intervention programs that can help children rediscover their hopes, gain social acceptance, and build confidence to live a better life. Appropriate intervention program models for morality and mental health that are appropriate for the problems of adolescents who violate the law (Question 3).

Deepa, Jacob & Manalan explained that the need for psychosocial interventions that proactively address cognitive, emotional and social needs such as counseling, vocational training, mentoring and positive approaches can support adolescents' personal growth and CICL for the better [36]. Schaefer & Erickson further expressed the need for facilities in juvenile correctional facilities to include programs to build adolescent psychosocial skills [40]. There is still limited research that examines interventions that target self-conscious emotions (shame and guilt) with the aim of reducing recidivism in juvenile offenders [40]. There were only two studies that focused on interventions that addressed empathy, in which Theriot reported moderate (positive) effects on empathy and varying (positive and negative) weak effects on recidivism [40].

Basto-Pereira and Maia's research examined the relationship between childhood adverse experiences (ACE) and delinquent behaviors, with mental health as a mediator. The results of the study showed that bad childhood experiences correlated with mental health problems and delinquency, where mental health mediated the relationship partially. These findings emphasize the importance of mental health service interventions in the rehabilitation of juvenile offenders. However, the study was limited to a small sample size and only explored one mediator [41].

Liu et al analyzed psychopathological trajectories and psychological resilience in 574 adolescent serious offenders over 7 years using statistical modeling and machine learning. Three patterns of anxiety and depression were found: low stable, high stable, and recovery. The LASSO analysis identified predictors at the personal (neuroticism), relational (parental hostility) and contextual (chaotic environment) levels as well as protective factors such as work orientation and paternal education. The study emphasizes the importance of holistic interventions, but is limited in generalizations because the data was collected more than a decade ago [42].

Underwood and Washington highlighted the high prevalence of mental health disorders among juvenile delinquents and the importance of a comprehensive treatment approach across sectors. The community-based approach is considered more effective than detention in rehabilitation, as it has the potential to increase moral awareness and reduce deviant behavior. However, this article also notes the limitations of the empirical evidence and the need for further research [25]. Furthermore, Ribeiro et al., analyzed the discourse of health professionals related to children's mental health conflicting with the law in juvenile correctional centers. There is no one dominant discourse, but a variety of professional perceptions, especially related to the understanding of social factors as the root of the problem. The study emphasizes the importance of listening to adolescents' voices and involving professionals perspective in the care system [43].

Yoder, Whitaker, & Quinn examined adolescents in correctional institutions and found that childhood trauma was associated with mental health disorders, while mental health services were associated with a reduced risk of recidivism. This study emphasizes the importance of trauma-based approaches in the juvenile justice system to support rehabilitation and prevent

reoffending [44]. Huikko et al., This study emphasizes the need for early screening and intervention, as well as a multiprofessional approach to prevent involvement in criminality due to unaddressed mental health issues [45]. Bartholomeu et al assessed moral emotions such as guilt, shame, anger in 141 adolescents, that adolescents' emotional experiences in risky situations were closely related to their moral development. The limitations of the study include the lack of specific instruments to accurately assess moral emotions and the lack of similar research in the context of Brazilian adolescents [46].

Heynen in his research showed that interventions targeting moral judgments had no significant effect on recidivism. Other findings suggest that no studies specifically target guilt and shame, as well as too few studies to analyze empathy interventions meta-analytically, suggest research limitations in aspects of moral emotions [47] Heynen's research is a continuation of further research by Stams et al [48].

Based on the findings and research results, there is an explanation of the complex relationship between moral development and antisocial behavior in adolescents, with an emphasis on the lower moral judgments that are often found among adolescent offenders. Various previous studies have shown that environmental factors, such as family pathologies and adverse childhood experiences, can contribute significantly to impaired moral development and adolescent mental health.

3 Method

This study uses a systematic literature review approach in synthesizing scientific evidence related to moral awareness and mental health in Juvenile Offenders as the formulation of the problem of this research study. A systematic review of the literature is carried out by collecting all published evidence on the selected topic and assessing the quality of the evidence presented [49].

3.1. Data Collection Methods

The method used in this study is the collection of Systematic Literature Review (SLR) data to identify, evaluate, and interpret research results that are relevant to a particular research question, or topic area, or phenomenon of concern. Meanwhile, the qualitative approach in systematic review is used to summarize the results of research that are qualitative descriptive. The systematic literature review conducted in this study was carried out to answer research questions based on the steps that were carried out systematically.

3.2 Literature Search

Relevant literature systematically retrieved from major academic databases, including Google Scholar, Scopus, Scielo, SINTA, and Index Copernicus. The searches were conducted using the software tools *Publish or Perish* and *SciSpace*, which facilitated access to these databases and improved the management of search results. Keywords such as "moral awareness, juvenile", "mental health, juvenile", "moral juvenile", and "mental health, juvenile offender*" were applied across the databases. To ensure credibility and targeted results, API connections (e.g., Crossref and Scopus) were also utilized. This systematic search yielded 45 relevant empirical publications published between 2014 and 2025.

3.3 Screening and Determination of Criteria

After the literature search process, the researcher conducted a screening and criteria determination process with the help of Mendeley and SciSpace to help manage references and facilitate sorting. In addition, VOSviewer was employed to visualize and analyze the

relationships among keywords obtained from the search results. This bibliometric mapping supported the identification of clusters and research themes relevant to the study as shown in Figure 1 a to c.
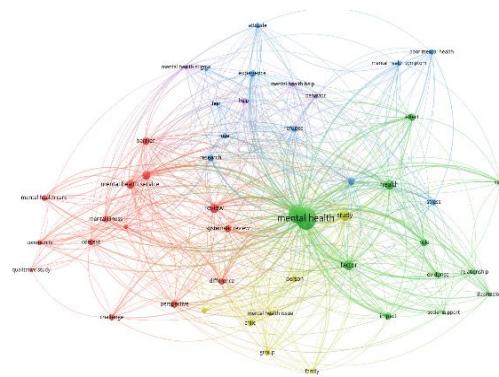
Fig. 1.a. Mental Health Networking
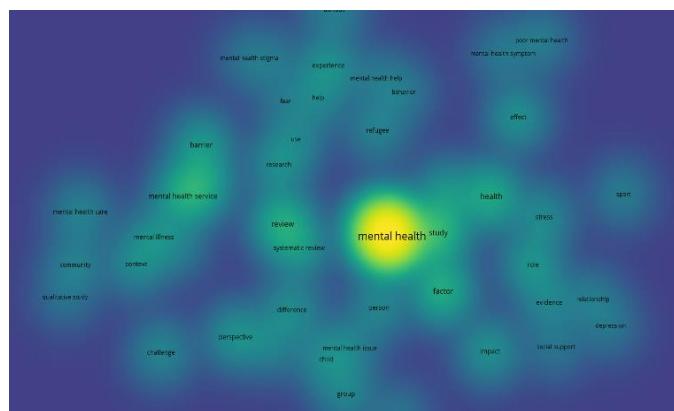
Fig. 1.b. Mental Health Density
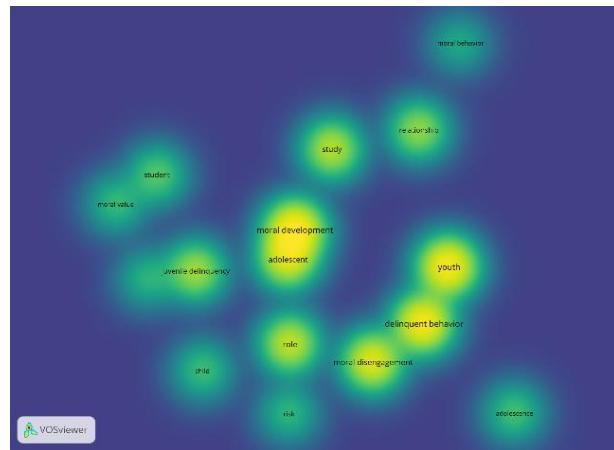
Fig. 1.c. Moral Density

Based on the screening that has been carried out with the help of VOSviewer and SciSpace, the relationship between *moral awareness* and the mental health *of juvenile offenders* results in a link with *moral disengagement, delinquent behavior, juvenile delinquency, self-conscious emotion, guilt, pride, shame, embarrassment, mental health stigma* and *moral development.* Next, the researcher screened the journals based on the inclusion and exclusion criteria shown in table 1. From the screening process, there were 38 selected literature as primary data and supported by secondary data from books, journals and articles relevant to the topic.

Table 1. Inclusion and Exclusion Criteria

	Study journals using both large and small-scale data that included both juvenile offenders and adolescents.
	Study discusses moral awareness and mental health with juvenile offender subjects
Inclusion Criteria	Studies identified through broader databases (Google Scholar, SINTA, Scielo, Index Copernicus) were screened to avoid missing potentially relevant works; however, only studies indexed in accredited and reputable journals were retained for inclusion, ensuring quality and consistency.
Exclusion of Criteria	Studies that are irrelevant to the variables of moral awareness and mental health

3.4 Quality Control
This stage implements quality control by reviewing the selected literature based on the Scopus Quartile (Q1-Q4) and other academic databases indexation according to the topics studied shown in **Figure 2**.
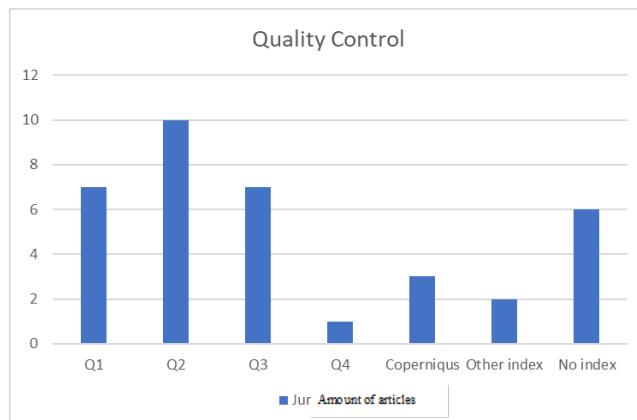
Fig. 2. Quality Control

4 Result

4.1 Stage 1: Dataset Preparation

At this stage, a literature search was conducted by two different softwares (eg. Publish or Perish and SciSpace). Publish or Perish was employed to retrieve metadata from databases such as Google Scholar, PubMed, Scopus, and Crossref. It allows direct keyword-based queries and provides structured bibliographic data (e.g., publication years, authorship, citation counts etc) that can be exported for further screening. Meanwhile, Scispace was utilized in a subsequent stage to assist in filtering and identifying articles more efficiently. Thus, Publish or Perish was used primarily for data collection, while SciSpace functioned as a complementary tool for screening and refining the dataset. Later, the search was conducted using relevant keywords such as "*mental health juvenile*", "*moral awareness juvenile*", "*moral juvenile*" and "*mental health and moral awareness juvenile*". The inclusion criteria focused on publications from the last ten years, specifically between 2015 and 2025. The number of results retrieved from each database is presented in **Table 2**.

Table 2. Initial Research Metadata Through Publish or Perish

Category Keyword		Number of Articles
Mental Health Juvenile		90500
Moral Juvenile		33400
Moral Awareness Juvenile		19600
Mental Health and Moral Awareness Juvenile		18100
	Total	161.600

4.2 Stage 2: Advanced Search

At this stage, the search continued using the SciSpace tool to complete the metadata of the articles found earlier. The same keywords were used as in the previous stage, with the publication year limited to 2015-2025. Each search generated 100 articles, which are summarized in **Table 3**.

Table 3. Number of Relevant Articles Through SciSpace

Category Keyword		Number of Articles
Mental Health Juvenile		100
Moral Juvenile		100
Moral Awareness Juvenile		100
Mental Health and Moral Awareness Juvenile		100
	Total	400

4.3 Stage 3: Finalization of Key Data Selection

At this stage, further screening and selection were conducted on the main data obtained through SciSpace. This process involved an in-depth verification of article quality, including the review of abstracts, results, methods, identification of research gaps and the relevance of content to the research topic. Articles were eliminated if they did not meet the inclusion criteria, such as i) did not involve juvenile or mental health variables, ii) did not examine moral awareness or mental health variables, ii) were indexed only in non-accredited databases. These exclusions resulted in 38 scientific articles and ensured that only relevant studies to the research focus as well as sufficient methodological were retained as the main data of the Systematic Literature Review (SLR) analysis, as presented in **Table 4**.

Table 4. Finalised Primary Data

Category Keyword		Number of Articles
Mental Health Juvenile		18
Moral Juvenile		12
Moral Awareness Juvenile		4
Mental Health and Moral Awareness Juvenile		4
	Total	38

5 Discussion

This study aimed to review the relationship between mental health and moral awareness in juvenile, particularly those conflicting with the law. The findings show that while the topic is highly relevant, it has not been fully integrated into academic literature. Based on the results of three systematic stages conducted, a large number of articles were initially identified through Publish or Perish and Google Scholars, but after applying strict inclusion and exclusion criteria using SciSpace, only 38 articles met the Systematic Literature Review (SLR) analysis criteria. These results highlight the need for an interdisciplinary approach to examine the relationship between mental health conditions and the moral development of Children or Adolescents in Conflict with Law (CICL). Furthermore, the review reveals a research gap, as few studies comprehensively combine the two variables, while limitations remain due to restricted database access and potential bias in article selection.

The findings from bibliometric mapping through VOSviewer also show that research on mental health in children and adolescents is still limited and has not yet become a major focus in the global literature. This is reflected in the visualization of research networks in Figure 2.b and further emphasized in Figure 2.c which shows that the topic of juvenile delinquency and mental health issues only forms small clusters with low density. In other words, there is still a

significant research gap, particularly in integrating psychological and moral aspects of the lawless adolescent population [50, 51].

Before discussing further, mental health itself has become a significant global issue and has direct implications for individual behavior patterns, including in the context of lawlessness by adolescents. WHO defines mental health as a condition of well-being in which individuals are aware of their potential, are able to cope with reasonable life pressures, work productively, and contribute to their communities [29]. In the context of corrections, the WHO notes that the risk of mental health disorders in the prison population is up to seven times higher than in the general population, a figure that underscores the urgency of attention to the psychological aspects of law offenders, especially adolescents [29].

The relationship between moral awareness and mental health in juvenile offenders is an area of study that requires more attention in research. The results of the literature review show that although many studies have highlighted one aspect (either moral or psychological), few explicitly examine both integratively. In fact, the two are closely interrelated: adolescents with moral regulatory disorders, such as low guilt or an inability to feel empathy, tend to show vulnerability to psychological disorders; Conversely, adolescents with disturbed psychological conditions are more prone to moral *disengagement*, which ultimately reinforces delinquent behavior [52, 53].

However, methodologically, the majority of the studies studied still use correlational or cross-sectional designs, so causal conclusions still need to be carefully studied. These limitations also include the lack of longitudinal approaches or mixed methods that can describe the dynamics of moral and psychological development more comprehensively. Some studies also did not explicitly examine mediating or moderating factors such as childhood trauma, parenting patterns, or socioeconomic status that actually had a significant influence [54, 55].

In some of the cutting-edge literature, the neuroscience perspective is breginning to offer a deeper explanation of the relationship between morality and psychological conditions. Activation and dysregulation of the areas *of the prefrontal cortex* (which regulates self-control and moral reasoning) and the amygdala (which is involved in emotional responses such as fear and guilt) suggest that neuropsychological inequality may explain dull tendencies of moral detachment, impulsivity, and empathy in law-breaking adolescents, especially those who experience trauma or violence from an early age [56, 57].

From a cross-cultural perspective, most of the studies reviewed came from Western countries, with much more structured justice and mental health systems than in developing countries. In the Indonesian context, the challenges are further complicated by the still strong stigma against mental disorders, the lack of experts at the Children's Special Development Institute (LPKA), and rehabilitation approaches that are still normative and punishment-oriented, not rehabilitative. Therefore, it is important to formulate intervention models that are culturally based, harnessing collective social forces such as family roles, religious values, and local communities as part of the social reintegration process [58].

The results of this review support the need for a new paradigm in juvenile offender rehabilitation, namely an approach that not only targets behavior control, but also the restoration of adolescents' moral-affectivecapacity through trauma-informed, community-based, and

developmentally sensitive strategies. This approach should ideally not stand alone, but be integrated with educational services, family support, and mental health facilities. Thus, the intervention model can be directed not only to decrease recidivism, but also to rebuild a sense of self-worth, empathy, moral responsibility, and hope for the future [57,58].

6 Conclusion

This study highlights the relationship between mental health and moral awareness in juvenile offenders. Based on a systematic literature review of 38 primary studies, it was found that low moral awareness, including moral disengagement mechanisms such as moral justification and dehumanization, contributes significantly to deviant behavior in adolescents. On the other hand, mental health disorders such as depression, anxiety, PTSD, and suicidal ideation are also consistently found in the adolescent population in the justice system, reinforcing the cycle of recidivism that is difficult to break.

The review found empirical evidence that juvenile delinquency is associated with developmental delays and moral awareness, including moral judgment, empathy, and self-conscious emotions (guilt and shame). Low guilt contributes to antisocial behavior. Meanwhile, low reasoning and moral emotion can also worsen mental health conditions. Unfortunately, there are still research gaps in designing interventions that holistically target both simultaneously. The majority of the existing approaches are still partial and punishment-oriented. Therefore, an intervention model that integrates cultural and community closeness, affective moral reinforcement (guilt, empathy, responsibility), and sustainable psychosocial support is needed. Integration between the justice system, mental health services, education, family, and community is key to a more humane, effective, and sustainable adolescent rehabilitation process. Thus, understanding moral and psychological dynamics is essential for developing rehabilitation policies that promote resilience and positive adaptation in juvenile offenders.

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Artificial Intelligence in Mental Health: A Narrative Review (Innovation, Ethics and the Future)

Salahuddin Liputo

{salahuddinliputo@umgo.ac.id}

Universitas Muhammadiyah Gorontalo, Indonesia

Abstract. This article presents a narrative review analyzing the literature related to the application of artificial intelligence (AI) in mental health. A literature search was conducted through PubMed, Google Scholar, IEEE Xplore, ScienceDirect, and JMIR databases (2016-2024), analyzing 65 publications thematically. The results indicate that AI has transformative potential in three areas: diagnosis and assessment using machine learning, treatment through chatbots and mHealth applications, and real-time monitoring using deep learning. Applications include early detection of mental disorders, personalized care, and virtual therapy. However, significant ethical challenges remain related to data privacy, algorithmic bias, and technological limitations. The future of AI in mental health requires continued innovation in Natural Language Processing, Virtual Reality, and a clear regulatory framework. The responsible application of AI can enhance the accessibility, effectiveness, and ethicality of mental health services, ultimately promoting optimal psychological well-being.

Keywords: Artificial intelligence, mental health, psychology

1 Introduction

Mental health conditions are highly prevalent in all countries of the world [1], and are of great concern in health policy and research [2]. Despite this, most societies and social health systems are still ignorant about mental health and do not provide the proper care and support needed. As a result, millions of people around the world suffer without help, experience human rights violations, or are negatively impacted in their daily lives [1].

Referring to the above statement, mental health treatment should receive serious attention from the Government considering the huge impact of the weak mental condition of the community. Mental health problems can no longer be considered a peripheral issue in Indonesia's health development [3]. Unfortunately, government programs for handling mental health problems only focus on curative and rehabilitative aspects and very little on preventive aspects, which are very important to do.

The problem faced by the government related to preventive efforts is that there are no guidelines for early detection of mental health [4], so input from various parties is needed to provide insight into the preparation of these guidelines. Of course this is a *"breath of fresh air"* for psychology academics to conduct research related to preventive efforts in early detection of mental health, which of course can be a contribution to the government in preparing the guidelines.

Currently, research efforts have gone into creating digital methods for monitoring mental health and emotions [5]. The research has even gone into developing the use of innovative technologies such as *machine learning* (ML), *big data*, and *artificial intelligence* (AI) as adopted approaches for psychological treatment, intervention and diagnosis and has grown sensationally over the past few years [6].

2 Literature Review

AI has been integrated into digital interventions particularly web and *smartphone* applications to improve user experience and optimize personalized mental health care. In terms of prediction and detection, the abundance of modern data streams means that data-driven AI methods can be used to develop prediction/detection models for mental health conditions [7]. Therefore, assessing the current status of AI applications in mental health research is relevant to determine trends, gaps, opportunities, and challenges [8].

This study examines the primary types of accessible AI technologies that have been integrated into mental health services, including machine learning, chatbots, and mobile health (mHealth) applications, and monitoring systems. The review focuses on established, evidence-based AI applications for the diagnosis, treatment, and monitoring of mental health conditions.

3 Method

This article was compiled using a narrative review approach to analyze the literature related to the application of artificial intelligence (AI) in the field of mental health. A narrative review was chosen due to the broad and rapidly evolving nature of the topic, requiring a comprehensive synthesis of various perspectives and research findings. Literature Search Strategy: A literature search was conducted through major academic databases including PubMed, Google Scholar, IEEE Xplore, ScienceDirect, and JMIR (Journal of Medical Internet Research) using a combination of the following keywords: "artificial intelligence," "machine learning," "mental health," "digital health," "chatbots," "mHealth," "psychological intervention," and "digital mental health." The search focused on publications from 2016 to 2024 to ensure the relevance and freshness of information on rapidly evolving AI technology.

The literature selection criteria used included: (1) peer-reviewed journal articles from reputable international journals, (2) publications from international health organizations such as the WHO, (3) empirical studies, systematic reviews, and meta-analyses discussing the implementation of AI in mental health, (4) conference proceedings from the IEEE and ACM related to digital health

technology, and (5) publications in English and Indonesian. Priority was given to studies discussing the practical applications of AI (machine learning, chatbots, mHealth), as well as the ethical and regulatory challenges, and future projections of AI in the context of mental health.

Analysis and Synthesis: Data from the 65 selected literature were thematically analyzed and synthesized to identify key trends, research gaps, and opportunities and challenges in the application of AI to mental health. The discussion is structured around three main themes: AI applications (diagnosis, treatment, monitoring), challenges and limitations (ethics, privacy, technology), and future projections and regulations.

4   Result

4.1 Application of AI in mental health

More than 970 million people in the world live with mental disorders and struggle to access treatment that is accessible to many. The utilization of technologies such as AI can impact mental health through prevention and treatment [9]. AI helps in identifying high-risk groups or individuals so that interventions can be made earlier, namely in the process of detecting, assessing, and predicting stress [10]. AI can analyze vast data, such as text from electronic health records to detect early indications of cognitive impairment [11], or signs of child maltreatment [12], both of which are factors that can affect a person's mental health later in life.

In addition, AI can act as a "frontline" in guiding individuals to needed mental health resources and services. Through the use of digital platforms and AI, access to mental health care can be more widely utilized, especially for those in remote locations or hard-to-reach areas. AI enables specific and tailored mental health interventions, which are particularly effective in the aftermath of natural disasters or in situations where access to resources is limited [9]. This means AI can be used not only for clinical care but also for resource management and mental health services more broadly.

One of the most popular AI used in mental health is *Machine Learning* (ML). ML is a technology that allows systems to learn and evolve based on data received, without requiring specific programming for each new task. There are several main approaches in ML used in research and practical applications, including *supervised learning, unsupervised learning, deep learning,* and *reinforcement learning* [13].

The use of ML in mental health shows great potential in improving diagnostic accuracy and the ability for early intervention based on accurate prediction of disorder risk [14]. ML is used to analyze complex health data to help diagnose conditions such as depression, anxiety, and schizophrenia, as well as predict the risk of future disorders, which is an important aspect in planning mental health interventions and treatments [15].

In *Supervised Machine Learning* (SML), the data used is labeled first, and then becomes the basis for the algorithm to learn. This labeling can be categorical or continuous, depending on the

variability of the condition under study. SML algorithms learn the relationships between features extracted from various data sources. These features can include sociodemographic, biological, and clinical information, which helps in building predictive models [16]. The algorithm is taught to associate certain features with corresponding labels [17].

This process is similar to how a teacher teaches a concept to a student. After the learning process, the algorithm is tested with unlabeled data to assess its ability to accurately classify and predict mental health problems [18]. An understanding of SML and its application in mental health is crucial to developing more effective diagnostic and predictive tools, which could ultimately contribute to better interventions and more positive mental health outcomes.

4.2 Treatment & management

One of the commonly used AI applications today is *Chatbots*, which are systems that can communicate and interact with human users using spoken, written, and visual language [19]. *Chatbots* have been used extensively in various aspects of health and well-being, with a particular focus on mental health care via *mobile* devices [20]. *Chatbots* are able to mimic human interaction and respond dynamically to user needs and provide personalized care [21]. This shows how important *Chatbots* are in digital transformation and ways of interacting, and certainly have the potential to be applied in mental health care. *Chatbots* can be integrated into mental health services, not only as therapy support, but also as an application to improve access and quality of care.

Some examples of the use of *Chatbots* include interventions with a non-intimidating approach for individuals who are reluctant to seek help due to fear of stigma, allowing for more personal and controlled interactions [22]. *Chatbots* also have the potential to increase engagement and adherence with mental health apps through easy and accessible interactions [23]. In addition, *Chatbots* provide help with anxiety, depression and stress, as well as awareness training and information on mental health conditions and treatments. In some situations, *Chatbots* can also facilitate connections between users and mental health professionals [24]. Finally, they have been used to guide marginalized communities on mental health issues [25]. In conclusion, *Chatbots* have great potential in assisting with mental health issues through various supportive and guided mechanisms.

In mental health management, there are currently several applications termed *mobile health* (mHealth) [26]. These apps are used specifically for mental disorder intervention through a series of digital-based therapeutic strategies. These interventions offer many advantages over traditional treatment services such as high accessibility, low cost, minimal contact, patient anonymity, flexibility, self-monitoring, and motivational support and personalized care [27].

Health interventions commonly include self-management features that allow clients to self-monitor symptoms and behaviors. This reinforces the patient to take an active role in managing personal mental health and has the potential for better outcomes [28]. Apps designed for the management of emotional disorders often include a variety of resources to assist clients, such as stress relief games, meditation instructions, mood detectors and psychoeducational materials. These apps can also assist clients in learning coping mechanisms [29].

Several systematic reviews have shown that *smartphone-based* interventions have beneficial effects on both clinical and nonclinical depressive symptoms in people [30]. Most recently, a comprehensive analysis showed that apps designed to address anxiety and depression provided significant clinical benefits, confirming the role of technology in supporting mental health care [31]. However, digital-based interventions are more effective when implemented in therapeutic sessions involving mental health professionals, given the importance of professional support and monitoring in improving treatment outcomes [32].

4.3 Monitoring & evaluation

AI applications make it possible to monitor mental health conditions in *real time* and continuously, so that detection of early signs of relapse or severity of a client's condition is higher and interventions can be carried out more quickly. Analyzing data related to the client's condition is also very important to gain a comprehensive understanding of the client's mental health patterns. This will help in identifying triggers or behavioral patterns that contribute to the client's condition, allowing for more personalized and accurate treatment [33].

Next, several studies have shown that AI can be used to evaluate and monitor mental health using objective metrics. One study tested an objective mental health evaluation model using a combination of *Convolutional Neural Network* and *Long-Short Term Memory* algorithms trained and validated using *time-series visual metrics*. Data was recorded by comparing cancer patients and individuals without cancer when viewing artworks in a gallery. As a result, the model was able to classify mental health levels with 93.81% accuracy for hope index, 94.76% anxiety, and 95.00% for mental well-being [34]. In conclusion, AI makes an important contribution to monitoring and evaluating mental health status and can make a significant difference to mental health maintenance.

5 Discussion

5.1 Ethics and Privacy

The increasing use of *chatbots* by government agencies as well as both profit and non-profit organizations in the provision of information and services has inevitably also touched the domain of mental health [35, 36]. However, *chatbots* have been found to create ethical problems, despite appearing harmless at first [37]. These ethical issues are specifically related to privacy, transparency, accuracy, security, and accountability, which are allegedly detrimental to the reputation of individuals and organizations using them [38]. These ethical issues will become even more severe as the sophistication *of chatbots* increases [35].

Privacy protection concerns the management of access to individual rights such as bodily privacy, personal information, property or residence, control over one's name, image, or likeness. In particular, in AI technology, clinical or business entities must protect such data from hackers and be careful not to display protected data on insecure or vulnerable servers [39]. Experts developing *Deep Learning* applications can afford to take hundreds of thousands of cases to develop and test new tools, utilizing their ability to access databases such as *"Imagenet"* which now has over 14 million

images. The desire to create and market new AI applications in healthcare led to a high demand for data coming from users [40].

In addition, according to some clinical psychologists and psychiatrists, the lack of understanding of the client's emotional state by the AI may result in a lack of effectiveness in achieving positive outcomes, which is precisely the emotional insight that is so important to gain [41, 42]. There is also a concern that AI may make misdiagnoses that could negatively impact the mental health of the client. AI's work in mental health involves collecting, storing, and analyzing large amounts of highly sensitive personal data including medical records, social media interactions, and data from *wearable* devices. These data, if not used carefully, can be harmful to the privacy and rights of the client [43]. The risk is that it could be misused or leaked, causing further harm to already vulnerable individuals [44].

5.2 Technology limitations

While AI has the potential for early risk identification, sorting and treatment of large numbers of individuals, there are some significant drawbacks in using AI for detection, assessment and prediction purposes. Some of these drawbacks are: *First, there* are biases that can occur when AI is used for mental health assessment, which can lead to errors in the assessment process. *Second*, while AI has been used to predict risks such as suicide risk, its effectiveness has been inconsistent and not even better than simpler prediction models. And *third,* there are concerns about the long-term consequences of replacing human interactions with AI, particularly in the aspects of judgment and experience that only humans can perform.

Despite the increasing interest and use of *mHealth*, there are still some barriers limiting the use of these applications in practice [45]. In many countries, specific regulations or legal frameworks governing these applications are still under development. As a result, medical apps can be launched and used by the public without strict supervision [46].

Inadequate government oversight means that there is no proper verification or validation process before an app is made available for download. This is very risky as unverified apps may contain inaccurate information or may even be unsafe [47]. In a weak regulatory environment, app developers can launch their products more easily and without taking full responsibility for the impact of using the app. This can be harmful to users if the app is related to the management of serious health conditions [48].

5.3 The Future of AI in Mental Health
5.3.1 Expected Innovation

The utilization of AI in the field of mental health continues to grow, and has the potential to create changes in the diagnosis, treatment, and monitoring of mental health conditions. In terms of diagnostics, ML technology can analyze large *Electronic Medical Record* (EMR) data and content shared on social media to identify symptoms and patterns that cannot even be seen by humans [49]. By utilizing large amounts of patient data, ML can also learn to recognize complex and diverse features of mental health disorders and make more accurate diagnoses [50].

Furthermore, in analyzing natural/automatic language features, the use of *Natural Language Processing* (NLP) shows great potential in the identification of early signs of cognitive decline. This technique could be a prospective strategy for detecting the early stages of dementia and other cognitive disorders [51]. With the same method, NLP is also able to detect signs of depression and anxiety such as negative emotions, cognitive distortions, or expressions of hopelessness [52].

In the therapeutic aspect, AI-based mental health interventions have been used to facilitate interactions between clients and their AI systems with a meaningful and compassionate approach in accordance with the client's need for empathic support and understanding to improve psychological well-being. AI has the potential to enhance empathic conversations by introducing human-AI collaboration systems. These technologies can provide automated and actionable responses with higher levels of empathy, complementing the support provided by humans [53].

Next, the use of *Virtual Reality* (VR) in the treatment of phobias by simulating situations that are the source of fear such as heights or narrow spaces so as to provide an experience that is close to reality. This provides an opportunity for the client to face the source of fear but in a safe and controlled environment [54].

This is also the case in the use of *Augmented Reality* (AR), where clients with social anxiety disorder can practice speaking in front of a virtual audience that appears in the real environment. The goal of both of these trials is the design of realistic real-life simulation environments with greater accuracy, thus enabling the achievement of ecological validity [54].

In the aspect of mental health monitoring, the use of AI technology is done by combining 3 methods at once: *first,* virtual counseling to fulfill continuous emotional support. *Second, the* provision of precision therapy that aims to analyze client data comprehensively so that the treatment provided is more effective and accurate. And *third, the* design of an AI-based diagnosis system to support early detection of symptoms of mental health disorders to produce more accurate diagnoses. With the combination, a more holistic and integral mental health care can be achieved [55].

5.3.2 Policy and Regulation

Regulation and supervision of AI in healthcare is crucial as the role of AI is increasing in the healthcare field [56]. Although AI offers a lot of potential, there are major concerns about privacy, data security, and ethics [57, 58]. It is therefore crucial to balance the benefits of AI use with ethical considerations, ensuring that advances in AI are utilized responsibly and in the best interest of its users [59, 60].

In Indonesia, one of the main problems related to this issue is the absence of a clear and comprehensive regulatory framework governing the use of AI in the health sector, especially mental health. Setting ethical guidelines as well as a strong regulatory framework for the use of AI for mental health services is essential to ensure that AI applications meet high safety and ethical standards so that they can be used responsibly and effectively. Data privacy and security measures, bias mitigation, and maintaining the human element in therapy are essential in building trust, reducing disparities, and providing ethical and high-quality mental health services [61, 62].

In 2023, WHO released a publication on regulations related to artificial intelligence (AI) for health. The publication emphasized the importance of establishing the safety and effectiveness of AI

systems, quickly providing systems that are suitable for users, and encouraging dialogue between stakeholders such as developers, regulators, manufacturers, psychologists, health workers, and of course users [63]. In developing regulations, matters such as data security, interoperability between systems, and equality of access should be top priorities [56]. And last but not least, for effective regulation, it must encourage innovation and at the same time comply with national standards, namely KEMENKOMINFO and international standards such as WHO and the *Health Insurance Portability and Accountability Act*.

6 Conclusion

Based on a comprehensive analysis of the literature, this study successfully identified various applications of AI in mental health and the challenges that accompany them. The challenges and future directions of AI for mental health care are dynamic and diverse. There are four concerns regarding AI: *first,* loss of jobs for humans; *second,* unethical decision-making; *third,* robot-led takeover; and *fourth,* uninterpretable decision-making [64].

Some of these can be solved by developing behavior-based digital biomarkers, redefining diagnosis, facilitating early detection of mental disorders, continuous learning systems that can assess patients in context, tools for clients and psychologists to better understand the illness and themselves, personalized approaches to diagnosis and treatment, and built-in computational models that make mental health care safer, more efficient and personalized [65].

In addition, a strong regulatory framework needs to be formulated, model validation and transparency ensured, and continuous research and development are important steps in utilizing AI to improve mental health services. As AI technology continues to evolve, these efforts are instrumental in shaping the future of mental health, making it more accessible, practical, and ethical for individuals [59].

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The Effect of Problematic Internet Use on Body Image in Teenage Girls Who Use Tiktok in Indonesia

Althaffauz Najwa Darmawan[1], Gisella Arnis Grafiyana[2]

{althaffauz@gmail.com[1] , gisella.arnis@ump.ac.id[2]}

Department of Psychology, Universitas Muhammadiyah Purwokerto, Central Java, Indonesia[1], Department of Psychology, Universitas Muhammadiyah Purwokerto, Central Java, Indonesia[2]

Abstract. Problematic internet use among adolescent girls on TikTok in Indonesia has become increasingly evident, as prolonged engagement exposes them to unrealistic beauty ideals. Such content, often emphasizing thinness and flawless skin, may foster negative social comparisons, body dissatisfaction, and heightened psychological distress. The present study investigated the impact of problematic internet use on body image among female adolescents aged 12–21 who actively use TikTok. Employing a quantitative design with purposive sampling, data were obtained from 349 participants. Results of a simple regression analysis demonstrated a significant negative association between problematic internet use and body image (t = -5.90, p = 0.001). The R^2 value of 0.0887 indicated that problematic internet use accounted for 8.87% of the variance in body image. These findings underscore the detrimental consequences of excessive and uncontrolled TikTok use, and highlight the importance of preventive strategies, awareness programs, and responsible media practices by content creators.

Keywords: Adolescents, body image, problematic internet use

1 Introduction

TikTok, a short-form video-based social media application originating from China, experienced rapid growth since its launch in 2016 and became highly popular in Indonesia starting in 2019. By July 2024, the number of its users in Indonesia had reached 157.6 million [1]. Adolescents, particularly adolescent girls, were the dominant users of the platform as they perceived TikTok as a means of self-expression and social interaction [2]. However, behind its popularity, TikTok also raised concerns regarding its impact on adolescents' body image. Adolescents were an age group in the process of forming their identity and were highly influenced by their social environment [3]. Exposure to TikTok content that frequently portrayed unrealistic beauty standards could have triggered unhealthy social comparisons and decreased satisfaction with their own bodies [4]. This phenomenon was closely related to problematic internet use, in which adolescents excessively used social media to seek validation and social recognition, ultimately affecting their mental health and body image [5, 6]. Problematic internet use has been shown to negatively affect adolescent mental health by increasing symptoms of depression, anxiety,

and psychological distress. These effects are thought to occur through mechanisms such as maladaptive social comparison, fear of missing out, and sleep disruption [7].

A preliminary study conducted on five adolescent girls showed that social media, including TikTok, had a significant influence on how they perceived their own bodies and caused psychological pressures such as stress and insecurity. Although several studies had examined the relationship between social media and body image, the results remained varied some indicated a positive correlation [8, 9], while others found no significant association [10].

Based on this background, the present study sought to address a gap in the literature by examining the relationship between problematic internet use and body image among adolescent girls who use TikTok in Indonesia. Problematic use, characterized by excessive engagement and exposure to content promoting idealized body shapes or extreme dieting, has been shown to reduce body satisfaction through mechanisms such as upward social comparison and the internalization of unrealistic beauty standards [11, 12]. This investigation is important for understanding the impact of social media on adolescents' psychological well-being and for informing the design of relevant intervention strategies.

2 Literature Review

Body image referred to an individual's perception of themselves, particularly regarding their physical appearance, with a focus on the body shape of adolescents. During adolescence, individuals experienced bodily changes due to puberty, and at that time, it was crucial for them to be able to accept the changes occurring in their bodies [13]. Body image could be defined as a person's experience of their own physical condition, which included perspectives, thoughts, and behaviors related to their perceived or interpreted physical appearance [14].

There were five aspects of body image. Appearance evaluation referred to the overall assessment of one's physical condition. Appearance orientation described the extent to which individuals cared about their appearance and made efforts to maintain and enhance it. Body area satisfaction indicated the degree to which individuals felt satisfied with specific parts of their body. Overweight preoccupation measured how concerned individuals were about their body weight. Self-classified weight referred to how individuals perceived their own weight, ranging from very underweight to overweight [14].

Problematic internet use referred to internet addiction, internet misuse, internet dependency, and compulsive internet use, which indicated an excessive and unhealthy attachment to internet-based technology [15]. Problematic Internet Use (PIU) was defined as a pattern of inappropriate or excessive internet use that resulted in disturbances or problems in various areas of an individual's life, such as social, psychological, occupational, or academic domains [16].

There were three dimensions of problematic internet use. The obsession dimension referred to a mental preoccupation with the internet, characterized by habitual daydreaming and fantasizing about the virtual world, as well as anxiety and depression resulting from the lack of online activity. The neglect dimension involved ignoring daily activities, basic needs, or responsibilities. The control disorder dimension referred to difficulties in regulating internet use, such as spending more time online than originally intended [16].

3 Method

This study aimed to examine the effect of problematic internet use on body image among adolescent girls. Therefore, a quantitative approach with a correlational study design was employed to achieve this objective. Problematic internet use was measured using the Problematic Internet Use Questionnaire (PIUQ), which was originally developed [16]. The researcher modified the PIUQ scale, which had previously been adapted [17]. This measurement tool consisted of 18 items that assessed three dimensions: obsession, neglect, and control disorder. Body image was measured using the Multidimensional Body Self-Relations Questionnaire - Appearance Scale (MBSRQ-AS), consisting of 34 items that measured five aspects: appearance evaluation, appearance orientation, body area satisfaction, overweight preoccupation, and self-classified weight. This instrument was also modified by the researcher [18]. The population in this study consisted of adolescent girls in Indonesia. According to recent data, the population was estimated at 73,000,000 individuals. The sample size in this study was 271 participants, determined using Isaac's table. Sampling was conducted using a non-probability sampling technique, specifically purposive sampling.

4 Result

4.1 Demographic Data

Demographic data were used to describe the basic characteristics of the respondents in this study, namely female adolescent TikTok users in Indonesia. The information included age, city of origin, and body weight.

Table 1. Demographic Data

Characteristics		Frequency	Percentage
Adolescent Girls	Late Adolescence	275	78,8 %
	Early Adolescence	74	21,2 %
City of Origin	Big City	138	39,54 %
	Small Town	211	60,46 %
Body weight	Overweight	239	68,48 %
	Underweight	109	31,23 %

Data Description

Table 2. Data Description

Variable	N	Min	Max	Mean	SD
Problematic Internet Use	349	18	54	44,7	13,2
Body Image	349	81	94	74,0	7,59

Based on these results, the scores of each variable were categorized into three levels: high, moderate, and low. The category scores were determined using the following calculation method:

Table 3. Variable Score Categorization

Variable	Low	Medium	High

Problematic Internet Use	14,9 %	69,1 %	16,0 %
Body Image	15,8 %	67,6 %	16,6 %

Based on the results presented in the table above, the majority of respondents (69.1%) were classified in the moderate category of problematic internet use, while 14.9% fell into the low category and 16.0% into the high category. This indicates that most respondents exhibit a concerning level of problematic internet use, with a smaller proportion at a particularly high level. Regarding body image, the majority of respondents (67.6%) reported a moderate perception, 16.6% were in the high category, and 15.8% in the low category. These findings suggest that most respondents hold a relatively positive perception of their body image.

Normality Test

In this study, a normality test was conducted using the Kolmogorov-Smirnov method.

Table 4. Normality Test Results

Kolmogorov-Smirnov	**p**
0,0370	0,727

Based on the table above, it can be seen that the results of the normality test showed a normal distribution in this study. The results indicated that the p-value of 0.727 was greater than the α value of 0.05, thus it could be concluded that the data in this study followed a normal distribution. Accordingly, the normality assumption was satisfied, confirming that the dataset is appropriate for subsequent parametric statistical analyses.

Linearity Test

Table 5. Linearity Test

Variable		**Problematic Internet Use**	**Body Image**
Problematic Internet Use	Pearson's rho		
	p-value		
Body Image	Pearson's rho	-0, 302	
	p-value	-0,001	

The linearity test assessment showed that the variable problematic internet use towards body image had a significance value of <0.001 and a Pearson's rho value of -0.302, indicating that the relationship was linear and negative. This meant that the higher the level of problematic internet use, the lower the individual's perception of body image. This negative relationship suggested that problematic internet use could have a detrimental effect on an individual's body image, likely due to exposure to body idealization content on social media, which could influence one's perception of their own body.

Simple Linear Regression Test

Table 6. Simple Linear Regression Test

Variable	Coef-	t	p	R-Squared
Total *Problematic Internet Use*	-0,173	-5,90	<0,001	0,887

Based on the table above, the results of the simple linear regression analysis indicated that problematic internet use significantly affected body image in adolescent girls. The regression coefficient value (B = -0.173) showed a negative relationship, meaning that the higher the level of problematic internet use, the lower the body image score of the individual. This relationship was found to be statistically significant with a t-value of -5.90 and a p-value less than 0.001 (p < 0.001). Furthermore, the R-squared value of 0.887 indicated that 88.7% of the variation in body image could be explained by problematic internet use. These findings suggested a strong and significant negative impact of problematic internet use on the body image of adolescent girls.

Difference Test

Table 7. Difference Test of Problematic Internet Use

Factor	N	p	Mean	Median	SD	SE
General	349	<0,001	44,7	44	13,2	0,708
Adolescent Girls						
Late Adolescence	275	0,046	43,9	43,0	13,1	0,789
Early Adolescence	74		47,4	48,5	13,5	1,57
City of Origin						
Big City	138	0,094	43,2	43,0	14,0	1,19
Small Town	211		45,6	45,0	12,7	0,871

Based on the results presented in the difference test table, there was a significant difference in the level of Problematic Internet Use (PIU) between early adolescent and late adolescent girls, with mean scores of 47.4 and 43.9, respectively, and a p-value of 0.046 (p < 0.05). This indicated that early adolescents tended to have a higher level of PIU. However, no significant difference was found based on city of origin, as adolescents from large cities had a mean score of 43.2, while those from smaller cities had a mean score of 45.6, with a p-value of 0.094 (p > 0.05). Therefore, city of origin did not significantly affect the level of PIU.

Table 8. Difference Test of Body Image

Factor	N	p	Mean	Median	SD	SE
General	349	<0,001	74,0	74	7,59	0,406
Adolescent Girls						
Late Adolescence	275	0,311	74,2	75,2	7,09	0,428
Early Adolescence	74		73,2	72,5	9,21	1,07

		City of Origin				
Big City	138	0,959	74,0	75,0	7,99	0,680
Small Town	211		74,0	74,0	7,33	0,505

Based on the results presented in the difference test table, there was a significant difference in body image perception, with a mean score of 74.0 and a significance value of $p < 0.001$. However, no significant differences were found based on demographic factors such as age, body weight, and city of origin. The mean body image scores for late and early adolescents were 74.2 and 73.2, respectively ($p = 0.311$); Therefore, age, and city of origin did not significantly influence the body image perception of female adolescent TikTok users in this study.

5 Discussion

The findings of the study indicated a negative relationship between problematic internet use and body image among adolescent girls who used TikTok. The higher the level of problematic internet use, the lower the positive perception of their bodies. This finding was supported by various studies that demonstrated how exposure to social media content promoting idealized beauty standards negatively impacted body image [19, 20, 11].

Demographically, early adolescents exhibited higher levels of compared to late adolescents, which was presumed to be due to their less mature self-regulation [21]. However, no significant differences were found in problematic internet use or body image based on city of residence or body weight. This supported the notion that psychosocial factors, such as the internalization of beauty standards and social comparison, played a more influential role than geographic characteristics [22, 23].

From a psychological perspective, problematic internet use dimensions such as obsession, neglect, and control disorder contributed to excessive exposure to idealized body content, which in turn affected body image components such as appearance evaluation and weight-related anxiety. Although problematic internet use only partially explained variations in body image, the findings underscored problematic social media use as a significant factor in the development of negative body image. A limitation of this study was its cross-sectional design, which did not allow for the observation of long-term changes. Additionally, it did not account for other contributing factors such as social support, personal experiences, or mental health conditions, all of which may also influence body image.

6 Conclusion

Based on the results of the study, it could be concluded that there was a significant influence of problematic internet use on body image perception among female adolescent TikTok users in Indonesia. The study explicitly demonstrated that the higher the level of unhealthy or uncontrolled internet use, the lower the adolescents' positive perception of their own bodies. Therefore, the working hypothesis stating that problematic internet use had an effect on body image was accepted. This negative influence suggested that excessive exposure to social media content promoting unrealistic beauty standards could reduce adolescents' self-acceptance regarding their physical appearance. Consequently, these findings highlighted the importance of supervision and education about healthy social media use among adolescents, particularly girls.

The findings were expected to encourage female adolescent TikTok users to be more mindful and critical in using social media, especially when consuming and comparing themselves to content that promotes unrealistic beauty ideals. Adolescents were advised to limit their time on TikTok and be more selective in following accounts or content that positively contribute to their mental well-being and self-image. It was also important to provide adolescents with the understanding that self-worth is not solely determined by physical appearance, but also by character, abilities, and personal achievements.

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Description of Intimate Friendship Among Blackpink Fans Using Rant Accounts on Social Media X

Ilmi Fauziyyah Zahra[1], Suwarti[2]

Ilmifauziyah1234@gmail.com[1], suwarti@ump.ac.id[2]

Faculty of psychology, Universitas Muhammadiyah Purwokerto[1,2]

Abstract. Social interaction has now expanded to social media, including the X platform, which enables the formation of intimate friendships. This study aims to describe the experience of intimate friendship among Blackpink fans who use rant accounts on the X social media platform. The approach used is qualitative with a descriptive phenomenological method. Data was collected through a survey of 101 participants to categorize the intensity of relationships (high, medium, low), followed by in-depth interviews with three representative participants from each category. The results show that participants in the high category demonstrated full trust and openness, even exceeding that of real life friends. Participants in the medium category had consistent interactions and stable relationships. Meanwhile, participants in the low category felt less capable of maintaining online communication, but their friendships developed through more meaningful offline interactions.

Keywords: Intimate friendship, social media X, Blackpink fans

1 Introduction

In the modern era, social interaction has evolved beyond physical interactions to encompass virtual interactions facilitated by various social media platforms, notably X. Sosial media X is a platform, that characterised by its microblogging functionality, which imposes a character limit of 280 on the content published by its users. This content encompasses ideas, concepts, and personal perspectives. A distinctive attribute of the social media platform X is its capacity to transcend geographical and temporal constraints, facilitating the expeditious dissemination of information on a global scale. This characteristic renders it remarkably accessible and expeditious for its users, enabling seamless connectivity across diverse over the world [1].

Presently, X occupies sixth position among Indonesian internet users in terms of the most widely used social media platform. Despite the prevalence of social media platforms such as WhatsApp, Instagram, Facebook, Tiktok, and Telegram in Indonesia, recent data indicates a significant number of users of the X media social platform. According to Statista in 2024, Indonesia is ranked fourth among countries with the highest number of X users worldwide, with a total of 24.8 million users [2].

The primary benefit of the social media platform X is its provision of a medium through which its users can express themselves by sharing their thoughts on a variety of subjects, primarily in the form of written content [3]. The X media platform offers a variety of features that facilitate

seamless interaction among users. A multitude of accounts is established for the purpose of engaging in discourse on a myriad of subjects they are interest. These accounts encompass a wide spectrum, including personal accounts (PA), business accounts (BA), study accounts (Studite), fan accounts (FA), and rant accounts (secondary accounts), among numerous others. At present, the most prevalent accounts on the social media platform X (Twitter) are those dedicated to K-Pop [4].

Blackpink fans are individuals who have an interest in Blackpink, a girl group from the K-pop music industry. A recurrent pattern among Blackpink fans is the tendency to offer mutual support among one another [5]. Moreover, the Blackpink fan community exhibits a positive relationship among its members on the social media platform X. This phenomenon can be attributed to the influence of the Blackpink girl group. This phenomenon can be attributed to the infrequent activity level exhibited by Blackpink, a notable instance being their prolonged hiatus. Consequently, it is not uncommon for Blackpink fans who utilize fan accounts (FA) to establish rant accounts, which offer a more private and unregulated platform for expressing diverse perspectives.

In essence, a "rant account" or more precisely, a "secondary account" refers to a social media user's additional account, distinct from their primary account, utilized for social media interactions [6]. A notable benefit of these accounts is that individuals can articulate their thoughts and emotions with a high degree of openness. This level of authenticity is further enhanced by the fact that only individuals considered to be within the individual's inner circle are privy to the content shared on these accounts. A notable benefit of these rant accounts is the increased freedom of expression they afford their users, allowing individuals to articulate their thoughts and emotions with a degree of uninhibitedness that is not always possible on other social media platforms. This increased level of authenticity can have a positive impact on the relationships of the users, as those who are close to them are more likely to be aware of their thoughts and feelings [7].

This finding aligns with DeVito's in 1986 assertion that intimacy can encourage individuals to disclose personal information [8]. Derlaga & Berg in 1987 also demonstrate that individuals exhibit a greater propensity to be more candid with those in their immediate social circles, including family members, romantic partners, close friends, and individuals with whom they share a personal affinity [9]. Admirers of the South Korean girl group Blackpink who utilize rant accounts on the social media platform X also endeavour to establish a conducive environment for themselves, thereby facilitating the articulation of matters that are, on occasion, sensitive and confidential.

According to the findings of Pathak & Pathak-Shelat in 2017, the formation of virtual groups or communities can indeed foster a sense of unity among their members, despite the presence of geographic and demographic boundaries [10]. This phenomenon is exemplified by the case of Blackpink fans in Indonesia who utilize the social media platform X. Individuals who already experience a sense of intimacy and frequently engage with each other, often developing a virtual friendship, are typically followers of a rant account [7].

Preliminary study was conducted by researchers on a group of three participants who self-identified as Blackpink fans and who used rant accounts. The results of the preliminary study indicated that when interacting with their friends, the three participants experienced a sense of validation, being heard by others, and a sense of trust. These sentiments may emerge due to the presence of close acquaintances within the user's social network, who often exhibit a high degree

of emotional attachment to the user. This attachment fosters a sense of ease and comfort when utilizing and uploading tweets on the account. The three participants had also convened in person with their close friends from the rant account. Furthermore, intimate friendship relationships have been shown to exert a detrimental influence on the subjects involved. This influence is believed to be a result of the friendship environment itself and the misunderstandings that are created.

This finding aligns with the theory of Intimate friendship, which can be conceptualized as a bilateral, mutual, and intimate relationship [11]. The aforementioned emotions, including a sense of validation, empathy, trust, and common interests, have been identified as integral components of the intimate friendship dynamics delineated by Sharabany in 1994 [12]. As posited by Sharabany, the emotional responses experienced by participants, including a sense of validation, acknowledgment, and trust, are all encompassed within the conceptual framework of intimate friendship [12].

A seminal study on intimate friendship on social media X was conducted by Firual and Hariyadi in 2022 [13]. In this study, intimate friendship was defined as the independent variable X, and it was posited that intimate friendship can encourage individuals to continue to disclose personal information. Lin's in 2016 research on social media X pertains to the concept of ambient intimacy, which posits that the degree of intimacy experienced can be influenced by the frequency of exposure to the target's social media content, thereby fostering a sense of closeness [14].

Research on intimate friendship is also frequently conducted on other social media platforms, with intimate friendship itself becoming the X variable of self-disclosure. A review of the extant literature reveals a consensus among four studies on the positive relationship between intimate friendship and self-disclosure. The findings indicate that as intimate friendship and trust levels increase, self-disclosure also increases [15, 16, 17,18]. This is an intriguing topic for further research, particularly in the context of intimate friendships among Blackpink fan accounts on social media platform X. A team of researchers will be presenting a study on individuals who maintain close-knit friendship relationships as Blackpink fans who utilize rant accounts on the social media platform X.

2 Literature Review

2.1 Intimate Friendship

2.1.1 Definition of Intimate Friendship

Intimate relationships are defined as warm feelings that can lead to closeness with specific individuals in one's life [19]. Intimate friendship is defined as a relationship that allows individuals to depend on their close friends. This dependence begins with an initial interest in or concern for a particular matter and is characterized by a willingness to share personal thoughts, experiences, and feelings with each other [20]. Intimate friendship can be characterized as a bilateral, mutual, and intimate relationship [18]. Sharabany in 1994 also considers intimate friendship to be a configuration of various elements, including self-disclosure, trust, happiness, and other intimacy-related phenomena that are interconnected and commensurate [12].

2.1.2 Elements of Intimate Friendship

According to Sharabany, the concept of intimate friendship encompasses eight distinct aspects, namely (12): 1) Honesty and spontaneity, characterized by the absence of pretence and the expression of candidness regarding one's thoughts and feelings; 2) Sensitivity and understanding, which pertain to the capacity of individuals to respond empathetically to their peers in various circumstances; 3) Closeness, denoting the degree of intimacy and compatibility that characterizes a friendship; 4) Exclusivity refers to the uniqueness of a relationship quality; 5) Giving and sharing entails the exchange of material goods. 6) Acceptance and sacrifice signify an individual's capacity to embrace all the characteristics possessed by a friend; 7) Same activities denote the engagement in shared pursuits; 8) principle is that of trust and loyalty, which refers to the condition of maintaining secrecy and defending each other.

2.1.3 Factors of Intimate Friendship

As posited by Myers in 2012, the concept of intimate friendship can be understood through the lens of three interrelated factors [21]. The first component is attachment style, defined as the presence of a profound emotional bond, thereby engendering a sense of significance, and yielding favourable outcomes. The second component is similarity, characterized by the perception of mutual interest. The third component is self-openness, denoting the capacity for intimate and profound connections, fostering a sense of closeness and vulnerability.

2.2 Blackpink Fans Rant Account Users

Blackpink fans are individuals who have an interest in Blackpink, a girl group from the K-pop music industry. A recurrent pattern among Blackpink fans is the tendency to offer mutual support among one another [5]. Moreover, the Blackpink fan community exhibits a positive relationship among its members on the social media platform X. This phenomenon can be attributed to the influence of the Blackpink girl group. This phenomenon can be attributed to the infrequent activity level exhibited by Blackpink, a notable instance being their prolonged hiatus. A notable distinction between Blackpink and other groups is their infrequent release of new songs and comebacks, a practice that is more prevalent among other groups [22]. A "rant account" is defined as a secondary account, which is used by a social media user to interact on social media itself [6]. Rant accounts are often used by users to express anger through means such as tweeting complaints, cursing, ranting, and nagging [7].

3 Method

This study uses a qualitative research method with a phenomenological approach. Phenomenology describes the meaning of a concept or phenomenon as experienced by several individuals [23]. According to Fiantika [24], phenomenology is the way humans understand the real world, allowing everything to be clear as it is. The qualitative data analysis process in this study will employ descriptive analysis developed by Amedeo Giorgi [25]. The analysis steps include a thorough reading of the interview transcripts, separation of meaning units, transformation of meaning units into psychological meanings, writing structural descriptions, and obtaining the essence of the participants' subjective experiences with general and specific themes [25].

The participants in this study were selected using purposive sampling. In this study, the researchers first conducted a survey of Blackpink fans who use rant accounts on social media X. The survey was distributed using the intimate friendship scale developed by Sharabany [12] and later adapted by Rizal and Rizal [11]. This scale consists of 38 items. The objective of the survey was to categorize participants into three distinct groups: high, medium, and low. The researchers sought to enrol a minimum of 100 participants who met the following criteria: 1) the subjects of this study are Blackpink fans who utilize rant accounts on a daily basis, 2) they exhibit a high level of engagement on social media platform X, with a minimum of five tweets published per day, 3) they derive enjoyment from interacting with mutuals and other users by responding to each other's tweets, 4) when completing the questionnaire, they are able to briefly describe their close friends on their social media accounts.

Furthermore, the researcher selected three participants to be interviewed, each of whom had obtained the highest scores in their respective categories. This selection endeavoured to achieve a profound and exhaustive comprehension of the characteristics of intimate friendship within each category. The objective of this study is to utilize the eight aspects elucidated by Sharabany [12] and the three factors of intimate friendship as delineated by Myers [21]. The interview process was conducted virtually via Google Meet, utilizing a set of 15 primary inquiries, each accompanied by probing questions.

4 Result

The survey's findings indicated that 16% of the participants exhibited a low level of intimate friendship, 70% demonstrated a medium level, and the remaining 16% displayed a high level of intimate friendship. Subsequently, the researchers conducted interviews with three participants, categorizing their responses as high, medium, or low. The interview was conducted with three participants, each representing a distinct category. This approach was adopted to facilitate a comprehensive and nuanced characterization of the intricacies of intimate friendship across varying levels of friendship intimacy. The following is a description of the participants who were interviewed.

Table 1. Participant Description

Participant	Gender	Age	Desc	Score	Category
N	Male	23	Job seekers	147	High
B	Female	24	Private employee	132	Medium
E	Female	23	Student	107	Low

The researchers then proceeded to analyse the data derived from the interviews. The data analysis in this study was conducted using a descriptive approach, employing a phenomenological method developed by Amedeo Giorgi. The analysis was conducted in the following manner: first, the interview transcripts were meticulously reviewed; second, the units of meaning were isolated; third, the units of meaning were transformed into psychological meanings; fourth, structural descriptions were written; and fifth, the essence of the participants' subjective experiences was identified through the presence of general and specific themes [25]. From this analysis, the researcher obtained results in the form of both general themes and specific themes.

	Table 2. Theme List	
Participant N	**Participant B**	**Participant E**
Safe Space for Self-Expression		
Openness without threat of judgment	Trust based on social distance	Not being judged
Emotional Closeness		
Quality of supportive responses	Frequency similarity creates consistent interaction	Continuing into the real world
Forms of Friendship Support		
Care and sacrifice	Mutual active support	Physical presence support
Shared Interests		
Light but meaningful interaction triggers	Basis of relational compatibility	Interest as a reinforcement of relational closeness
Dynamics of Closeness Intensity		
Respect for personal space	Relationship stability	Grows stronger through physical presence

4.1 Safe space for self-expression

Each participant has differences in the scope of this theme, as each participant comes from different categories and levels. For participant N, who has a high level of intimate friendship, it was found that participant N feels comfortable and unhesitant to open because of the trust they have in their friend, due to the friend's supportive attitude and lack of negative responses. Participant N avoids confiding in real-life friends because they are concerned about receiving negative responses or perceptions.

Furthermore, Participant B, who has a low level of intimate friendship, was found to be comfortable expressing themselves because their close friend comes from a different background, making Participant B feel safer sharing personal stories without worrying about the information spreading. Then, Participant E, who had a low level of intimate friendship, showed a "careless" attitude toward the possibility of negative responses from others. In addition, their close friends also showed a non-judgmental attitude, which made Participant E feel freer and more comfortable in expressing themselves.

Each participant also revealed the level of openness in expressing themselves to their friends. Participant N, who had a high level of intimate friendship, stated that he was completely open to his close friends and had no secrets. Participant B, who had a medium level of intimate friendship, stated that he was open to his close friends, especially regarding family issues, but there were some things that he kept to himself. Additionally, Participant E, who has medium intimate friendship, stated that they are open with their close friends, but topics such as romance and childhood experiences are not shared with their close friends. The remaining information is kept to themselves or shared with their middle school friends, such as in the context of romance.

4.2 Emotional closeness

The second theme identified by the researchers was related to emotional attachment. Each participant differed in terms of this theme, as each participant came from a different category and level. Participant N, who had a high level of intimate friendship, felt more comfortable sharing deep stories with their close friend than with friends in real life. As a result, the positive advice given by their friend was considered meaningful and worthy of consideration in decision-

making. Furthermore, Participant B, who has a medium level of intimate friendship, feels that they and their friend are on the same wavelength, making their communication enjoyable and intense, marked by exchanging stories almost every day.

A different finding was observed in Participant E, who had a low level of intimate friendship. The relationship with their friend was not limited to digital interactions but had developed into a real-world friendship. The in-depth discussions or deep talk made Participant E feel comfortable because they allowed for mutual sharing without any burden or pressure.

4.3 Forms of support in friendships

The third theme identified by the researchers was related to the forms of support that occur in friendships, with each participant differing in the scope of this theme. Participant N, who had a high level of intimate friendship, demonstrated a high level of concern, even willing to take the time to remain available to respond to their friend's messages, despite being in a busy situation. In return, their friend showed reciprocity by defending Participant N during a social media conflict. Participant B, who had a medium level of intimate friendship, expressed concern if their friend chose to remain silent and not share, as their friend also showed similar concern when the participant exhibited signs of sadness.

Furthermore, slightly different from participants N and B, participant E, who has a low level of intimate friendship, shared an experience where their friend faced difficulties, and participant E provided direct physical support. This occurred because participant E and their friend transitioned to a real-world relationship.

4.4 Similar interests

The fourth theme identified by researchers was related to similar interests in friendships, with participants differing in the scope of this theme. Participant N, who has a high level of intimate friendship, was found to share common interests, such as being fans of Blackpink, having similar music tastes, and sharing similarities in clothing style and preferred clothing colours, enabling them to engage in light-hearted conversations that strengthen their friendship.

Additionally, Participant B, who has a medium level of intimate friendship, and their friend often discuss topics related to Blackpink together, including hyping up the idol group in their conversations, which leads to frequent interaction between the two. Furthermore, Participant E, who has a low level of intimate friendship, and their friend often attend various events related to Blackpink together and hang out together because both enjoy going to cafes.

4.5 Dynamics of closeness intensity

The last theme found by researchers was related to shared interests in friendships, with participants showing differences in this area. Participants N, who had a high level of intimate friendship, demonstrated an attitude of respecting their friends' personal space, especially when their friends did not want to talk or were busy with work, even though their friends did not actually feel bothered. Additionally, participants N expressed a desire to build long-term friendships and meet in person, which reflects the dynamics of their friendships.

Furthermore, participant B, who has a moderate level of intimate friendship, revealed that there is no awkwardness between them when they meet in person, and although opportunities to meet in person are limited, they maintain their relationship through good communication, as evidenced by the absence of conflict between participant B and their friend. Additionally,

Participant E, who has a low level of intimate friendship, has a high level of attachment when the friendship develops into a real-world friendship. Participant E stated that the friendship they have developed has improved since they began interacting in the real world, as the participant feels less skilled at building closeness online.

5 Discussion

This study aims to uncover the nature of intimate friendships among Blackpink fans who use rant accounts on social media platform X. The researchers also examined the nature of intimate friendships based on the high, medium, and low categories that had been established. The researchers identified five major themes encompassing various aspects and factors of intimate friendship, namely: 1) safe space for self-expression, 2) emotional closeness, 3) forms of support within the friendships, 4) shared interests, and 5) the dynamics of closeness intensity.

The research results indicate that each participant had different experiences in interpreting a safe space for self-expression in friendships on rant accounts, which was closely related to the level of intimate friendship they had. Generally, a safe space in this context is understood as a psychological condition that allows participants to show openness in sharing personal matters without fear of negative responses, judgment, or the spread of information. This theme relates to aspects of honesty and spontaneity, trust, and loyalty, as well as factors regarding self-disclosure.

Participants with a high level of intimate friendship were found to be fully open without hiding anything. Participants shared about life issues, including openness about their sexual orientation, which none of their real-world friends knew about. This openness arose due to a strong sense of trust in their close friends. This trust was built through consistent interaction experiences and supportive responses from their friends, who never judged them.

This is in line with research conducted by Rahmayanti and Ediyati [26], which found that the stronger the online friendship, the higher the level of self-disclosure. Additionally, similar research was conducted by Lestari Laturrakhmi [27], which revealed that when individuals have a high level of trust, they become very open with their online friends, even more so than with their offline friends.

Unlike participants in the high category, participants in the moderate intimate friendship category showed that comfort in sharing stories was based on social distance from real life. Their close friends came from different backgrounds, which created a sense of security because the information shared was considered unlikely to spread to other social circles. Interacting with online friends from different social backgrounds can help individuals feel more connected and supported [28]. According to his research, this occurs because individuals gain greater emotional benefits as they feel freer from direct social pressure [28].

Meanwhile, participants who were also in the low intimate friendship category showed different dynamics. Their openness was more influenced by a personal attitude of "careless" about the possibility of negative judgments from others. In addition, their close friends showed non-judgmental listening, so they felt free to express themselves. This aligns with research conducted by Chen and Xu that empathetic and non-judgmental listening makes someone feel accepted, not just approved of, and allows them to be more open in sharing their feelings and thoughts [29].

Safe space is not just about how often someone shares, but also who receives the story and how they respond. In other words, a safe space is the result of a combination of supportive interpersonal experiences and subjective perceptions of social risk in friendships. The most significant factor influencing the creation of a safe space is trust; without trust, participants cannot be open (self-disclosure) in online friendships. Additionally, this trust is supported by supportive responses, social distance, and non-judgmental listening from the participant's friends as reinforcers, thereby fostering self-disclosure among participants.

This second theme emerged from the experiences of the three participants, showing that emotional closeness develops differently depending on the level of intimate friendship. This emotional depth is evident in how they respond to stories, provide support, and the extent to which advice is accepted as a basis for decision-making. This theme relates to aspects of attachment, exclusivity, and factors related to attachment style.

Participants with a high level of intimate friendship stated that personal stories and positive advice from close friends felt far more meaningful than support from real-life friends. This highlights the quality of support in highly intimate relationships. Previous research by Shabahang [30] suggests that some individuals feel more comfortable and receive greater emotional support from online friends than from real-life friends, especially when discussing sensitive and private topics. This may also be related to the high level of trust among participants in the high category, enabling such advice to be taken seriously and serve as a basis for decision-making, reflecting deep emotional involvement.

However, this condition can also lead to excessive emotional dependence on online friends. Participants tend to rely on online friends for emotional validation and guidance, which can potentially weaken their ability to deal with problems independently. Previous studies have shown that self-disclosure and strong trust in online relationships can trigger social media addiction and emotional dependence [31]. Therefore, it is important for participants to maintain a balance between online relationships and emotional independence to prevent negative impacts on mental health.

Participants with moderate levels of intimate friendship describe their emotional closeness through similar frequencies, which can create intense communication. This illustrates that the regularity of daily interactions and shared emotions create emotional closeness, even though the depth of this relationship has not yet reached the level of closeness of participants in the high category. Previous research on online communication was conducted by Abdillah [32], who revealed that there is a positive relationship between the intensity of online communication and warmth in friendships. The higher the intensity of communication, the greater the level of warmth in friendships, where warmth in friendships includes emotional availability, genuine caring, and support, which are certainly related to emotional closeness.

Furthermore, it can be concluded that the consistency and intensity of digital communication have been proven to create a warm and cohesive emotional space. Additionally, this is also related to the Social Penetration Theory proposed by Taylor and Altman [33], where closeness is formed through consistent interaction and increased depth of communication. Increased intimacy in a relationship is a consequence of the increasingly intense process of sharing personal information between individuals in the relationship.

This is slightly different from participants in the low categorization who revealed that emotional closeness emerged after digital friendships developed into real-world relationships, allowing for deep talk without feeling burdened or pressured. This aligns with Amelia and Wibowo's

research [34], which found that the decision to meet offline begins with the process of building trust, and when meeting in person, the relationship becomes closer because both parties already know and trust each other emotionally. This closeness grows further in the real world, and the participants' emotional closeness also increases.

Thus, emotional closeness in intimate friendships has the deepest level of closeness, ranging from accepting advice to influencing decision-making among high-category participants, through enjoyable daily interactions among medium-category participants, to real-life meetings that strengthen bonds among low-category participants. Support in friendships is one of the themes of this study, as it is an important aspect of intimate friendships, reflected in emotional attention, concrete actions, and empathetic responses to a friend's circumstances. The results of this study indicate that the form of support demonstrated by participants is influenced by the level of closeness in the relationship and the context of the interaction, whether digital or in person. This theme relates to aspects of giving and sharing, acceptance, and sacrifice.

The support that emerged based on the research results for high-category participants showed forms of support that were intense both emotionally and digitally. Participants demonstrated a form of time sacrifice, namely being willing to be present whenever their friends needed them, even in busy situations, which showed emotional availability as a form of high concern. Previous research has been conducted and found that virtual friendships on platforms like Twitter are based on mutual support motives and unwritten rules that encourage prosocial behaviour, including sacrificing time and attention for online friends [27].

In addition, his friend also showed reciprocal support by defending the high-category participant when he experienced conflict on social media. This shows the reciprocal support that was created between the two. This is in line with the research by Rahmawati and Nurhamida [35], which found that there are five forms of support in virtual friendships, namely instrumental, informational, emotional, self-reinforcement, and social networking. This study highlights that the most prominent form of friendship support is the reciprocal relationship between instrumental support (such as practical tips or actions) and emotional support (such as empathy). Both forms of support are evident in the friendships of high-category participants, such as emotional support through listening to each other's heartfelt confessions even when busy, and offering advice to one another.

In contrast, among participants in the moderate intimate friendship category, support is demonstrated through affective and reflective concern when sharing stories. When a friend does not share a story, the participant feels anxious, indicating emotional sensitivity to the friend's situation. Dinar's research [36] confirms that strong online social support reduces social anxiety and facilitates self-disclosure by sharing one's feelings with trusted friends. When participants in the moderate category feel anxious, they are not only reactive but also proactive, leading to immediate anxiety when communication stops. Life update about their friends is very meaningful to them; when their friends are unreachable, this can lead to social anxiety.

Meanwhile, participants in the low category demonstrate more tangible forms of support through direct physical actions, such as helping friends facing academic challenges or assisting during times of crisis. This is possible because the relationship that initially formed online has developed into an offline relationship. This aligns with Desjarlais [28], who found that online friendships that develop into direct interactions tend to create space for instrumental support, which is support based on concrete actions such as physical support that cannot always be provided in relationships formed solely online.

This shows that the support provided in the participants' friendships varies from participant to participant. However, basically all three apply support with a two-way relationship, even though the forms of support vary. Participants in the low category for this theme showed the highest level of friendship support compared to the other two participants because their relationships extend into the real world. However, the digital friendship support of participants in the low category is not visible.

In this study, although the forms of support provided by participants vary, all three demonstrate two-way engagement that strengthens emotional bonds between individuals. Such relationships can create a sense of belonging, reduce psychological stress, and boost self-confidence. Research by Thoits [37] supports this finding, stating that reciprocal social support can be a primary source of emotional reinforcement, helping individuals manage stress and improve mental well-being.

The next theme relates to shared interests, which often serve as the foundation for the formation of deeper friendships. In this study, the theme of shared interests was found among all participants, although the form and intensity of their connections varied according to the level of intimate friendship each participant had. This theme relates to shared activities and similarities.

This study focuses on Blackpink fans, where all three participants shared common interests with their respective friends, namely being Blackpink fans, and their interactions began from this shared interest. Although the relationship originated in the digital world, shared interests bridged openness, closeness, and even participation in real-world activities. Additionally, this demonstrates that individuals tend to form closer relationships with people who share similar interests or perspectives [38].

Other studies also reinforce this finding. In their research, Liddiniyah and Maryam [39] found that shared interests significantly contribute to the formation of friendship quality, as they allow individuals to feel more understood and emotionally connected without having to explain themselves too much. Thus, shared interests not only serve as a bonding element but also have a strong binding force in strengthening the emotional dimension of friendships, whether they occur online or offline.

However, among participants in the high category, similarities were also found beyond shared interests in Blackpink, such as in style and music preferences, which led them to frequently discuss these topics with one another. Additionally, participants in the low category showed that they often participated in activities related to K-pop directly because their relationships had developed into real-world friendships. They also shared similarities in the process of completing final assignments, where they had a common desire to work together and shared the same goals.

The fifth theme that emerged in this study is the dynamics of closeness intensity, which shows how closeness in friendships can develop differently among participants, depending on the level of attachment and the transition of interactions from the virtual realm to the real world. Among participants with high levels of intimate friendship, the dynamics of closeness are characterized by mutual respect for personal space and a strong desire to maintain long-term relationships. Although their communication occurs digitally, the relationship remains close due to unconditional acceptance and ongoing emotional support. Previous research has noted that comfort in online friendships can be maintained, especially when individuals have had positive experiences in forming online relationships in the past. Individuals have a desire to form long-term relationships because of these positive experiences [40].

Meanwhile, among participants with moderate levels of intimate friendship, relationship dynamics appear stable due to smooth communication and the absence of conflict. Their relationships are characterized by a balance between emotional closeness and non-binding interactions, which provide a sense of comfort even when they rarely meet in person. When conflicts are rare, individuals find it easier to share sensitive or personal issues with one another, as there is no fear of negative responses or rejection [12]. This allows the relationship to proceed with mutual trust and comfort, ensuring that the relationship remains stable.

Participants with low levels of intimate friendship showed higher intensity of closeness after the relationship moved to the offline realm. Participants acknowledged that they had difficulty building relationships online due to limitations in expressing emotions through digital media. However, after the relationship continued in the real world, the intensity of closeness increased significantly, marked by shared activities and direct physical support. In a study by Rahmawati and Nurhamida [35], it was found that friendships that began online could experience an increase in closeness when continued in face-to-face interactions because more communication channels were used and emotional expressions were easier to convey.

Overall, these results underscore that the dynamics of closeness intensity in friendships are not only influenced by communication frequency but also by how the interaction medium is used and to what extent the relationship develops from virtual to real-world. This reinforces the concept that closeness in digital friendships is dynamic and influenced by each individual's interpersonal experiences.

6 Conclusion

The results of the study on the three participants—high (participant N), medium (participant B), and low (participant E)—show that all three have different levels of intimate friendship. This study has five themes; safe space for self-expression, emotional closeness, forms of support in friendships, shared interests, and the dynamics of closeness intensity. Participants in the high category demonstrated unlimited trust and openness toward their friends, resulting in relationships that were extremely intimate, surpassing those of real-world friends. However, the relationships of participants in the high category carry the risk of dependency and lack of independence, leading to negative psychological impacts. On the other hand, participants in the moderate category also have consistent interactions almost every day and maintain stable relationships without conflicts, allowing participants to feel comfortable sharing their stories. Furthermore, participants in the low category admitted they were not skilled at online communication, but they had close friends whose relationships developed in the real world. Participants admitted they did not have intense interactions with their friends, but they often engaged in activities together, making them closer to one another.

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Nonsuicidal Self-Injury Instruments in Indonesia

Trie Septia Nurhaliza[1], Kartika Sari Dewi[2].

trienurhaliza@students.undip.ac.id[1], ksdewi@lecturer.undip.ac.id[2]

Faculty of Psychology, Universitas Diponegoro, Semarang, Indonesia[1], Faculty of
Psychology, Universitas Diponegoro, Semarang, Indonesia[2]

Abstract. Nonsuicidal Self-Injury (NSSI) is increasing in Indonesia. Appropriate
measurement is needed to understand the NSSI characteristics deeply; however,
documentation of NSSI measurements used in Indonesia is still limited. This scoping
review aims to identify instruments for measuring NSSI in the Indonesian population,
evaluate the completeness of reported psychometric properties, and provide
recommendations for future use. Three databases (Garuda, Onesearch.id, Neliti) were
searched using the PRISMA-ScR framework. The finding indicates that six instruments
have been used, with ISAS and SHI standing out for their more comprehensive
psychometric reporting. One locally developed instrument was identified, but limited
documentation of its adaptation process hindered further evaluation. These findings imply
a need for increased attention to the psychometric reporting of NSSI instruments in
Indonesia to inform future efforts to adapt or develop culturally appropriate tools, while
also encouraging collaboration among researchers, clinicians, and policymakers to address
these gaps.

Keywords: assessment, NSSI, mental health, psychometrics, self-injury

1 Introduction

Nonsuicidal Self-Injury (hereafter NSSI) is the act of intentionally injuring body tissues without
the intention to end one's life, and the reason for the act is usually unacceptable to society [1].
All forms of self-harm without a suicidal motive are categorized as NSSI, including self-cutting,
self-beating, skin carving, piercing with sharp objects, self-banging, and burning [2,3]. In
individuals with NSSI, the chosen form of self-harm usually involves more than one method;
these behaviors are deliberately and primarily chosen to reduce the emotional pain experienced
[4].

The reasons behind a person's engagement in NSSI are divided into two categories:
intrapersonal functions, which aim to change one's internal state, and interpersonal functions,
where self-harm is performed to change the external environment [5]. Intrapersonal functions
are more prevalent than interpersonal or social functions, with NSSI being preferred by
individuals to reduce the intensity of negative emotions [6–11]. This suggests that self-harm
may not arise in individuals who possess adaptive emotional coping strategies [7]. Despite its
rarer occurrence, showing emotional pain to others and influencing others to do the same are
widely reported reasons for interpersonal functioning [7,11].

NSSI typically occurs during adolescence, with many reports concentrating on the 12 to 15-year-old age group. This data indicates adolescents have the highest prevalence of NSSI, both in clinical (30%-82%) and general (14%-26%) populations. In addition to occurring among adolescents, NSSI behavior also appears in young adults, with percentages ranging from 21%-65% in clinical populations and 12%-20% in non-clinical populations [12]. Research on the prevalence of NSSI behavior in Indonesia shows that NSSI is quite common, especially between university students. According to a study by [13], among 100 college students aged 18-23 years, over 30% self-injured up to 10 times, with 28% doing so 11-50 times. Common NSSI behavior patterns include self-hitting, hair pulling, pinching, and other actions. The high prevalence of NSSI is considered a significant clinical and public health issue.

Measuring NSSI using appropriate assessment tools is highly urgent, as psychological assessment plays a crucial role in understanding an individual's overall characteristics and abilities. According to [14] and [15], as cited in *Psychological Testing in the Service of Disability Determination* [16], psychological assessment involves the collection, integration, and interpretation of information about individuals. This approach enables psychologists to obtain data that encompasses cognitive, emotional, and social aspects in a complementary manner.

Using multiple measurement tools and consistent sources can also help identify data discrepancies, which may enrich the understanding of the individual being assessed. Accurate assessment can lead to more informed clinical conclusions, both in diagnosis and in recommendations for intervention planning [16]. In addition to its role in clinical diagnosis, a sound measurement process plays a crucial role in ensuring the reproducibility and replicability of research findings, allowing researchers to draw theoretical conclusions with greater confidence [17].

The accuracy of measuring instruments is crucial in psychological research. If the instrument used is not valid or reliable, the study's results may be questionable. Validity refers to the extent to which a measurement tool accurately measures the intended construct, without interference from unrelated concepts. Reliability indicates the consistency of measurement results when the procedure is repeated under the same conditions. Furthermore, a good measurement instrument should ensure fairness in assessing various population groups. If these criteria are not met, the conclusions drawn from the research may be inaccurate and difficult for other researchers to replicate [17].

In the context of NSSI, there is an urgent need for accurate measurement because these behaviors are complex and involve various psychological factors, such as emotion regulation, self-criticism, and the need for self-expression or support-seeking [1]. Valid and reliable measurement tools enable more precise identification of behavioral patterns and risk factors for NSSI, thereby supporting more effective and evidence-based interventions. With proper measurement, research on NSSI can also offer stronger theoretical contributions, enhance understanding of the psychological mechanisms behind these behaviors, and provide a more solid foundation for mental health policy in Indonesia.

Although research on NSSI has been conducted among the Indonesian population, the measurement tools used to examine this behavior are often adapted from instruments developed in other countries. While these tools may demonstrate good psychometric properties, they do not necessarily capture the cultural nuances and unique experiences of individuals in Indonesia.

This gap is critical because, as highlighted by [18], content validity is the most important measurement property for an assessment tool. This concept ensures the tool's relevance and comprehensibility for a specific population, and its absence can lead to biased or inaccurate results by decreasing the overall validity. Evidence from validation studies in Indonesia supports this concern. For instance, the Indonesian version of the *Self-Harm Inventory* (SHI) [19] revealed that some items, such as those related to laxative abuse, were less relevant in the Indonesian context. Similarly, the validation of the Indonesian version of the *Inventory of Statements About Self-Injury* (ISAS) [20] found that cultural factors, including religious perspectives on suicide, could influence NSSI behavior. These findings underscore the need for culturally sensitive and robust instruments to capture NSSI more accurately within the Indonesian population.

The lack of documentation regarding NSSI measurement tools used in research in Indonesia also presents a challenge. This is due to the limited number of studies that report the adaptation and validation processes of these instruments, as well as the scarcity of information on their applicability in local contexts. Without sufficient documentation, it becomes difficult to determine whether the instruments used thus far are truly effective in accurately capturing NSSI behavior.

The purpose of this scoping review is to identify, summarize, and evaluate NSSI measurement instruments that have been used in Indonesian research, as well as to provide an overview of their appropriateness and quality within the context of the Indonesian population. Identifying the measurement tools that have already been used in Indonesian studies holds significant value. This process will not only help to determine which instruments are most frequently applied but also assess whether the descriptions of the NSSI instruments used have been reported completely and transparently. This review is expected to make an important contribution by evaluating the extent to which existing instruments can describe NSSI behavior in the Indonesian population.

2 Literature Review

2.1 Nonsuicidal Self-Injury (NSSI) Definition

The conceptualization and measurement of NSSI behavior have developed significantly in recent years. Although there are ongoing debates surrounding NSSI, its high prevalence, especially among clinical populations and adolescents [21,22] and its connection to serious clinical and functional impairments has drawn increased attention. Thus, the Childhood and Mood Disorders Work-Group of the DSM-5, by Shaffer and Jacobson, proposed recognizing NSSI as a distinct diagnostic disorder in the DSM-5 [23]. However, there was a lack of research supporting the full diagnostic criteria for NSSI as a proposed psychological disorder. Issues such as small sample size, low reliability in the DSM-5 field trials, and multiple revisions of the criteria were major limitations [24].

Hence, NSSI disorder (NSSID) was included only as a condition for further study in Section III of the DSM-5. Nevertheless, this development represents an important step toward recognizing NSSI as a distinct disorder [25] and highlights the need for continued research in this area. NSSI is defined as the intentional destruction of one's body tissue without suicidal intent and for reasons that are not socially acceptable [26]. The International Society for the Study of Self-Injury (ISSS) further describes NSSI as the deliberate act of injuring body tissue without the intention of ending one's life. This behavior is sometimes referred to as self-injurious behavior, nonsuicidal self-directed violence, self-harm, or intentional self-injury [27]. Based on these definitions, NSSI can be understood as a direct act of self-harm, carried out without suicidal intent and for purposes that are not socially or culturally accepted.

2.2 Nonsuicidal Self-Injury (NSSI) Function

The reasons behind self-harm are generally understood in terms of its function. In this context, "function" refers to the factors that motivate or reinforce the occurrence of a behavior [28]. People may engage in self-harm for various reasons, but many explanations emphasize the role of rewards and punishments associated with the behavior [29]. The four-function model (FFM) of Self-injury [30] combines these behavioristic concepts with social and environmental factors that can influence self-harm [31].

The four-function model (FFM) emphasizes both internal and external factors that contribute to NSSI. It is currently the most widely used psychological model for understanding NSSI, likely because it addresses the complex interactions between individual and social influences [29]. The FFM outlines four main functions of NSSI, organized into a contingency matrix based on two dimensions: automatic (intrapersonal) versus social (interpersonal), and positive versus negative reinforcement [29]. A more detailed explanation of this contingency matrix is presented in **Table 1**.

Table 1. Key tenets of the Four-Function Model of NSSI [31].

Reinforcement type	Negative	Positive
Automatic	Decrease or eliminate aversive affective or cognitive state or status	Increase or generate the desired affective or cognitive state or states
Social	Decrease or eliminate aversive social event(s)	Increase or generate the desired social event or events

The four distinct functional processes include positive and negative automatic reinforcement, which describe NSSI performed to produce or alleviate specific intrapersonal stimuli. For example, NSSI performed to reduce negative emotional experiences is categorized as negative automatic reinforcement, whereas engaging in NSSI to evoke emotions or physical sensations represents positive automatic reinforcement. Positive and negative social reinforcement, on the other hand, refer to NSSI carried out to generate or alleviate certain interpersonal responses. An example of positive social reinforcement is seeking attention from one's social environment, while negative social reinforcement involves escaping from aversive social experiences, such as bullying [31].

3 Method

This scoping review aims to identify NSSI instruments that have been used in research involving Indonesian participants, including instruments adapted into Bahasa Indonesia and those developed by Indonesian researchers. A scoping review method identifies in-depth and comprehensive literature obtained through various sources and research methods, related to the research topic [32]. Scoping review activities include: Formulating research topics, searching for relevant research, selecting research, mapping, compiling, summarizing, and disclosing findings. The scoping review process in this study used the Preferred Reporting Items for Systematic Reviews and Meta-Analyses extension for Scoping Review (PRISMA-ScR) with a literature search through the *Garba Rujukan Digital* (Garuda) database, Onesearch.id, and Neliti. The inclusion criteria used are: 1) The study was conducted in the last five years (2019-2024); 2) The study focused on measuring NSSI in the Indonesian population, both clinical and nonclinical groups; 3) The keywords used to obtain articles are ["Nonsuicidal self-injury" AND "Non-suicidal self-injury" AND "Nonsuicidal" AND "Non-suicidal" AND "Self-harm" AND "Self harm"]; 4) The research design uses quantitative, either involving experiments or non-experiments; 5) Literature can be accessed for free and online (open access), either in Indonesian or English. From the scoping review process using PRISMA-ScR, eleven articles were found that will be discussed in this study.
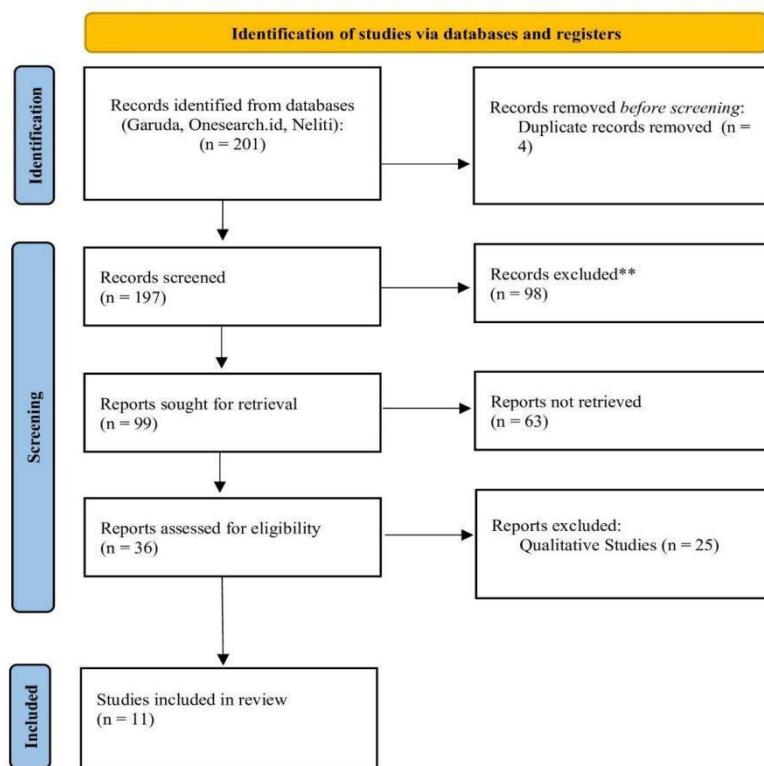

Fig. 1. PRISMA-ScR flow diagram of study selection process.

4 Result

A total of eleven articles met the inclusion criteria. Six types of measurement tools were used to assess NSSI in Indonesian studies. **Table 2** provides a summary of the eleven articles based on the most widely used measurement tools, namely the *Inventory of Statements about Self-Injury* (ISAS), *Self-Harm Inventory* (SHI), *Deliberate Self-Harm Inventory* (DSHI), *Non-Suicidal Self-Injury Assessment Tool* (NSSI-AT), *Non-Suicidal Self-Injury Function Scale* (NSSI-FS), and S*elf-Harm Behavior Questionnaire* (SHBQ). Each measurement tool is explained below.

4.1 Inventory of Statements about Self-Injury

The *Inventory of Statements about Self-Injury* (ISAS) [1] is the most widely used measurement tool in research in Indonesia, having been used in five of the eleven studies discussed in this review. ISAS measures NSSI behavior by examining the frequency and reasons behind self-harm. The instrument includes 12 items asking participants about the frequency of self-harm using various methods, such as self-cutting, punching, and slowing wound healing, etc., in Section I. Section II contains a total of 39 self-report items regarding the individual's background related to engaging in self-harm. In the Indonesian population, two studies used the ISAS instrument, which had been adapted by [33]. These studies included an additional statement item in Section II, bringing the total number of items on the adapted ISAS scale to 40 [34,35]. One study independently carried out the adaptation after obtaining permission from the original ISAS developer [36], while the rest did not provide a detailed explanation of the ISAS adaptation process [37,38].

4.2 Self-Harm Inventory

The *Self-Harm Inventory* (SHI), developed by [39], is a 22-item self-report measure. Participants respond to each item by indicating 1 for 'Yes' and 0 for 'No' for various behaviors. Two Indonesian studies [40,41] used an Indonesian version of the SHI, which was adapted from the translation by [19]. This adaptation maintained the original number of items, with no additions or subtractions.

4.3 Deliberate Self-Harm Inventory

The third instrument is the *Deliberate Self-Harm Inventory* (DSHI), developed by [42]. The DSHI unidimensionally measures self-harm behavior and consists of 17 self-report questions. Scoring is done by assigning a score of 1 for 'Yes' and a score of 0 for 'No'. The study conducted by [43] did not explain the process of translating or adapting this instrument into Indonesian.

4.4 Non-Suicidal Self-Injury–Assessment Tool

The *Non-Suicidal Self-Injury–Assessment Tool* (NSSI-AT) [44] is a psychological measurement tool that focuses on measuring NSSI behavior in terms of frequency, method, causes, reasons, situations that typically encourage individuals to harm themselves, and the impacts resulting from NSSI activities. NSSI-AT is the most comprehensive instrument for recording the phenomenon of NSSI in individuals, utilizing various response formats ranging from ticking and scoring to ranking all 39 statement/question items.

Only one study used this measurement instrument with the Indonesian clinical population [45]. Like the previously mentioned instruments, the researcher did not explain the adaptation process that allowed the NSSI-AT to be administered to the research sample.

4.5 Non-Suicidal Self-Injury Function Scale

The *Non-Suicidal Self-Injury Function Scale* (NSSI-FS) [46] is the only NSSI measurement tool developed by Indonesian researchers. However, limited information is available about this instrument beyond its measurement of NSSI characteristics, as the original manuscript discussing NNSI-FS was not publicly published as a journal article. The study using this measurement tool only explained the modification of NSSI-FS carried out by the researcher (one of the developers of the NSSI-FS), such as changing the questionnaire item on NSSI frequency to assess the average annual frequency of NSSI among participants, to obtain a more comprehensive understanding of NSSI behavior. Additionally, the researcher added four new items to the questionnaire. The NSSI severity score ranges from 0 to 12, with a higher score indicating more severe NSSI in the participant [47].

4.6 Self-Harm Behavior Questionnaire

The *Self-Harm Behavior Questionnaire* (SHBQ) is a brief self-report measure of NSSI behavior in pathological and non-pathological situations, developed by [48]. It consists of 32 questions asking participants to report activities related to self-harm behavior, suicide attempts, suicide threats, and suicidal ideation. The measuring instrument utilized in the experimental study by [49] was adapted and translated into Indonesian by [50]. There were no changes made during the adaptation process of this instrument.

Table 2. Descriptive Statistics Information on NSSI.

No	Author	NSSI Instruments	Sample	Reliability	Validity
1	Arifin et al. (2021)	ISAS. Section I (12 items)	68 participants aged 12-21 years old	0,70	NR
2	Putri et al. (2024)	ISAS. Section I (12 items)	60 participants aged 16-21 years old	0,83	NR
3	Rahayu and Ariani (2023)	ISAS. Section I (12 items), Section II (39 items)	191 participants aged 13-21 years old	0,81 (Section I) 0,90 (Section II)	NR
4	Sabrina and Afiatin (2023)	ISAS. 32 items	159 participants aged 10-24 years old	0,92	0,79 (Aiken's V)
5	Zain and Arbi (2023)	ISAS	104 participants aged 12-21 years old	NR	NR
6	Iswanti et al. (2024)	SHI. 22 items	570 participants aged 10-19 years old	0,83	0,83 - 0,97 (Aiken's V)
7	Nugrahawati et al. (2023)	SHI. 22 items	199 participants aged 12-18 years old	NR	NR
8	Paramita et al. (2020)	DSHI. 17 items	168 participants	NR	NR

No	Author	NSSI Instruments	Sample	Reliability	Validity
			aged 14-20 years old		
9	Ulya (2022)	NSSI-AT. 39 items	150 patients aged 18-24 years old	NR	NR
10	Elvina and Bintari (2023)	NSSI-FS	311 participants aged 18-29 years old	0,9	$U = 0{,}00$ (Discriminant validity)
11	Djoenaedi and Pratitis (2020)	SHBQ. 32 items	Five participants aged 15-18 years old	0,94	NR

5 Discussion

This scoping review aims to identify the NSSI measurement tools used in research conducted in Indonesia. Based on a review of eleven studies, the most frequently used instrument for assessing NSSI behavior in the Indonesian population is the *Inventory of Statements about Self-Injury* (ISAS) [34–38]. The findings also indicate that the six identified measurement tools were primarily used with adolescents aged 10−24 years and emerging adults aged 18-29 years. This focus reflects previous evidence [22] that the highest prevalence of NSSI occurs during adolescence (17.2%) and emerging adulthood (13.4%), making these age groups a primary target in research and assessment. However, this concentration also indicates a gap, as little is known about the applicability of these instruments to older populations, where NSSI may present with different functions or meanings.

Based on the results, the reporting of the adaptation process for measurement instruments is still lacking in detail, as described by the researchers. Of the six instruments identified, only three were explicitly stated to have been adapted to Bahasa Indonesia [1,39,48], while one instrument was developed locally [46]. Unfortunately, the remaining two instruments, which originated from outside Indonesia, did not include any explanation of the adaptation process [42,44]. The absence of this information may limit a complete understanding of how these instruments maintain cultural and linguistic relevance in the context of Indonesian research.

Another limitation found in the measurement instrument sections of nearly all reviewed studies relates to the reporting of validity and reliability. Only three studies provided complete information on the psychometric properties of the NSSI instruments used [34,40,47]. In contrast, four studies did not report any reliability or validity data at all [35,41,43,45]. The lack of detailed psychometric analysis makes it difficult to assess the overall reliability of the research findings. However, in the studies that did report such information, the measurement tools demonstrated good psychometric quality, with reliability coefficients ranging from 0.70 to 0.94 and validity coefficients from 0.79 to 0.97. Their results indicate that the instruments are suitable for measuring NSSI constructs, especially when applied to the populations in which they were tested.

One notable finding is the presence of an NSSI measurement tool developed by Indonesian researchers [46]. However, the evaluation of this instrument is limited due to the lack of

published information on its development process, validity, and reliability, as it was not published in a peer-reviewed journal. This lack of documentation makes it difficult to assess and compare the tool with adapted external instruments. Without access to the psychometric properties of locally developed instruments, it is unclear whether they offer advantages in capturing culturally specific aspects of NSSI compared to well-established tools like the ISAS. These limitations present challenges in ensuring that the instrument is relevant and appropriate for use in the Indonesian context. Moreover, the absence of sufficient documentation restricts other researchers from utilizing or improving the tool, which may hinder the progress of developing a culturally grounded NSSI measurement instrument in Indonesia.

Despite the limitations identified in the publication of NSSI measurement tools within the studies analyzed in this scoping review, two measurement tools can be recommended for future research on NSSI in the Indonesian context. These are the ISAS [1], which was adapted by [33], and the SHI [39], adapted into Indonesian by [19]. These two instruments were selected because both the descriptions and psychometric properties are reported in detail. In addition to complete reporting, both instruments also demonstrated good reliability and validity results, further supporting their feasibility for use in future research on NSSI in the Indonesian context.

The results of this scoping review on NSSI measurement tools in Indonesia highlight the importance of transparency in the development and reporting of instruments. The full publication of the adaptation process, as well as validity and reliability data, is essential to support critical evaluation and to encourage broader use in future studies. Researchers who develop local measures must ensure that their tools are published with clear documentation of their psychometric properties. Doing so will increase the instrument's credibility, enable its utilization by other researchers, and facilitate further development as needed.

In addition to these findings, this review underscores the need to adapt or develop culturally appropriate NSSI measurement tools in the Indonesian context. Tools that are both psychometrically sound and culturally sensitive are essential for capturing the unique functions and measurement of NSSI across different populations. These findings also imply the importance of fostering interdisciplinary collaboration among researchers, clinicians, and policymakers to promote best practices in instrument development and reporting. Strengthening such collaboration can ensure more valid and applicable assessments of NSSI in the Indonesian population, while also advancing early detection and appropriate intervention efforts.

This scoping review has several limitations. First, the scope of the analyzed articles was limited to publications accessible through selected databases, which may have excluded other relevant instruments or studies. Second, some of the reviewed articles lacked detailed information on the adaptation process or psychometric evaluation, making it difficult to comprehensively assess the quality of the measurement tools.

For future researchers, it is recommended that the methods and instruments sections in research articles be written clearly and systematically. Researchers can refer to the *Publication Manual of the American Psychological Association* (7th edition) [51], particularly the guidelines related to instrument reporting. Additionally, it is essential to openly publish detailed information on the development and adaptation processes of measurement tools, including the psychometric results. Such transparency allows for replication, supports rigorous scrutiny, and aids in the progressive refinement of instruments suited to the cultural context, ultimately elevating the standard and impact of NSSI studies in Indonesia.

6 Conclusion

The findings of this scoping review indicate that between 2019 and 2024, six different instruments were used to measure Nonsuicidal Self-Injury (NSSI) behavior in Indonesia, across both experimental and non-experimental studies involving clinical and general populations. Although some instruments demonstrated sound validity and reliability, the overall documentation, particularly regarding psychometric properties and the adaptation processes of locally developed tools, remains limited. Among the instruments reviewed, *the Inventory of Statements about Self-Injury* (ISAS) scale, developed by [1], used in the study of [34,35], and *the Self-Harm Inventory* (SHI) by [39], as used in the study by [40] and [41], are recommended for future use. These instruments were chosen due to their comprehensive descriptions and strong psychometric evidence.

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Positive Character: Implementation of Positive Behavior through MISI (*Kemandirian, Inisiatif, dan Salim*) Habituation in Kindergarten A Learners

Nabilla Feylisha Azzahra[1], Tri Na'imah[2], Nur'Aeni[3]

{nabillafeylisha@gmail.com[1], trinaimah@ump.ac.id[2], nuraeni@ump.ac.id[3]}

Faculty of Psychology, Universitas Muhammadiyah Purwokerto[1], Faculty of Psychology, Universitas Muhammadiyah Purwokerto[2], Faculty of Psychology, Universitas Muhammadiyah Purwokerto[3]

Abstract. Early childhood education is a critical stage for shaping lifelong behavior and character, yet many programs still prioritize academic skills over value formation. This research addresses the urgency of integrating character habituation into daily school practices to foster holistic child development. The study explores the implementation of MISI values (*Kemandirian, Inisiatif, and Salim*) at Kindergarten A. Using a qualitative phenomenological approach, data were collected through interviews and observations with one principal and four teachers, then analyzed using Interpretative Phenomenological Analysis (IPA). The findings revealed three main themes and sub-themes: (1) fostering independence through daily routines responsibility in tasks and self-confidence; (2) encouraging initiative in learning and play voluntary participation and leadership; and (3) cultivating respect and courtesy through salim greeting routines and strengthening social bonds. The study's novelty lies in offering an applied framework of culturally rooted values. Future research should examine its long-term impact across diverse contexts.

Keywords: Habituation, MISI, Positive Behavior, Positive Character, Early Childhood Education.

1 Introduction

Education has a very important role in supporting the overall development of individuals and is a major factor in improving the quality of life [1]. Children's education as the most basic stage has a very important position in the development of human resources [2]. Early childhood, which covers the age range from birth to eight years, is a crucial period in the educational process that can affect the course of future education [3]. The kindergarten period is an early age phase characterized by rapid development, making it a very decisive time for further development [4]. Early childhood education has now developed rapidly, both through programs initiated by government agencies and those driven by the community.

Kindergarten is a formal early childhood education level, with a curriculum that focuses more on providing educational stimulus to support children's physical and mental growth and development, so that they are ready to continue to a higher level of education [5]. Kindergarten

age children are those in the age range of 4-6 years, who are in the developmental stage [6]. This development includes changes in behavior from previously immature to more mature, or from initially simple to more complex.

Learning in kindergarten follows the principle of play, because play is the core of children's activities. Through play, children are given the freedom and opportunity to express, create, and communicate [7]. Themes in learning activities in kindergarten serve as a tool to introduce concepts to children as a whole [8]. Theme is not the purpose of learning itself, but as a means to broaden horizons in order to achieve the maturity of child development. Research has consistently shown that theme-based learning enhances social competence, cooperation, and tolerance, while also making learning experiences more meaningful [9].

Despite the extensive literature on character education and thematic learning, previous studies have mainly focused on general character values such as discipline, honesty, and cooperation [10,11]. However, there is still a lack of research exploring the systematic habituation of MISI values Kemandirian (independence), Inisiatif (initiative), and Salim (courtesy/respect) within the context of early childhood thematic learning. This creates a research gap that needs to be addressed, particularly because MISI values integrate both individual competencies (independence and initiative) and prosocial attitudes (salim) that are highly relevant to the holistic development of young children.

The absence of MISI habituation at the early childhood level may result in children being less prepared to manage themselves independently, lacking initiative in problem-solving, and showing limited social respect or empathy in interactions with peers and adults. Such developmental delays can hinder school readiness and negatively affect later adjustment at higher levels of education.

In response, this study examines the implementation of MISI habituation in thematic learning at School X. Specifically, it investigates how teachers and principals integrate MISI values into daily classroom practices and how these values contribute to fostering positive character in kindergarten learners. This study is expected to fill the existing research gap while providing practical insights for strengthening character education through early habituation.

2 Literature Review

2.1 Positive Character

The positive character theory framework is based on the positive psychology approach introduced by Peterson [12], which focuses on human strengths and virtues rather than merely correcting weaknesses or disorders. Positive character is defined as a set of stable moral qualities, such as honesty, empathy, respect, responsibility, courage, and humility, that enable individuals to live ethical, meaningful, and constructive lives [13]. These traits are considered the foundation of healthy psychological functioning and are key to achieving psychological well-being and self-actualization. Positive character is not innate but is shaped through a process of socialization, education, life experiences, and continuous personal reflection [14].

Theoretically, the development of positive character can also be explained through social learning theory Bandura [15], in which individuals learn through observation of positive behavioral models in their social environment, as well as through reinforcement of behaviors

that are consistent with moral values. In addition, Kohlberg [16] provides a basis for the idea that character development is closely related to the stages of cognitive and moral development. Thus, positive character is viewed not only as a psychological predisposition but also as the result of a process of habit formation and reflection on values in daily life.

Within a cultural framework, positive character cannot be separated from the context of local or religious values [17]. For example, in Eastern cultures or religious societies, positive character is often integrated with spiritual values such as sincerity, trust in God, or good manners towards others. Thus, positive character is cross-cultural, but it can be manifested differently according to the norms and value systems of a particular society. The role of educational institutions, families, and communities is crucial in the process of internalizing positive character. Through a holistic approach, positive character is not merely the ultimate goal of character education but also a means to cultivate resilient, independent, and moral individuals capable of navigating the dynamics of contemporary life [18].

2.2 Positive Behavior

The theoretical framework of positive behavior is based on the understanding that human behavior is not only a response to external stimuli, but is also influenced by internal values, self-perceptions, and a supportive social environment [19]. Positive behavior refers to actions that reflect responsibility, respect, concern for others, cooperation, and adherence to constructive social norms [20]. This theory is rooted in behavioral and cognitive-social approaches, in which Bandura [21], through his Social Cognitive Theory emphasizes the importance of observation, modeling, and social reinforcement in shaping adaptive behavior. In addition, the approach of *Positive Behavior Interventions and Supports (PBIS)* also makes an important contribution to understanding that positive behavior can be developed systematically through the creation of a consistent environment, positive feedback, and planned reinforcement strategies [22].

Individuals who exhibit positive behavior tend to have healthier interpersonal relationships, are better able to cope with social challenges, and demonstrate higher levels of psychological well-being [23]. Therefore, positive behavior is not merely a result of compliance with rules, but rather a manifestation of the internalization of mature character values and social skills, which can be shaped from an early age and developed throughout the lifespan. As such, the reinforcement of positive behavior is an important component of psychological interventions, character education, and personal development strategies in various contexts, including schools, families, and communities [24].

2.3 MISI (Kemandirian, Inisiatif, dan Salim)

The theoretical framework of this study is based on three core values in character building, namely independence (kemandirian), initiative (inisiatif), and salim. These three values are seen as important pillars in the development of individuals who are psychologically, socially, and morally well-rounded. Independence in the context of developmental psychology is the ability of individuals to regulate themselves, make decisions independently, and take responsibility for the consequences of their actions [25]. This aspect is closely related to the concept of autonomy in Self-Determination Theory [26–28], which emphasizes that individuals have a basic psychological need to feel that they are agents of their own actions. Independence does not mean total detachment from others, but rather the capacity to manage oneself and make

choices based on mature personal considerations, as well as having strong internal control over one's behavior.

Meanwhile, initiative refers to the ability and drive to act proactively, taking the first step in a situation without waiting for instructions or direction from others [29]. This concept aligns with the theory of proactive personality Bateman & Crant [30], which suggests that individuals with a proactive personality tend to exhibit initiative in seeking opportunities, solving problems, and creating positive change in their environment. In the context of education or organizations, initiative is crucial as it demonstrates an individual's readiness to think ahead, have a vision, act responsibly, and develop solutions independently in complex situations [31]. Initiative also reflects the development of executive cognitive functions, particularly in planning and decision-making aspects [32].

The third value, salim, which means mutual assistance, emphasizes the importance of healthy social relationships, empathy, and commitment to the common good. In social psychology, this value is rooted in the theory of prosocial behavior Eisenberg & Fabes [33], which explains that helping behavior develops from a process of empathy, social norms, and learning experiences from an early age. Mutual assistance not only improves social well-being but also strengthens bonds between individuals and fosters a sense of belonging within the community [34]. From a moral perspective, salim also reflects the development of altruistic values that are essential for building an inclusive, resilient, and just society [35].

These three values (independence, initiative, and salim) do not stand alone but complement each other and form a balanced character structure between self-development and social responsibility. In personality development, the combination of these three values enables individuals not only to grow personally but also to make meaningful contributions to their environment. Thus, understanding and strengthening these values are highly relevant in the design of psychological interventions, character education curricula, and human resource development policies across various socio-cultural contexts.

3 Method

This study employed a qualitative phenomenological approach. Phenomenology was chosen because it allows researchers to explore the lived experiences of teachers and principals in implementing MISI habituation in early childhood education [36]. The focus of phenomenology on subjective meaning and interpretation is considered most appropriate to capture the depth of informants' perspectives and practices in shaping children's character development. Interpretative Phenomenological Analysis (IPA) was used because it not only emphasizes describing phenomena, but also interpreting the meaning behind informants' experiences.

The study involved five informants, consisting of one principal and four class teachers from School X. Informants were selected purposively based on their direct involvement in implementing MISI habituation in kindergarten learning. Prior to data collection, informed consent was obtained from all participants. They were provided with an explanation of the research objectives, procedures, confidentiality assurances, and their right to withdraw at any time.

Data were collected through in-depth interviews and participant observation. The interviews were conducted face-to-face at School X in a quiet room to ensure comfort and minimize disruption to school activities, with each session lasting approximately 45–60 minutes and recorded with the participants' permission. The interview guide contained open-ended questions that focused on teachers' understanding of MISI values, strategies used in habituating independence, initiative, and salim, challenges encountered in implementation, as well as the perceived impact on children's behavior and character. Complementing this, observations were carried out over a four-week period by following the daily routines of kindergarten classes. The observation guide emphasized teacher-student interactions related to MISI habituation, children's responses to independence training such as tidying up and washing hands, expressions of initiative during play and learning activities, and the habituation of salim and greetings during school entry and exit. Field notes were taken systematically to strengthen and enrich the data obtained from interviews. Researchers make every effort to obtain data from all these components, so that the information obtained is precise, accurate, and comprehensive [37]. Data validity in research is very important, because good research requires valid, credible, and reliable data. Testing the validity of data in this study includes triangulation, extended observation, negative case analysis, and the use of reference materials [38].

The method can be interpreted as a systematic way to facilitate the implementation of activities to achieve predetermined goals [39]. *Interpretative Phenomenological Analysis* (IPA) according to Smith & Osborn [40], is a recent qualitative approach to analyzing data, introduced by Jonathan Smith and his colleagues in the mid-1990s. This approach has become increasingly popular, especially in applied fields such as health psychology and counseling. IPA can be said to represent a representation of qualitative psychology with a focus on individuals doing self-reflection and interpretation, and aims to explore the meaning of individuals in their personal and social lives. According to Noon [41], IPA is phenomenological and is used to explore individual perceptions.

IPA data analysis according to Smith et al., [42], there are 7 steps consisting of data collection, transcription, initial reading, note taking, theme identification, in-depth analysis and interpretation. The data collection stage used in this research is by interview and observation techniques, then for research informants consisting of principals and teachers. Furthermore, the data obtained from interviews and observations were transcribed for further analysis, after which the researcher read the transcripts to gain a general understanding of the experiences and views of the research informants. In the next step, the researcher identified themes that emerged from the data related to the habituation of MISI values and its impact on children's positive character, then each theme was analyzed more deeply to understand its meaning and context, as well as how the theme relates to individual experiences. Then the researcher provides an interpretation of the themes found and tries to understand the deeper meaning of the learners' experiences and how the habituation of these values affects their development. Finally, the results of the analysis are compiled in a report that includes the main themes, quotes from informants, the researcher's interpretation, and the implications of the research for early childhood education

Habituation is the process of instilling skills in doing and saying something, so that the right ways are favored by learners and have a deeper impact if done with the right approach, and can be effective in shaping character when learners get examples from an adult environment. The method to improve children's moral behavior is known as the habituation method [43,44]. According to Destiyanti & Setiana [2020], the habituation method is a learning approach that emphasizes certain lessons. Other research states that the habituation method is a way to form

certain habits or behaviors in students [46]. Education through habituation can be implemented with careful planning and intense routine activities [47]. In school X, the educational method applied to class A students is the method of habituation of positive behavior with the theme of MISI, which focuses more on emphasizing character, independence, and initiative, such as teaching salim to the mother teacher when arriving at school and leaving school.

4 Result

The habituation method is a practical method to shape and prepare students in the educational process [48]. This method will produce a more optimal impact if applied with appropriate strategies. Habituation has proven effective in developing student character, especially when students are given direct examples by adults [49]. Implementation of habituation-based education requires careful planning, routine implementation, and consistent intensity [50]. The process of instilling character values in children through habituation ideally involves the active role of various parties, including parents, teachers, and the community environment [51]. Cooperation between schools, families, and communities plays an important role in supporting character building and optimizing the development of positive behavior in children [52].

Character has a very important role in the life of each individual [53,54]. Character formation from an early age is a major determinant of a person's future, regardless of the profession that will be undertaken [55–57]. Therefore, having a positive character since childhood is very important to face various challenges and struggles in life [58,59]. The same thing was conveyed by [6], which states that the success of children in facing the future does not only depend on academic ability, but also on the positive character they have. This is the reason why the cultivation of positive character needs to be done from an early age.

4.1 Findings

The Interpretative Phenomenological Analysis (IPA) on in-depth interviews and participant observations revealed three main themes regarding the habituation of MISI values in early childhood education. These themes include: (1) fostering independence through daily routines, (2) encouraging initiative in learning and play activities, and (3) cultivating respect and courtesy through salim practices. Each theme was supported by several sub-themes that highlight children's behavioral changes and teachers' reflections.

Theme 1: Fostering Independence through Daily Routines

Sub-theme: Responsibility in daily tasks

Independence was observed through children's ability to manage simple tasks without relying on teachers' assistance. These included washing hands after activities, tidying up toys, and preparing learning materials. Teachers noted a gradual change in children's attitudes, from waiting for adult help to showing initiative in carrying out routines. Teachers explained:

"At first, the children often waited for the aunty to help them. But now they can tidy up their toys by themselves and even remind their friends to do the same." (Teacher 2)

"Now, if their pencil gets dull, they immediately take the sharpener and throw the shavings in the trash. Before, they always had to be reminded." (Teacher 1)

"Simple habits like clearing the table after eating or washing their hands have now become automatic routines, without needing the aunty's guidance anymore." (Teacher 4)

This demonstrates not only behavioral change but also the emergence of responsibility and peer influence. Independence was interpreted as children's growing capacity to regulate their actions and internalize discipline.

Sub-theme: Building self-confidence

Children expressed pride when completing tasks independently. Observations revealed moments when students smiled or verbally acknowledged their achievement after completing routines, reflecting increased confidence. Independence in daily routines thus provided a foundation for character development, aligning with the idea that repeated habits shape long-term behavior. Teachers explained:

"After successfully putting on their own socks, they often say, 'I can do it myself, Aunty!' with a proud smile." (Principal)

"There are children who used to always ask for help opening their lunch boxes; now, if they can do it themselves, they immediately show the aunty while laughing." (Teacher 3)

"Their confidence is becoming more visible; they like to tell their friends that they can do something without any help." (Teacher 1)

Independence in daily routines thus provided a foundation for character development, aligning with the idea that repeated habits shape long-term behavior.

Theme 2: Encouraging Initiative in Learning and Play Activities

Sub-theme: Voluntary participation in classroom tasks

Children demonstrated initiative by volunteering to help teachers, preparing learning materials, or taking the lead during group activities. Such behavior was consistently highlighted by teachers as an indicator of proactive engagement. Teachers described:

"Some children voluntarily help the aunty prepare the materials before the lesson starts, and they are brave enough to read words or tell stories in front of their classmates." (Teacher 3)

"There are those who immediately step to the front of the class without being asked, inviting their friends to join them as well." (Teacher 2)

"When one child volunteers to come forward, usually the others get motivated too, so the initiative spreads." (Principal)

These findings suggest that children increasingly positioned themselves as active contributors rather than passive learners.

Sub-theme: Leadership in peer interactions

Observations showed children organizing peers during group play, guiding others in completing activities, and taking initiative in problem-solving. Initiative was thus understood as a form of leadership expressed in natural social settings. It fostered collaboration, creativity, and confidence in expressing ideas.

"When playing on the playground, some children immediately organize turns for the slide so that everyone gets a chance." (Teacher 4)

"For example, if a friend is having trouble folding origami, other children immediately help without being told." (Principal)

"They are also brave enough to share ideas with their group, such as suggesting new ways to arrange blocks or puzzles." (Teacher 3)

Initiative was thus understood as a form of leadership expressed in natural social settings. It fostered collaboration, creativity, and confidence in expressing ideas.

Theme 3: Cultivating Respect and Courtesy through Salim Practices

Sub-theme: Routine of greeting and salim

Respect and courtesy were habituated through daily practices of greeting teachers and peers with salim upon entering and leaving the school. Teachers emphasized that over time, this practice became automatic for children and extended beyond school. A principal stated:

"The habit of greeting and shaking hands with the aunty has now become automatic for them. Even outside school, parents say their children often politely greet neighbors." (Principal)

"Every morning, they immediately line up to shake hands with the teachers without being reminded." (Teacher 1)

"When a new teacher or guest arrives, the children spontaneously greet and shake hands politely." (Teacher 2)

This indicates that salim practices instilled values that were transferable to broader social contexts.

Sub-theme: Strengthening social bonds

The practice of salim was not only symbolic but also reinforced emotional closeness and mutual respect between teachers and students. It cultivated a culture of politeness and strengthened the school's social environment. Salim thus functioned as both a moral and social habit that shaped children's interpersonal relationships.

"The ritual of shaking hands (salim) has made the relationship between the aunties and the children closer; it feels warm and full of love every morning." (Principal)

The findings above illustrate how the habituation method facilitated the internalization of MISI values among young learners. The integration of independence, initiative, and salim into daily school life reflects a systematic process of character building, with evidence showing children's growing responsibility, confidence, and respectfulness. A summary of the themes and sub-themes identified is presented in Table 1.

Table 1. Theme structure and sub-themes

Main Theme	Sub-Themes	Key Meanings
Independence	Children tidying up their own belongings after activities	Indicates early development of self-regulation and responsibility.
	Choosing their own materials for play or learning	Reflects decision-making ability and sense of control over the environment, which supports intrinsic motivation.
Initiative	Children volunteering to help peers in group activities	Suggests prosocial behavior and the capacity to take initiative without external prompting.
	Proactively starting a task without being told	Demonstrates self-starting behavior, showing children's intrinsic drive to explore and learn.
Greetings (Salim)	Children greeting teachers and peers upon arrival	Represents respect, social awareness, and acknowledgment of others' presence, which is linked to the development of empathy and positive peer relationships.
	Saying thank you after receiving help	Reflects gratitude and recognition of others' contributions, reinforcing positive social norms.

5 Discussion

School X, a kindergarten resulting from the merger of two institutions located in Purwokerto and Purbalingga, has implemented a consistent positive behavior habituation program across both sites using the MISI approach (Independence, Initiative, and *Salim*). This program plays a vital role in early childhood education because it supports not only character building but also children's holistic development. Early childhood education is a critical foundation in human resource development, as experiences during the ages of 4–6 significantly influence long-term growth and learning trajectories. Therefore, kindergarten education should not merely emphasize intellectual advancement but must also prioritize character formation to prepare children for higher levels of education.

Character education in early childhood requires consistency, modeling, and repetition through habituation. As scholars have noted, the outcomes of this process are not instant but require time and sustained practice. The implementation of MISI at School X demonstrates this principle. Teachers, parents, and the school environment together cultivate positive behaviors that strengthen discipline, responsibility, and respect. These values align with broader character education goals, such as honesty, caring, cooperation, and creativity. The findings of this study reveal several key aspects of children's positive behavior development through the MISI dimensions.

5.1 Independence (Kemandirian)

The findings reveal significant development in children's independence. Children were able to complete daily routines without adult assistance, such as throwing trash in its place, washing hands after activities, and preparing learning materials. They also managed personal needs, including going to the bathroom, eating without help, or wearing socks independently. Such practices reflect the success of habituation in fostering autonomy from an early age. Independence is closely linked to self-regulation and responsibility, laying the groundwork for self-confidence and problem-solving skills [61]. For teachers, students' growing independence also reduced dependence on adult guidance, allowing them to focus more on lesson delivery and classroom management.

5.2 Initiative (Inisiatif)

Children also showed a strong ability to take initiative in both learning and play. They voluntarily helped prepare learning media, cleaned up toys after play, and confidently answered teachers' questions. Examples include children daring to tell stories in front of peers or attempting to read aloud words provided by teachers. Such actions signify children's proactive engagement and intrinsic motivation, which are essential for creativity and lifelong learning. Initiative reflects autonomous motivation that fosters sustained involvement in learning [62]. These findings suggest that habituation can nurture not only compliance with routines but also active participation and leadership among young learners.

5.3 Salim

Another key dimension observed was *Salim*, which emphasizes respect, courtesy, and harmonious relationships. At School X, salim practices were ritualized through daily greetings when children arrived and left school, shaping consistent habits of respect toward teachers and parents. Teachers also noted that these behaviors transferred beyond the classroom, as parents reported children greeting neighbors politely. This demonstrates that habituation successfully internalized values that extend to broader social contexts. Prosocial behaviors such as helping peers, showing empathy when a friend was upset, and respecting adults are critical to emotional development and social competence [63]. These habits contribute to a classroom climate that is inclusive, cooperative, and nurturing.

The MISI habituation program provided tangible benefits not only for students but also for teachers. For students, it nurtured independence, self-confidence, responsibility, courtesy, and creativity dimensions that collectively enhance social, emotional, and cognitive development. For teachers, the program improved classroom effectiveness: with children becoming more autonomous and respectful, teachers were able to dedicate more time to instructional design and quality improvement. The salim values, in particular, promoted a more harmonious atmosphere, which reduced behavioral disruptions and enhanced professional satisfaction for teachers.

Implementation of MISI values at School X demonstrates that consistent habituation methods, when reinforced across school and home environments, can significantly shape children's behavior and character. The program not only improved positive behavior in the short term but also helped form mindsets and attitudes that will serve children well into the future. In this sense, MISI habituation contributes to both the immediate classroom environment and the broader goal of strengthening the quality of education, laying a foundation for lifelong learning and responsible citizenship.

The success of MISI habituation at School X also highlights the importance of collaboration between teachers, parents, and the wider community. Character formation cannot be achieved by schools alone; rather, it requires consistency across multiple environments in which the child develops. When parents reinforce at home the same values of independence, initiative, and respect practiced at school, children experience coherence in expectations and are more likely to internalize these behaviors as part of their everyday lives. This finding resonates with prior research emphasizing the shared responsibility of educators and families in cultivating character education, where joint reinforcement ensures that values become enduring habits rather than situational behaviors.

Furthermore, the MISI program demonstrates its potential to contribute to the broader educational agenda of developing holistic learners who are academically capable, socially responsible, and emotionally resilient. By embedding character education into daily routines rather than treating it as an additional subject, the program ensures that values are not abstract ideals but lived experiences. This integration is crucial for preparing children to face future challenges with integrity and adaptability. As such, the implementation of MISI habituation at School X offers an important model for other early childhood institutions seeking to balance cognitive development with moral and social growth, thereby advancing the long-term goal of nurturing a generation with both competence and character.

6 Conclusion

The main theme of this study highlights the effectiveness of the habituation method as a fundamental approach in student character education. The sub-themes that emerged include the development of independence, initiative, courtesy, and students' active participation in classroom activities. These findings show that habituation not only supports behavioral changes but also contributes to the growth of social, emotional, and cognitive aspects of students, while at the same time creating a more conducive learning environment.

The novelty of this research lies in its emphasis on the role of habituation as a sustainable and practical method that involves collaboration among parents, teachers, and the wider community, making character education more holistic and impactful. This approach also provides additional benefits for teachers, including easier classroom management and greater professional satisfaction. For future researchers, it is recommended to explore the long-term effects of habituation methods on students' character development, compare its effectiveness with other educational approaches, and examine how cultural and contextual factors may influence its implementation. Such studies will enrich the understanding of character education practices and provide broader implications for both theory and practice.

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The Influence of Work Passion and Job Crafting on Job Embeddedness Among Employees of PT X in Semarang City

Kharisma Febi Arfiana[1], Retno Dwiyanti[2]

{Kharismafebiarff@gmail.com[1], retnodwiyanti@ump.ac.id[2]}

Universitas Muhammadiyah Purwokerto, Banyumas Regency, Indonesia[1, 2]

Abstract. Companies face significant challenges in retaining quality employees due to high turnover rates. One key factor influencing employees' decisions to stay is job embeddedness, which can be affected by various elements. This study analyzes the impact of work passion and job crafting on job embeddedness among employees of PT X Semarang, utilizing a quantitative approach with 237 respondents. Instruments used include the Job Embeddedness Scale (JES), Passion Scale, and Job Crafting Scale (JCS). The analysis reveals that work passion positively and significantly affects job embeddedness, with $t = 4.268$, $R^2 = 0.072$, and $p = 0.00$, contributing 7.2% to job embeddedness. Additionally, job crafting also shows a positive and significant effect, with $t = 2.548$, $R^2 = 0.027$, and $p = 0.011$, contributing 2.7%. Furthermore, both work passion and job crafting significantly influence job embeddedness simultaneously, with $F = 11.013$, $R^2 = 0.086$, and $p = 0.00$, highlighting their importance in enhancing employee attachment to the organization.

Keywords: Work passion, job crafting, job embeddedness

1. Introduction

The world of work in Indonesia continues to experience complex dynamics, along with economic growth, changing career preferences, and a mismatch between education and industry needs. These challenges require companies to hire human resources (HR) who are not only technically competent, but also have high attachment to the organization. Job embeddedness is an important concept to understand why employees stay with the company, even in the midst of various career opportunities available outside the organization.

A survey by Talentics states that 59% of CEOs rate the importance of attracting and retaining talent [1]. Furthermore, Jobstreet found that 70% of employees feel increased engagement through positive social interactions with superiors and coworkers. A 30% reduction in turnover also occurs in companies that actively build internal social networks. One of the companies that managed to reduce the turnover rate to below 10% is PT X in Semarang, which is engaged in furniture and plywood manufacturing.

The preliminary study shows that some PT X employees actively demonstrate work initiatives beyond their formal descriptions. Although there were resignations, the main motivation was a personal desire to find a job more in line with passion, not due to conflict or dissatisfaction. This

phenomenon shows the importance of two factors: work passion and job crafting in enhancing job embeddedness.

Previous research has shown a relationship between work passion and job embeddedness [2], [3]. In addition, there is also research on job crafting and job embeddedness [4], [5]. However, the findings regarding the harmonious passion aspect still show inconsistencies. Therefore, this study aims to re-examine the effect of work passion and job crafting on job embeddedness, especially in the context of manufacturing industry employees in Indonesia.

2. Literature Review

2.1 Job Embeddedness

The concept of job embeddedness, as an alternative approach to understanding employee retention, emphasizes that an individual remains in an organization not solely due to job satisfaction or commitment, but also due to their ties to the work and the surrounding social environment [6]. Job embeddedness includes three main dimensions: fit (the individual's fit with the organization and community), links (the social relationships that bind the individual to the job and community), and sacrifice (the perceived loss or sacrifice of leaving the job or community).

This model was later developed into six more detailed aspects by Clinton [7]. The first aspect, Job Fit, describes the extent to which employees' personal values, skills, and goals align with the jobs and organizations they work for. The higher the level of fit, the more likely individuals are to feel comfortable and remain in the organization. The second aspect, Job Links, illustrates the number and strength of social relationships that individuals have at work, including connections with coworkers, superiors, and work teams. These relationships serve as a social glue that encourages individuals to stay in the organization due to personal and professional ties. The third aspect, Job Sacrifice, indicates an individual's perception of what they would have to give up if they left their job, such as losing benefits, comfort, or career opportunities. The greater the perceived sacrifice, the higher the level of embeddedness. The fourth aspect, Community Fit, describes an individual's fit with the environment of the community in which they live, encompassing the social norms, lifestyle, and values espoused by the local community. This fit reinforces feelings of comfort and a desire to remain in the community. The fifth aspect, Community Links, indicates the extent to which individuals have social connections outside of work, such as relationships with neighbors, local communities, or social organizations. These relationships create stability and reinforce reasons not to change residences or jobs. The sixth aspect, Community Sacrifice, refers to the extent to which individuals feel they would lose something valuable if they were to leave their community, such as access to public facilities, children's schooling, or social support. High perceptions of this sacrifice may reinforce the decision to stay in their current residence and job.

This approach allows for a more holistic measurement of employee embeddedness, encompassing both internal (organization) and external (home community) aspects. Employees with high levels of embeddedness tend to maintain their positions because they feel fit, socially connected, and

would suffer emotional and financial losses if they left their jobs. Therefore, job embeddedness is an important variable in understanding turnover intention and retention.

2.2 Work Passion

Work passion refers to the tendency of individuals to engage in work that is considered important, enjoyable, and in accordance with personal values. Passion is divided into two types: harmonious passion and obsessive passion [8]. Harmonious passion occurs when individuals voluntarily and flexibly internalize work as part of themselves, so they can work enthusiastically without disturbing other aspects of life. In contrast, obsessive passion arises when work is internalized in an unbalanced manner, resulting in psychological distress, and work becomes dominant in an individual's life.

2.3 Job Crafting

Job crafting is a concept that describes how individuals actively and proactively reshape their work to make it more meaningful, according to personal needs, preferences, and strengths. This concept was first introduced by Wrzesniewski & Dutton [9]. Then further developed quantitatively by Tims et al. [10] divided into four aspects. The first aspect, Increasing Structural Job Resources, involves an individual's efforts to enhance the structural elements of their job, such as autonomy, task variety, and opportunities for self-development. For instance, an employee who actively seeks additional training or requests new, more challenging responsibilities exemplifies this form of crafting. Those engaged in this aspect typically aim to develop their competencies and achieve personal growth.

The second aspect, Increasing Social Job Resources, encompasses an individual's efforts to build or strengthen social support at work, whether from superiors, coworkers, or mentors. Examples of this include seeking feedback, building internal networks, or fostering positive working relationships. Social support has been shown to enhance job satisfaction and reduce stress, which in turn strengthens attachment to the organization. The third aspect, Increasing Challenging Job Demands, refers to employees consciously seeking additional challenges that stimulate their development and motivation. This could involve participating in new projects, taking the initiative to solve complex problems, or setting higher targets than usual. Employees who engage in crafting within this aspect typically possess a high intrinsic drive and a strong desire to achieve more. The fourth aspect, Decreasing Hindering Job Demands, pertains to efforts aimed at reducing or managing workloads that are perceived as obstructive or excessively stressful. Examples include avoiding interpersonal conflicts, simplifying complicated work procedures, or minimizing excessive administrative tasks. The ultimate goal of job crafting is to maintain a work-life balance and reduce the risk of burnout.

Job crafting is seen as an important strategy in dealing with the often unstable dynamics of modern work. Employees who are able to do job crafting will feel more control, involvement, and meaning in their work, which in turn increases productivity and loyalty to the organization. Job embeddedness has been researched both nationally and internationally. Previous studies have combined job embeddedness with various variables. In line with this, there is job embeddedness research which results in job embeddedness having a role in work attachment and job embeddedness also affects innovative work behavior [11, 12]. In addition, there is also research

that states that narcissism leadership has a negative impact on job embeddedness [13]. Other research on job embeddedness and job crafting found that job crafting has a positive relationship with job embeddedness [14, 15].

The difference between this research and previous research is in analyzing the combined impact of work passion and job crafting on job embeddedness. This research is different from previous studies because it combines work passion and job crafting on job embeddedness, whereas previous studies only discussed job crafting or work passion. The target of this research is also different, where previous research was conducted on health workers and this research will be conducted on employees of manufacturing companies. In addition, this study was also conducted to clarify the differences in results conducted by previous studies on the work passion variable.

Based on the literature review, this study proposes three hypotheses:
H_1: There is a positive influence of work passion on job embeddedness
H_2: There is a positive influence of job crafting on job embeddedness
H_3: There is an influence of work passion and job crafting on job embeddedness
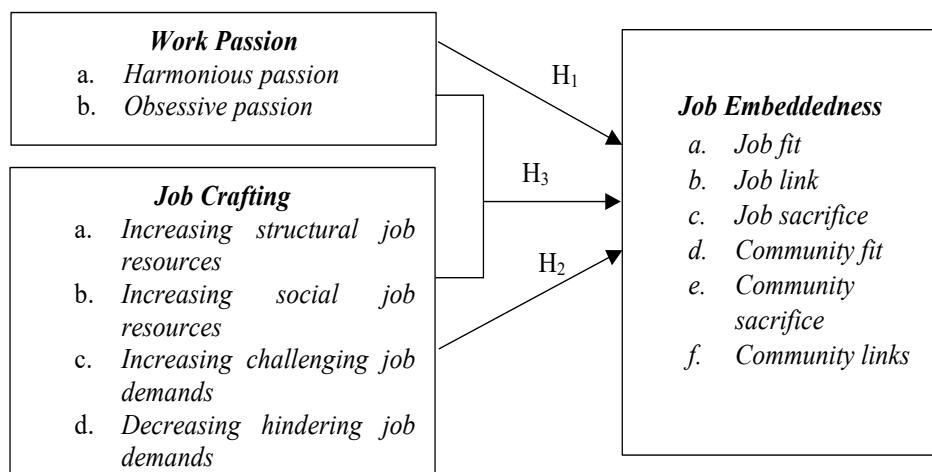

Fig. 1. Hypotheses of this study

3. Method

This study uses a quantitative approach that aims to determine the relationship and influence between the independent variables (work passion and job crafting) on the dependent variable (job embeddedness). This research is non-experimental, because there is no manipulation of variables but data collection through questionnaire surveys.

3.1 Sample and Population

The population in this study were all employees of PT X, totaling 580 people. The sample was taken as many as 237 employees using simple random sampling technique. The determination of the sample size is based on the Slovin formula as follows:

$$n = \frac{N}{1 + N(e)^2}$$

$$n = \frac{580}{1 + 580\,(0.05)^2}$$

$$n = \frac{580}{1 + 580\,(0.0025)}$$

$$n = \frac{580}{1 + 1.45}$$

$$n = \frac{580}{2.45}$$

$$n = 236.7$$

3.2 Research Instruments

This study uses three psychological scales that have been modified and adapted to the research context. The job embeddedness variable was measured using a modified scale comprising 12 items that assess six aspects: job fit, job links, job sacrifice, community fit, community links, and community sacrifice [7]. The items are organized in the form of positive statements and rated using a 5-point Likert scale (1 = strongly disagree to 5 = strongly agree).

The work passion variable was measured using a modified scale consisting of 14 items that assess two aspects: harmonious passion and obsessive passion [8]. This scale also uses a 5-point Likert format. The job crafting variable was measured using a modified scale consisting of 21 items covering four aspects: increasing structural job resources, increasing social job resources, increasing challenging job demands, and decreasing hindering job demands [10]. All measuring instruments have gone through content validity testing (expert judgment) and empirical validity testing with item-total correlation, as well as reliability testing using Cronbach's Alpha. The α value for all scales is > 0.90, indicating that all three have excellent reliability.

Table 1. Reliability of Job Embeddedness, Work Passion and Job Crafting

Scale	Alpha Cronbach	Description
Skala Job embeddedness	0,932	Reliable
Skala Work Passion	0,916	Reliable
Skala Job Crafting	0,934	Reliable

3.3 Data Analys Techniques

Data were analyzed using simple linear regression and multiple linear regression to test the influence of each independent variable (work passion and job crafting) on the dependent variable (job embeddedness). Data processing was done with the help of SPSS version 25.0. The classical assumption tests conducted included normality, linearity, multicollinearity, and heteroscedasticity.

4. Result

4.1 Data Collection Process

This study used 50 PT X employees to test the measuring instrument on February 27, 2025. Collecting data for the measuring instrument trial using a hardfile questionnaire at 12.15 to 13.00. The results of the questionnaire were then tested for validity and reliability. Then data collection was carried out on April 11, 2025 with 100 employees, April 18, 2025 with 100 employees, and April 25, 2025 with 37 employees at PT X. Total data from 237 employees will be used for hypothesis testing. The research data collection was conducted offline at PT X Semarang. In this study, there were 580 employees who became the population and 237 employees who became the research sample. The sampling technique chosen was simple random sampling.

4.2 Respondent Description

This study involved 237 employees from PT X in Semarang. The majority of the respondents were male, as many as 190 people (80%), while female respondents totaled 47 people (20%). Based on age, most respondents were in the age range of 21-30 years as many as 76 people (32%), followed by the age group 31-40 years as many as 64 people (27%), 41-50 years as many as 57 people (24%), and 51-60 years as many as 40 people (17%).

In terms of the latest education, most respondents are high school / vocational school graduates with 170 people (71%). Other respondents came from elementary school (6%), junior high school (20%), D3 (1%), and S1 (1%) educational backgrounds. Marital status showed that the majority of respondents were married, 185 people (78%), while the rest were single (19%) and divorced (3%).

4.3 Descriptive statistic

Descriptive analysis was conducted on the three main variables in this study, namely job embeddedness, work passion, and job crafting. The job embeddedness variable has an average score of 35.05 with a standard deviation of 7. The most dominant category is the medium category, which includes 54% of all respondents. The work passion variable shows an average score of 41.91 with a standard deviation of 7, and is also in the medium category (54%). Meanwhile, the job crafting variable has an average of 69.68 and a standard deviation of 8, with the majority of respondents (51%) also in the medium category.

4.4 Hypothesis Testing

This hypothesis test uses a t-test to determine the effect of work passion on job embeddedness. Based on the analysis results, the simple linear regression test value shows regression significance = 0.00 <0.01, F value = 18.212, t value = 4.268. These results indicate that H1 is accepted and there is a significant effect of work passion on job embeddedness because the significance value is less than 0.01 (0.00 < 0.01). Furthermore, the coefficient of determination R Square is 0.072 which indicates that this study contributes 7.2%, the rest is contributed by other factors not examined. The regression equation in this study is y = a + bx so that y = 23.226 + 0.282. This shows that every time there is an increase of 1 unit in work passion, it will cause an increase in job embeddedness by 0.282 units, assuming other variables are constant.

This hypothesis test uses t-test to determine the effect of job crafting on job embeddedness. Based on the analysis, the simple linear regression test value shows regression significance = 0.011 < 0.05, F value = 6.493, t value = 2.548. These results show that H2 is accepted and there is a significant effect of job crafting on job embeddedness because the significance value is less than 0.05 (0.011 <0.05). Furthermore, the coefficient of determination R Square is 0.027, which shows that this study contributes 2.7%, the rest is contributed by other factors not examined. The regression equation in this study is y = a + bx so that y = 25,365 + 0.139. This shows that every 1 unit increase in job crafting will cause an increase in job embeddedness by 0.139 units with the assumption that other variables are constant.

This hypothesis test uses the F-test to determine the effect of work passion and job crafting on job embeddedness. Based on the results of the analysis, the value of multiple linear regression test shows regression significance = 0.000 <0.01. This result shows that H3 is accepted and there is a significant influence of work passion and job crafting on job embeddedness because the significance value is less than 0.01 (0.000 <0.01). Furthermore, the F value is 11.013, the t value is 3.972 and the coefficient of determination R Square is 0.086 which shows that this study contributes 8.6%, the rest is contributed by other factors not examined. The regression equation in this study is y = a + bx1 + bx2 so that y = 17.034 + 0.102 + 0.260. This study shows that every 1 unit increase in work passion and job crafting will cause an increase in job embeddedness by 0.102 and 0.260 units with the assumption that other variables are constant.

So it can be concluded that there is a significant influence between work passion on job embeddedness (p = 0.000; β = 0.282), with a coefficient of determination (R^2) of 0.072. This means that work passion accounts for 7.2% of the variation in job embeddedness of PT X employees. Furthermore, job crafting also showed a significant influence on job embeddedness (p = 0.011; β = 0.139), although the contribution of the variance explained was relatively small, at 2.7% (R^2 = 0.027). The simultaneous effect of work passion and job crafting on job embeddedness was tested through multiple regression. The results showed a significant effect (p = 0.000), with regression coefficient values of β = 0.102 for work passion and β = 0.260 for job crafting, respectively. The R^2 value of 0.086 indicates that the two variables together explain 8.6% of the variation in employee job embeddedness.

5. Discussion

The results of the t-test from work passion on job embeddedness indicate that the simple linear regression analysis shows a significance level of 0.00, which is less than 0.01. This finding suggests a significant influence of work passion on job embeddedness. However, the effect of work passion on job embeddedness is relatively small, accounting for only 7.2% of the variance, with the remaining influence attributed to other unexamined variables. These findings are supported by previous research which found that obsessive passion as an aspect of work passion, positively correlates with job embeddedness [3]. Similarly, research conducted on hotel employees in Indonesia indicated that both harmonious and obsessive passions are positively related to job embeddedness [2]. This suggests that when individuals possess passion for their work, they are more likely to feel a stronger connection to their jobs.

The t-test results form Job Crafting on Job Embeddedness reveal that the simple linear regression analysis shows a significance level of 0.011, which is less than 0.05. This indicates a significant influence of job crafting on job embeddedness. However, the effect of job crafting on job embeddedness is also small, accounting for only 2.7% of the variance, with the remaining influence attributed to other unexamined variables. The findings of this study align with previous research highlighting the active role of employees in shaping their work in relation to job embeddedness. For instance, Yun et al. demonstrated a positive relationship between job crafting and job embeddedness, with a significance value of 0.548 (0.548 > 0.05) [5]. Additionally, another research found that job crafting has a positive and significant impact on job embeddedness [14].

The F-test results indicate that the multiple linear regression analysis shows a significance level of 0.000, which is less than 0.05. This finding demonstrates a significant positive influence of both work passion and job crafting on job embeddedness. This simultaneous effect suggests that a strong drive for a beloved job, combined with proactive initiatives to modify work practices, can substantially enhance employees' attachment to the organization. According to the Person-Job Fit Theory, the harmony between individual characteristics, particularly interests, and job attributes leads to better work outcomes, such as higher levels of embeddedness [16]. In this study, employees who possess passion for their work and actively engage in job modifications tend to experience greater job embeddedness. Furthermore, the Job Demands-Resources Theory is also relevant, as work passion can be seen as a trigger for motivation and energy that helps individuals cope with job demands and enhances their sense of connection [17].

Based on the Self-Determination Theory (SDT), work passion fosters intrinsic work engagement, ultimately strengthening emotional and psychological attachment to both the job and the organization [18]. While job crafting has been shown to enhance job embeddedness, this process often relies on the presence of work autonomy and organizational support to be optimally executed [5] Therefore, work passion tends to have a more fundamental and consistent impact on job embeddedness compared to job crafting, which is more contextual and reactive to work conditions. On the other hand, job crafting serves as a mechanism for employees to enrich their job resources, such as social support, which can alleviate burdensome demands. This combination has the potential to reduce job obstacles, thereby minimizing the desire to leave, which indirectly contributes to job embeddedness.

In addition to the aforementioned theories, the findings of this study align with the work passion theory proposed by Vallerand et al., which emphasizes the importance of positive feelings and engagement in meaningful work [19]. Moreover, previous research has found a positive relationship between job crafting and job embeddedness [15]. Thus, it can be concluded that employees who not only possess passion for their work but also actively adjust their roles and responsibilities are more likely to feel attached and motivated to remain part of the organization. Work passion has a more substantial influence compared to job crafting, as it serves as a strong internal motivation rooted in individuals' identities and personal values regarding their work. In the case of obsessive passion, work becomes a crucial part of an individual's identity, creating a deep emotional bond with the organization and reluctance to leave [3]. Conversely, job crafting is an adaptive behavior that emerges as a manifestation of this motivation, and its influence tends to depend more on environmental support, such as psychological capital and social support [5].

6.   Conclusion

Based on the research results, work passion and job crafting are a combination that can strengthen employee engagement with the company. Therefore, it can be concluded that:

6.1   Work passion influences the job embeddedness of employees at PT X, Semarang City.

6.2   Job crafting has a positive influence on job embeddedness among employees at PT X, Semarang City.

6.3   Work passion and job crafting simultaneously influence job embeddedness among employees at PT X, Semarang City.

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The Effect of Job Demand and Work-Life Balance on Turnover Intention of Health Workers at RSU Aghisna Medika Kroya, Cilacap District

Stevia Hias Saputri[1], Retno Dwiyanti[2]

steviahias@gmail.com[1], retnodwiyanti@ump.ac.id[2]

Faculty of Psychology, Universitas Muhammadiyah Purwokerto[1], Faculty of Psychology, Universitas Muhammadiyah Purwokerto[2]

Abstract Turnover intention is an important indicator in human resource management because it reflects employees' intention to leave their jobs. This study aims to examine the effect of job demand and work-life balance on turnover intention in health workers at RSU Aghisna Medika Kroya Kabupaten Cilacap. The study used a quantitative approach with a sample of 103 respondents taken through the Krejcie and Morgan table. Research instruments in the form of Turnover Intention, Job Demand, and Work-Life Balance scales. Data were analyzed using multiple linear regression. The results show that job demand ($p = 0.008 < 0.05$) has a significant effect on turnover intention, work-life balance ($p = 0.012 < 0.05$) has a significant effect on turnover intention, job demand and work-life balance affect turnover intention with a value of $p = 0.001$ ($p < 0.05$), a simultaneous contribution of 12.4% ($R^2 = 0.124$). This finding confirms the importance of managing job demands and work-life balance in reducing turnover intention. It is recommended that hospital management develop work policies and welfare support programs for employees.

Keywords : Job Demand, Work-Life Balance. Turnover Intention, Health Workers

1. Introduction

The healthcare industry is now experiencing rapid development and is required to be managed professionally according to scientific management principles [1]. Hospitals as health service providers have a high dependence on professional and competent human resources (HR), the availability and stability of health workers greatly affect the quality of service and the achievement of the hospital's vision and mission [2]. Therefore, hospital HR management is a crucial aspect that includes recruitment, selection, and efforts to maintain the workforce [3].

The performance of health workers has a strategic role in the success of hospital operations. To create optimal performance, hospitals need to pay attention to compensation, training, fair division of labor, and a conducive work environment [4]. However, in practice, not all hospitals are able to create ideal working conditions, resulting in increased turnover intention, which is the desire of employees to voluntarily resign [5].

Turnover intention is a serious problem that can hamper hospital operations. When health workers decide to leave, hospitals have to spend additional resources on recruitment and retraining processes, and bear the risk of disruption of services to patients [6]. Based on data obtained from Human Resources (SDI) Management of RSU Aghisna Medika Kroya Kabupaten Cilacap, the following data is obtained:

Table 1. Turnover data 2017-2023 RSU Aghisna Medika Kroya Kabupaten Cilacap

Year	Number of Employees	Number of Employees In	Number of Employees Out	Percentage
2017	189	34	24	13%
2018	199	28	26	13%
2019	201	34	28	14%
2020	207	22	31	15%
2021	198	35	21	11%
2022	212	53	9	4%
2023	242	48	18	7%

Table 1 above shows that Aghisna Medika Kroya Kabupaten Cilacap experienced a high turnover rate in 2017-2021 with an average rate above 10% per year, in 2022 it decreased to 9 employees, namely 4% and in 2023 it doubled to 18 employees, namely 7%. Most of the employees who left were health workers, this can be seen through the turnover data for 2023 provided by the management of RSU Aghisna Medika Kroya Kabupaten Cilacap in the table below:

Table 2. Turnover Data of Health Workers and Non-Health Workers in 2023 RSU Aghisna Medika Kroya Kabupaten Cilacap

Health Workers	Non-Health Workers
11 Employees	7 Employees

Table 2 above shows that Preliminary studies through interviews with several health workers revealed heavy work demands, tight and inflexible shift schedules, and difficulties in taking leave or managing personal time. There are several things that can affect turnover intention, one of which is the existence of job demands or often referred to as job demand [7]. According to an expert, job demands are the number of work demands given to employees, resulting in work pressure and unfinished work [8].

Based on previous research, Job Demand partially influences Turnover Intention in Godrej Indonesia employees, which means that the higher the Job Demand, the higher the turnover intention felt by employees [9]. Then other research also showed that Job Demand did not have a significant positive influence on turnover intention [10].

In addition to job demand, turnover intention can also be influenced by the absence of time balance in life and work, which can be said to be work-life balance [11]. According to one theorist, work-life balance is a positive and negative influence on a person's personal and work life [12].

Previous research said that Work-Life Balance has a negative and significant effect on Turnover Intention of Perum BULOG Jakarta employees [13]. Then another study also said that work-life balance has a negative and insignificant effect on turnover intention in millennial generation workers [14].

Previous studies using Job Demand variables on Turnover Intention and Work Life Balance variables on Turnover Intention still show inconsistent results, where some studies found a significant influence between variables, while other studies did not show any influence between

variables. Turnover that occurs in a healthcare worker will have an impact and disrupt the stability of services. By conducting research on the influence of Job Demand and Work Life Balance on Turnover Intention, it can help hospitals to identify factors that can influence turnover intention so as to increase retention and minimize the emergence of turnover intention. This study aims to examine the influence of Job Demand on Turnover Intention in healthcare workers at RSU Aghisna Medika Kroya Hospital Kabupaten Cilacap, examine the influence of Work Life Balance on Turnover Intention in Healthcare Workers at RSU Aghisna Medika Kroya Hospital Kabupaten Cilacap, and examine the influence of Job Demand and Work Life Balance on Turnover Intention in Healthcare Workers at RSU Aghisna Medika Kroya Hospital Kabupaten Cilacap.

2. Literature Review

Turnover intention is an individual's desire to resign from their job or move to another organization according to their wishes [15]. Turnover intention is often seen as the initial stage of the actual turnover process, which can be influenced by various factors, both from within and outside the job. Turnover intention also functions as an early indicator that can be used by organizations to anticipate potential loss of workforce, so it is important to understand and manage it properly. Aspects of turnover intention include : thinking of quitting, intention to search for alternatives, and intention to quit. Job demand is the number of work demands given to employees so that it can cause work pressure and the possibility of unfinished work [8]. These demands can be physical, psychological, social, and organizational. High job demand if not balanced with adequate resources can cause work stress, fatigue, decreased job satisfaction, and increase the tendency for employees to have turnover intention. Aspects of job demands include : role ambiguity, role conflict, and work overload.

Other research also stated that work-life balance is the impact of a person's personal life on work, both positively and negatively, and vice versa [12]. Work-life balance can be disrupted if work interferes with personal life and vice versa which can ultimately trigger stress, emotional exhaustion, and increase turnover intention. Aspects of work-life balance include : work inference with personal life, personal life interference with work, personal life enchancement of work, work enchancement of personal life.

3. Method

This study uses a quantitative research design, namely to examine the effect of independent variables on the dependent variable on the research sample using research instruments that have been provided [16].

3.1 Sample and Population

The population in this study was 140 health workers of RSU Aghisna Medika Kroya Kabupaten Kabupaten with a sample of 103 health workers.The sampling technique used probability sampling technique with Simple Random Sampling type. Simple Random Sampling technique is done randomly and simply by using a lottre [17].

3.2 Research Instruments

The instruments in this study used the job demand scale, work-life balance scale, and turnover intention scale. The job demand scale in this study is a modification of the scale developed based on the aspect role ambiguity, role conflict, and work overload which has 17 question items [8]. Then the Work-Life Balance Scale is a modification based on the aspect work inference with personal life, personal life interference with work, personal life enchancement of work, and work enchancement of personal life which has 17 question items [12]. Furthermore, the Turnover Intention Scale is the result of an independent construction that has 20 question items and is arranged based on the turnover intention aspect [18].

3.3 Data Analysis Technique

The data analysis method in this study uses multiple linear regression tests. Data analysis begins with a classic assumption test, namely normality test, multicollinearity test and heteroscedasticity test. After the assumption test is carried out and it is known that the data meets the parametic assumption test, then multiple linear regression analysis tests are carried out to measure the direction and magnitude of the influence of the Independent Variable on the Dependent Variable using the Jamovi 2.6.26.0 tool.

4. Result

4.1 Multiple Linear Regression Test Results

Table 3. Partial Test of Work-life Balance on Turnover Intention

Predictor	Estimate	SE	t	p
Intercept	45.802	5.345	8.57	<.001
X2	-0.421	0.138	-3.05	0.003

Table 3 above shows the results of the partial significance test (t-test) obtaining a p value = 0.003 (<0.05). This shows that there is a significant influence between work-life balance on turnover intention. Based on these results, it can be concluded that the second hypothesis is accepted. This is reinforced by the results of the regression equation, namely:

$$Y = a + bX$$
$$Y = 45.802 - 0.421X$$

The coefficient b is the regression direction coefficient and states the average change in turnover intention variables for each change in work-life balance variables. This change is an increase when b increases positively and a decrease when b is negative. From this it can be concluded that turnover intention changes by 0.421 for each change in the work-life balance variable.

Table 4. Simultaneous Test of Job Demand and Work-life Balance on Turnover Intention

Predictor	Estimate	SE	t	p
Intercept	58.504	7.925	7.38	<.001
X1	-0.307	0.144	-2.14	0.035
X2	-0.356	0.139	-2.56	0.012

Table 4 above shows that the simultaneous significance test obtained an F-value of 7.11 with a p-value = 0.001 (p < 0.05), which indicates a significant influence between the job demand and work-life balance variables on turnover intention. Based on these results it can be concluded that the third hypothesis is accepted. This can be strengthened by the results of the regression equation, namely:

$$Y = a + bX1 + bX2$$
$$Y = 58.504 - 0.307X1 - 0.356X2$$

The coefficient b is the regression direction coefficient and states the average change in turnover intention variables for each change in job demand and work-life balance variables. This change is an increase if bX1 and bX2 are positive and a decrease if bX1 and bX2 are negative. From this it can be concluded that turnover intention changes by 0.307 for every change that occurs in the job demand variable and a value of 0.356 for every change that occurs in the work-life balance variable.

4.2 Hypothesis Test Results

Hypothesis 1: Effect of Job Demand on Turnover Intention in health workers at RSU Aghisna Medika Kroya Kabupaten Cilacap
Based on the results of the partial significance test (t test), the p value = 0.035 (p < 0.05) is obtained, which means it shows that there is an influence between job demand on turnover intention. Based on these results it can be concluded that the first hypothesis is accepted

Hypothesis 2: Effect of Work-Life Balance on Turnover Intention in health workers at RSU Aghisna Medika Kroya Kabupaten Cilacap

Based on the results of the partial significance test (t test), the p value = 0.012 (<0.05) is obtained, which means it shows a significant influence between work-life balance on turnover intention. Based on these results it can be concluded that the second hypothesis is accepted.

Hypothesis 3: Effect of Job Demand and Work-life Balance on Turnover Intention in health workers at RSU Aghisna Medika Kroya Kabupaten Cilacap

Based on the simultaneous significance test, the Fcount value is 7.11 with a p value = 0.001 (p < 0.05) which indicates a significant influence between job demand and work-life balance variables on turnover intention. Based on these results it can be concluded that the third hypothesis is accepted.

5. Discussion

Based on the partial significance test (t test), the regression coefficient is -0.307 with a p value = 0.035 (p < 0.05). This shows that there is a negative effect of job demand on turnover intention in health workers at RSU Aghisna Medika Kroya Kabupaten Cilacap, which means that the stronger the job demand felt by health workers, the lower the turnover intention that occurs and vice versa. Based on the Job Demand-Resources (JD-R) theory which says that job demand may not stand alone in influencing turnover intention. This Job Demand-Resources theory emphasizes that job demand can be influenced by external factors such as compensation, work environment and social support so as to reduce the negative impact of job demand on intention

to leave work. Job Resources can reduce the impact of job demand on job strain including turnover intention [19].

Previous research results show that human resource management such as training, development, and coaching can improve employee resources and help employees overcome work challenges which will ultimately lead to employee welfare rather than the desire to leave [20]. Other studies also say that job resources can function as motivation when employees experience high job demands and cause burnout [21]. It can be concluded that job resources are able to suppress the negative influence of job demands on turnover intention.

Based on the partial significance test (t-test), a regression coefficient of -0.356 was obtained with a p value = 0.012 (p <0.05). This shows that there is a negative influence between work-life balance and turnover intention, which means that the stronger the work-life balance, the lower the turnover intention felt and vice versa. The results of this study support previous research which proves that work life balance affects turnover intention in Perum BULOG Jakarta employees [13].

The results of further research also show a negative influence between Work-Life Balance and Turnover Intention [22]. Work-Life Balance has a negative and significant impact on employee turnover intention. With a healthy work-life balance, employees will find it easier to carry out their tasks more effectively, comfortably, and efficiently within the company.

6. Conclusions

The results of the study indicate that Job Demand influences Turnover Intention, Work-Life Balance influences Turnover Intention, and Job Demand and Work-Life Balance significantly influence Turnover Intention of Healthcare Workers at RSU Aghisna Medika Kroya Kabupaten Cilacap with a contribution of 12.4%. However, this study is limited to one hospital with a limited sample size and has not included other factors such as job satisfaction, leadership style, peace, and organizational culture. For further research, it is recommended to expand the sample, add relevant variables, and use mixed methods. For hospitals, it is important to unify workloads, improve well-being, and support work-life balance through activities such as family gatherings and providing sports facilities to reduce the intention of health energy to leave.

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The Role of Perceived Organizational Support as a Mediator in the Influence of Work Environment on Work Engagement in Police Members

Agustina Inesia Emasintia Sutoro[1], Bonita Sandika Budi[2], Eka Putri Purwitasari[3] &
Retno Dwiyanti[4]

{agustinaines1708@gmail.com[1], bsandikabudi@gmail.com[2], ekaputripurwita@gmail.com[3],
retnodwiyanti@ump.ac.id[4] }

Master of Psychology Muhammadiyah University of Purwokerto, Indonesia[1,2,3,4]

Abstract. As law enforcement officers, police officers are required to be ready to carry out their duties 24 hours a day and take full responsibility for every call of duty. This demand can affect their psychological engagement at work. This study aims to examine the influence of the Work Environment on Work Engagement, with Perceived Organizational Support as a mediating variable. This quantitative study involved 150 members of the Cilacap Police Department with data collected using a Likert scale questionnaire. Data analysis was conducted using (SEM-PLS) using SmartPLS 3.0. The results showed that the Work Environment influenced POS, but the Work Environment and POS did not significantly influence Work Engagement, and POS did not mediate the relationship. These findings indicate the need for strategies to improve work engagement within the Cilacap Police Department. This study has limitations, so it is recommended that further research consider other more relevant variables.

Keywords: Work Environment; Perceived Organizational Support; Work Engagement

1 Introduction

The police are law enforcers who have an important role in Indonesia. The Indonesian National Police is one of the functions of the state government in the field of maintaining security and public order. Article 13 of Law of the Republic of Indonesia Number 2 of 2002 stipulates that the Indonesian National Police (POLRI) has the duty to maintain security and public order, enforce the law, and provide protection, protection and services to the community. As a police officer, you must be ready to carry out the tasks assigned for 1x24 hours for duty calls at any time. This is a work demand that must be carried out with a full sense of responsibility so that it can affect the psychological attachment of police officers in their work. As a member of the police force, good performance is needed. To improve good performance, it must increase high work engagement.

In the context of police organizations, work engagement is very important because it is directly related to performance and effectiveness in carrying out tasks that are often high risk. Police officers are faced with various challenges that require a high level of engagement to ensure public safety and security. The established engagement will foster a strong

emotional connection between an employee and their organization, thereby motivating individuals to invest greater effort in their work [1]. However, to increase high work engagement, it is necessary to create a good work environment. Work environment is defined as everything that has the potential to affect organizational performance [2]. The work environment must be supportive, including facilities, organizational culture, as well as relationships between colleagues, which can encourage police officers to be more engaged and committed to their duties.[3]

In addition, another study conducted by [4] shows other evidence that one of the factors that supports the achievement of high levels of work engagement among employees is perceived organizational support. Eisenberger et al. [5] also stated that one of the crucial factors that can affect work engagement is perceived organizational support. This concept refers to employees' views on the extent to which the organization values their contributions and cares about the welfare of its employees [6]. Previous research also shows that perceived organizational support has an influence of 42.9% on work engagement [7].

Several studies on the effect of work environment on work engagement have been conducted by previous researchers, but no researcher has added the variable perceived organizational support as a mediator to the effect of work environment on work engagement. In addition, previous studies were conducted on lecturers and company employees, while this study was conducted on members of the police. Therefore, this research is important to explore more broadly matters related to the effect of work environment on work engagement with perceived organizational support as a mediator.

2 Literature Review

Work Engagement

Work engagement is a condition in which a person has positive thoughts so that he is able to express himself, both physically, cognitively, and affectively, in doing his work [8]. Work engagement is a desired condition, has a purpose, and implies attachment, commitment, enthusiasm, enthusiasm, focus, and full energy in working so that it has good work attitude and behavior components [9]. Aspects of work engagement include: Vigor, Dedication, and Absorption [10]

Work Environment

The work environment is everything that has the potential to influence organizational performance [7]. According to Albrecht and Leiter [8], the work environment is all the tools and materials encountered, the environment around where a person works, their work methods, and work arrangements, both as individuals and as a group. The work environment has five indicators consisting of lighting, color, and aesthetics of the work space, work safety, conditions of the work space layout, and employee relationships, both with fellow employees, subordinates, and superiors [11].

Perceived Organizational Support

According to Saks [4] perceived organizational support is a situation that creates an organizational obligation to realize employee welfare which will further help the organization achieve its goals [4] According to Hardianto & Ratna [7] perceived organizational support is the level at which employees feel that the company pays attention to employee welfare properly and assesses the contributions they have made to the company [8]. Meanwhile, according to Rhoades & Eisenberger [9], perceived organizational support is the employee's perception of the organization to what extent the organization can appreciate the contribution

and care about the welfare of employees [9]. The aspects of perceived organizational support namely appreciation for employee contributions and organizational concern for employee welfare [9].

3 Method

This research employed a quantitative approach aimed at empirically examining the relationships among variables using statistical analysis. The population of this research consisted of all police officers serving at Cilacap Police Department (Polres Cilacap), with a total of 150 members. Since the population size was relatively small and fully accessible, this research applied a saturated sampling technique, in which all members of the population were included as respondents. This method was chosen to obtain more comprehensive and representative data. The data collection method in this research utilized Likert-scale questionnaires, developed based on behavioral indicators presented in the form of statement items. There were three measurement scales used in this study: the Work Environment Scale, the Work Engagement Scale, and the Perceived Organizational Support Scale. The data analysis was conducted using Structural Equation Modeling–Partial Least Squares (SEM-PLS) with the assistance of SmartPLS version 3.0 software. SEM-PLS enables researchers to perform partial path analysis and examine the influence of independent variables on dependent and intervening variables. The SEM-PLS analysis consisted of three main stages: (1) inner model, (2) outer model, and (3) hypothesis testing. The measurement model was assessed by examining convergent validity and discriminant validity, while the reliability of the constructs was evaluated using Cronbach's Alpha and Composite Reliability tests [10].

4 Result

Convergent Validity

Validity testing can be seen using the convergent validity test. Convergent validity is tested by looking at the outer loading value of each indicator on its respective construct.
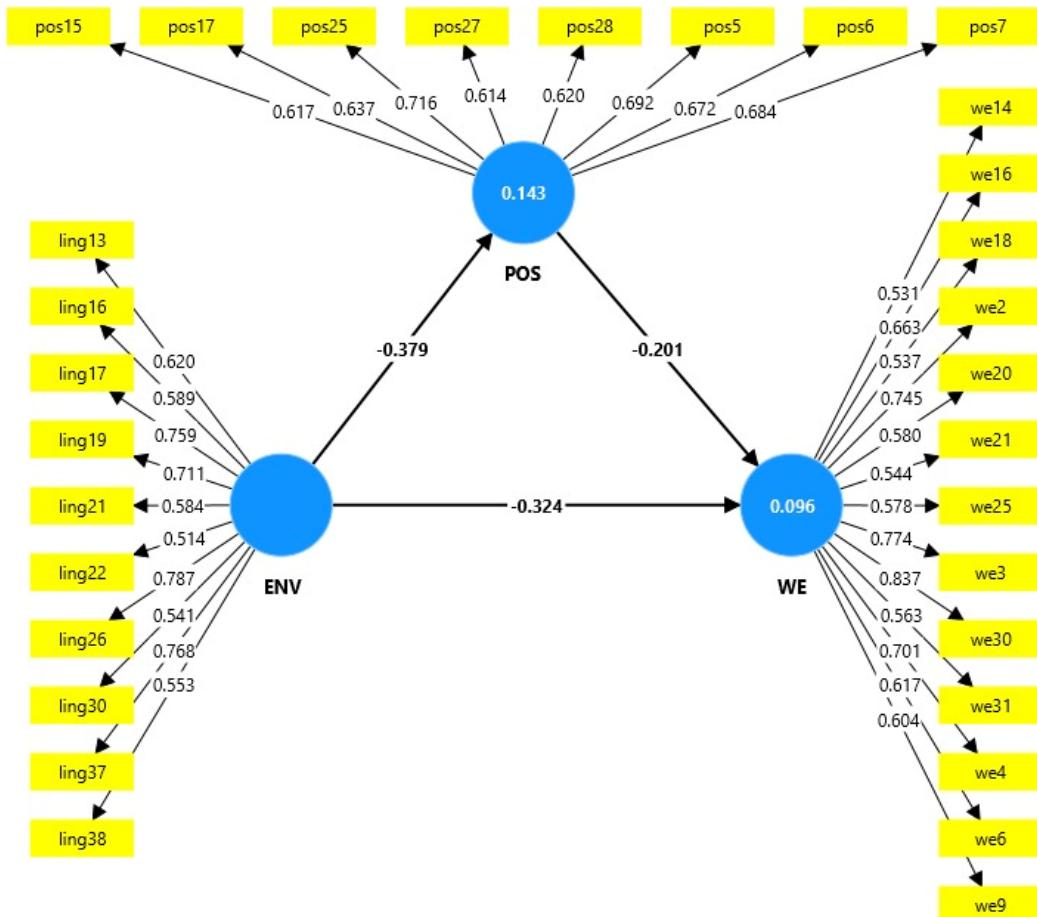
Figure 1. Outer Loading Algorithm

The figure above shows that all indicators of the three constructs of Work Environment, Perceived Organizational Support, and Work Engagement have a loading value above 0.50. This means that each item or statement is able to adequately explain the construct it represents. The ideal outer loading value is above 0.70. However, values between 0.50-0.70 are still acceptable as long as the indicator's contribution remains significant to the composite reliability [11].

Discriminant Validity
Discriminant validity assesses whether the constructs in the model are indeed empirically distinct from each other. Two main methods are used: Fornell-Larcker Criterion and Cross Loading.

Table 1. AVE Value Table

Variable	AVE
ENV	0.650
POS	0.658
WE	0.643

The table above shows that the Fornell-Larcker results related to the square root value of AVE are higher than the correlations between other constructs. This suggests that the construct shares more variance with its own indicators than with other constructs. Cross loading further strengthens this claim. Cross loading shows that each indicator has the highest loading on its construct compared to other constructs. This finding reinforces the statement that the indicators used have specifically measured their respective constructs. The cross loading and Fornell-Larcker approaches should be used together to ensure comprehensive discriminant validity [12].

Construct Reliability
Reliability refers to the internal consistency of indicators in measuring a construct. In this study, the three constructs (ENV, POS, WE) showed Cronbach's Alpha and Composite Reliability (CR) values.

Table 2. Cronbach's Alpha and Composite Reliability Values Table

Variable	Cronbach's alpha	Composite reliability
ENV	0.848	0.877
POS	0.821	0.859
WE	0.891	0.900

The table above shows that all values are well above the minimum threshold of 0.70, which indicates that all constructs have high reliability and good internal consistency [13]. Thus, the measuring instruments in this study have strong and reliable measurement quality.

R-Square (R²) Value
The R² value indicates the proportion of variance in endogenous constructs explained by exogenous constructs. In this study, the results are :

Table 3. R-Square Values Table

Variable	R-square	Adjusted R-square
WE	0.096	0.067

The table above shows a low or weak predictive power value, in accordance with Chin's (1998) classification which states that $R^2 < 0.19$ is considered weak[14]. This low R² value indicates that employee work engagement is influenced by many other factors outside the model, such as intrinsic motivation, organizational culture, social support from colleagues, and transformational leadership [15].

F-Square (f²) Value

The effect size f² shows how much influence the exogenous construct has on the endogenous construct if the construct is removed from the model. In this study the results were obtained:

Table 4. F-Square Values Table

Variable	ENV	POS	WE
ENV		0.168	0.099
POS			0.038
WE			

The table above shows that based on Cohen [9], the f² value of 0.02 is considered small, 0.15 is medium, and 0.35 is large. So it can be concluded that the effect of ENV on WE is small, while the effect of POS on WE is very small [16] This is in line with Saks' [4] research, which shows that the relationship between organizational support and engagement is often indirect, but rather mediated by factors such as trust, job satisfaction, or perceptions of fairness [4].

Path Significance Test (Hypothesis)

The following is a table showing the results of the three hypothesis tests in this study：

Table 5. Hypothesis Test Results Table

	Original Sample (O)	Sample mean (M)	Standard Deviation	T Statistics	P Values
ENV -> POS	-0.379	-0.409	0.160	2.368	0.018
ENV -> WE	-0.324	-0.305	0.258	1.253	0.210
POS -> WE	-0.201	-0.182	0.263	0.763	0.445

H1 (ENV → POS): Significant (t = 2.368, p = 0.018)

The results of this study indicate that the work environment has a significant effect on POS. This finding is consistent with the study conducted by [17], which revealed that a supportive and positive work environment can enhance employees' perceptions of organizational support.

H2 (ENV → WE): Not Significant (t = 1.253, p = 0.210)

The results of this study reveal that the work environment does not have a significant effect on work engagement. This finding differs from previous studies, which demonstrated that the work environment significantly influences employees' engagement at work.[18] Another study also reported a positive and significant relationship between the work environment and work engagement. [19] Therefore, the present finding does not support earlier research, suggesting that the work environment may not be the primary factor influencing work engagement among police officers.

H3 (POS → WE): Not Significant (t = 0.763, p = 0.445)

The results of this study indicate that POS does not have a significant effect on work engagement. This finding contrasts with previous studies, which reported that POS plays an important role in enhancing work engagement [20] Other research also found that perceived organizational support can increase employees' level of engagement. [21] Therefore, this study's results are inconsistent with prior findings, suggesting that other factors may play a more dominant role in influencing work engagement among police officers.

5 Discussion

The results of SEM-PLS analysis in this study indicate that work environment has a significant effect on perceived organizational support with a p value = 0.018 (p < 0.05). This finding is in line with previous research which states that the quality of the work environment has a major contribution to employees' perceptions of the extent to which the organization supports them[22]. In the context of policing, a conducive work environment, such as decent work facilities, healthy interpersonal relationships, and supportive management, can strengthen the belief that the institution is concerned about their well-being [23].

However, interestingly, the work environment variable does not significantly affect work engagement with a p of 0.210, and neither does the perceived organizational support variable on work engagement with p = 0.445. These results contradict various previous studies which state that a good work environment and organizational support tend to increase work engagement [24]. This discrepancy may be due to the nature of police work that has structural pressures, strict hierarchies, and high workloads, which make their work engagement more influenced by intrinsic factors such as work meaning, transformational leadership, or personal motivation [25].

The R-square value for work engagement of 0.096 indicates that perceived organizational support and work environment can only explain 9.6% of the variance in work engagement, indicating that the model has low predictive power. This reinforces the notion that there are other factors that are more dominant in explaining work engagement in the context of police officers, such as a sense of responsibility to the community, institutional loyalty, or work culture factors [26].

The implication of these findings for police organizations is the need to strengthen other aspects of the organization that can increase engagement, not only by creating a good work environment or showing support, but also by fostering an inspiring work climate, motivating leadership, and empowering members to feel a sense of control and meaning over their duties.

This study has limitations in the scope of the variables used, as well as subjects who only came from one institution, so the generalization of the results to a wider population is limited. In addition, the cross-sectional design does not allow for in-depth inference of causal relationships. Future research is recommended to include additional variables such as transformational leadership, meaning of work, and organizational culture. A longitudinal approach can also provide a deeper understanding of the dynamics of the relationship between variables over time.

6 Conclusion

Based on the results of research and discussion, it shows that only work environment variables have a significant influence on perceptions of organizational support. Meanwhile, neither the work environment nor the perception of organizational support showed a significant influence on job attachment. This finding suggests that police officers' perceptions of organizational support are strongly influenced by the quality of the work environment they experience on a daily basis. However, these perceptions have not been able to directly encourage increased work engagement. This highlights that in the context of a high-pressure job such as policing, job attachment is not sufficiently influenced by physical conditions and organizational support alone, but may also be determined by other factors such as leadership, role clarity, workload, and work-life balance. The main contribution of this study is to provide a deeper understanding of the psychological dynamics of work in law enforcement institutions. The results of this study add to the literature in the field of industrial and organizational psychology, especially in the militaristic public sector. For future research, it is

recommended to explore other variables that could potentially mediate or moderate the relationship between perceived organizational support and job attachment, such as job stress, organizational culture, or personal characteristics such as resilience and intrinsic orientation. Longitudinal and mixed-method approaches may also provide richer insights into the dynamics of work attachment over the long term.

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To What Extent Training Programs Can Enhance Employee Engagement: A Case Study

Laily Rahmah [1], Nabila Rachmawati Setianingsih[2]

{laily@unissula.ac.id[1], nabilarachmawati@std.unissula.ac.id[2]}

Faculty of Psychology, Sultan Agung Islamic University Semarang[1], Faculty of Psychology, Sultan Agung Islamic University Semarang[2]

Abstract. This study explores the role of training programs in increasing employee engagement at Gama English Course (GEC) using a qualitative case study design. Data were obtained through in-depth interviews with human resource managers, coordinators, and executive directors at GEC. Thematic analysis revealed eight key themes: professional development, enhancing positive work attitudes, internalizing organizational culture, adaptive readiness, enhancing interpersonal relationships, proactive engagement, providing psychological support, and providing feedback and development facilities. The findings indicate that well-designed training programs aligned with employee needs significantly increase employee engagement levels. Strategic training plays a crucial role in human resource management and offers actionable insights for developing sustainable engagement strategies. This study recommends future research focusing more on employee perspectives to provide a more comprehensive understanding. The novelty of this study is that it offers a clear picture of the role of training in increasing engagement, a topic previously lacking in research.

Keywords: Employee Engagement, Gama English Course Management , Training Programs

1 Introduction

Employee engagement has emerged as a critical factor in achieving organizational goals, significantly influencing employee performance, productivity, and overall effectiveness. Saks defines engagement as an emotional, psychological, and behavioral condition that enables individuals to demonstrate high levels of commitment and participation in their work and organization [1]. Engaged employees are typically more productive, innovative, and loyal to their companies. Schaufeli, Bakker, and Salanova further elaborate that employee engagement encompasses a positive attitude towards one's work, coupled with a willingness to contribute skills and energy, which manifests in behaviors such as enhanced focus, diligence, and enthusiasm for tasks [2].

The concept of employee engagement was first introduced by Kahn who described it as the emotional, cognitive, and physical attachment of employees to their work and organization. Kahn emphasized the importance of a strong relationship between employees and the organization in fostering productivity and job satisfaction. He identified three psychological conditions that influence employee engagement: meaningfulness, psychological safety, and availability [3]. Meaningfulness provides employees with a compelling reason to feel connected to their work, while psychological safety allows them to create a comfortable environment for

optimal performance. Availability ensures that employees possess the energy and focus necessary for full engagement.

The significance of employee engagement has gained traction in the business world, particularly following Gallup's research, which began in 1993. Gallup popularized the term through global surveys and the annual "State of the Global Workplace" report, which measures employee engagement levels across various countries as a vital metric in organizational management. Their findings indicate that higher employee engagement correlates with enhanced productivity, profitability, and customer service quality, alongside reduced turnover rates [4]. In the era of globalization, where competition between organizations is increasingly fierce, increasing employee engagement has become a strategic advantage, especially in the education sector [5].

Employee engagement theory continues to evolve, with contributions from academics and research firms. Kahn's framework remains relevant, especially in understanding how training programs can enhance employee engagement. Effective training initiatives can generate positive feelings, make employees feel valued and encourage creativity and involvement. Research shows that quality training programs can enhance productivity and reduce turnover, ultimately improving performance.

Despite enhancing recognition of employee engagement, Gallup's State of the Global Workplace (2023) reports Indonesia's engagement rate at only 25%, slightly above the global average of 23% [6]. This gap highlights the need for organizations to prioritize engagement, especially in education, where engaged teachers contribute significantly to learning quality and student outcomes [7]. Engaged employees foster a positive work environment, enable innovation in teaching methods and enhance the educational experience [8].

In the context of educational institutions such as Gama English Course (GEC), the interaction between teachers and students is very important in determining the quality of learning. Optimizing the competence of human resources in the field of education is very important, because teachers play an important role in influencing students' academic achievement. Therefore, employee engagement is a key to achieve educational goals and develop competent and reliable human resources in the organization [9]

One common strategy to enhance employee engagement is through training programs [10]. Effective training initiatives can create positive employee experiences, promote appreciation, and encourage creativity and involvement [11]. Bhakuni and Saxena found that quality training programs can enhance productivity and reduce turnover rates, leading to better performance. However, challenges such as limited funding, organizational culture, and human resource constraints can hinder the implementation of effective training programs [12].

Although training is recognized as important in enhancing employee engagement, many organizations, including GEC, face challenges in realizing its full impact. Issues such as limited time, geographical distance between branches, employee resistance to change, and lack of post-training evaluation can hinder results. This underscores the need for further research on training effectiveness in enhancing employee engagement.

This study aims to bridge the gap between training efforts and their impact on employee engagement at GEC. Using a qualitative case study design, this study will explore GEC management's understanding of the role of training programs in enhancing employee engagement. The findings are expected to provide practical recommendations for GEC and

other organizations seeking to implement training programs as a strategy to enhance employee engagement.

In summary, this study contributes to the academic discourse on employee engagement by focusing on the role of training programs as a stimulus to enhance engagement levels in organizations. By examining the perspectives of management personnel at GEC, this study aims to provide insights that can inform the development of effective and relevant training programs in educational institutions.

2 Literature Review

2.1 Employee Engagement

Employee engagement is a multifaceted concept that encompasses the emotional, cognitive, and behavioral commitment that employees demonstrate toward their work and organization. It reflects a dynamic and positive relationship between individuals and their tasks, which fosters dedication and enthusiasm in execution [13]. Engagement is shaped by individual traits and a supportive environment, as noted by Albrecht et al [14]. Saks   emphasized the psychological basis of employee engagement, highlighting meaningful work, managerial support, and open communication as a key factor [15].

Positive work experiences play a crucial role in enhancing employee engagement. Eldor and Vigoda-Gadot found that satisfying work experiences and challenges that align with individual capabilities significantly boost engagement levels [16]. Leaders who encourage creativity, innovation, and independence can further enhance this engagement. Thus, employee engagement can be seen as an employee's attachment to the organization, characterized by a commitment to its goals and mission.

Several key theories have shaped the understanding of employee engagement. Maslow's Hierarchy of Needs posits that employees are motivated by a progression of needs, from basic physiological requirements to self-actualization [17, 18]. Herzberg's Two-Factor Theory further categorizes workplace factors into motivators, which lead to satisfaction, and hygiene factors, which prevent dissatisfaction, emphasizing the importance of recognition and growth opportunities in enhancing engagement.

Engagement can be categorized into three groups based on the Q12 measurement tool developed by Gallup: engaged, not engaged, and actively disengaged. Employees are enthusiasm and dedication, not engaged employees complete tasks without emotional connection, while actively disengaged employees express dissatisfaction that can peers negatively [19, 20]. Saks also distinguishes between individual engagement, which pertains to daily professional activities, and organizational engagement, which relates to the implementation of individual roles within the organization. The balance between these two forms of engagement is vital for long-term organizational success.

Indicators of employee engagement behavior are manifested in various forms of active contribution to work. According to Bakker and Demerouti and Chitanda these indicators include commitment to work, where dedicated employees show enthusiasm for their tasks; initiative, where proactive employees take responsibility and contribute positively to problem solving; collaboration, which emphasizes teamwork that is important for achieving organizational goals; and positive attitudes, where employees manage stress effectively and maintain enthusiasm

[21,22]. Gallup's Engagement Hierarchy adds four levels of engagement indicators, which include what employees receive, what they give, how they feel accepted, and how they can grow in the organization.

Research has also identified various aspects of employee engagement. Schaufeli, as cited in Muslikah et al, categorizes engagement into three dimensions: vigor, which refers to high energy and mental resilience at work; dedication, which involves deep involvement and pride in accomplishment; and absorption, which signifies full concentration and immersion in work. This multidimensional nature of employee engagement highlights its emotional, cognitive, and physical aspects, all of which are interrelated with an individual's role in their work [23].

The factors that influence employee engagement vary across individuals, requiring leaders to identify organizational elements that enhance engagement at both the individual and group levels [4]. Key factors include a positive work environment, effective leadership style, career development opportunities, recognition and reward systems, and open communication. The impact of employee engagement on individual and organizational performance is profound and recognized as a critical determinant of productivity, job satisfaction, creativity, and overall success. Engaged employees thrive in a positive workplace environment and feel motivated to fulfill responsibilities [24], leading to enhance productivity, reduced employee turnover, enhance customer satisfaction and innovation. In short, understanding employee engagement is essential for organizations seeking to cultivate a committed workforce. By addressing influencing factors and implementing effective strategies, organizations can enhance employee satisfaction and drive overall success.

2.2 Training Programs

Training programs play a vital role in this context, defined as initiatives designed to enhance employee knowledge, skills, and competencies. Training is a planned process aimed at changing attitudes and skills through experiential learning to achieve effective performance [25]. Training can be delivered through workshops, seminars, and online courses [26]. Besides benefiting individual performance, training contributes to employee engagement and job satisfaction, making it a strategic solution for enhancing overall organizational outcomes. Organizations should prioritize educational opportunities for all employees, recognize training as an ongoing process, and align training with business objectives.

The objectives of training, as outlined by Bhakuni and Saxena, include skill enhancement, competency development, and enhanced productivity [27]. Sibarani et al highlighted benefits of training for organizations and employees, such as skill enhancement, enhanced organizational commitment, improved performance, adaptability to change, and greater loyalty and engagement. Training is not just a method for enhancing technical skills, it is a strategy for cultivating motivated and committed employees. According to Renhoran et al, effective performance management strategies, including continuous training, can significantly enhance employee engagement and productivity, leading to organizational effectiveness [28]. Effective training programs should be designed based on training needs assessments (TNA) to address performance gaps and align with current trends, ensuring high employee engagement through updated knowledge, skills, and attitudes [29].

2.3 Context at Gama English Course (GEC)

At Gama English Course (GEC), an educational institution established in 1993 with 15 branches in Central Java and East Java, training programs are essential to enhance the competence of teachers and administrative staff. GEC's vision is to provide an effective learning experience and high-quality education, emphasizing competency development through training. These programs ensure instructors are equipped with the latest teaching methods and a curriculum understanding, focusing on technological competency and soft skills development, such as leadership and communication. By promoting a collaborative and innovative work culture, training at GEC enhances employee relations and enhances engagement in achieving common goals, contributing to the mission of quality education.

3 Method

This study used a qualitative approach using a case study design to explore the role of training programs in enhancing employee engagement at Gama English Course (GEC). The case study method was selected to facilitate an in-depth understanding of the phenomenon, specifically focusing on research questions centered on "how" and "why." This approach enabled a comprehensive exploration of the complexities surrounding employee engagement and the impact of training initiatives in the specific context of GEC.

The study adopted a Single Case Design, focusing on the perspective of organizational management at GEC. Data were collected from various levels in the management structure, including executive directors, training coordinators, and human resource management, to ensure complete insight into the role of training programs in enhancing employee engagement. The study was conducted in a natural setting, where the researcher directly engaged with the respondents without experimental manipulation, maintaining the authenticity of the data.

Training programs were operationalized by examining their type, frequency, and content, while employee engagement was assessed using indicators such as motivation, productivity, and loyalty. Data collection was conducted through semi-structured interviews, allowing for flexibility and exploration of respondents' subjective experiences and perceptions.

Data analysis was conducted using thematic analysis techniques as described by Braun and Clarke , involving stages of data familiarization, coding, searching for themes, reviewing themes, defining themes, and writing a report [30]. This systematic approach allowed the researcher to identify patterns and themes emerging from the data, providing deeper insights into the role of training programs in enhancing employee engagement in GECs. Using this qualitative methodology, this study aims to contribute valuable knowledge to the field of employee engagement and training in educational institutions.

4 Result

Training Programs at Gama English Course: Enhancing Teaching Quality and Employee Engagement

In an effort to enhance the quality of teaching and employee engagement, Gama English Course has implemented various training programs specifically designed to meet the professional

development needs of its staff. The training programs are attended by both permanent employees and orientation staff, who undergo two main components of training at Gama English Course. The first component focuses on training for administrative staff, which aims to improve efficiency and effectiveness in managing the institution's operations. The second component involves specific teaching training for tutors, which is designed to strengthen teaching skills and methodologies used. In addition to technical skills, Gama English Course also provides training in the development of soft skills, such as communication, teamwork, and leadership, which are essential to creating a harmonious and productive work environment.

 Although there are other sub-training sessions held, such as training for the design and marketing teams, these are more personalized and conducted face-to-face. Formal structured training at Gama English Course mainly covers two categories: training for administrative staff and training for tutors or educators. The structured training programs are designed to ensure that each employee has the skills necessary to contribute optimally in a dynamic work environment.

The training program at Gama English Course consists of three types: daily, weekly, and annual training, each of which has a specific purpose. Daily training is aimed at providing a quick update on new teaching and administration techniques, while reinforcing the basic skills needed for daily tasks. Weekly training is designed as an in-depth session on a specific topic, such as teaching methodology, classroom management, or non-technical skill development. This training aims to maintain the quality of skills, improve skills gradually, and provide an opportunity for employees to share experiences and best practices. Annual training includes comprehensive sessions covering annual performance evaluations, strategic planning, and long-term professional development, ensuring alignment with the institution's vision and mission.

A variety of methods are used in training, including workshops and seminars that allow participants to learn from practitioners and experts. Practical training involves simulations and hands-on practice, allowing participants to apply the skills learned in real-life situations. Additionally, mentoring and coaching provide a personal approach, allowing employees to receive direct guidance from senior staff or managers.

After the training program, an evaluation is conducted to measure the effectiveness of the program. Feedback from participants is critical to improving future programs and helping management understand the impact of training on employee performance and engagement within the organization. Even well-designed training programs can face several challenges, including time constraints and varying needs. Employees often have busy schedules, making it difficult to allocate time for training, and they have different needs and backgrounds, making it difficult to design appropriate training programs. While these challenges can impact the effectiveness of a training program and important to understand the perspectives and experiences of the management involved in implementing the training program.

Findings: The Role of Training Programs in Stimulating Enhanced Employee Engagement at Gama English Course (GEC)

Interviews with three management representatives from Gama English Course, specifically from Human Resource Management, Training Coordinator, and Executive Director, revealed important findings regarding the role of training programs in stimulating employee engagement at GEC.

4.1. Professional Development

Professional development is an important aspect of training programs that contributes significantly to improving the quality of individuals in the organization. Structured training allows employees to acquire new knowledge, hone their skills, and develop a more professional work attitude. Its main focus includes improving technical and non-technical skills, increasing self-confidence and professionalism, and improving job competency and knowledge.

Training programs are considered to have an important role in improving both technical (hard) and non-technical skills. Training materials are designed to cover relevant aspects of the job role, from specific technical expertise to interpersonal skills. This structured approach helps employees develop a comprehensive set of skills, ensuring they are ready to meet the demands of a dynamic job. In addition, training improves the English language proficiency of instructors, many of whom do not have an English language education background.

4.2. Enhancing Positive Work Attitudes

Training programs are not only aimed at improving technical skills, but also at forming and strengthening positive work attitudes among employees. Positive work attitudes are crucial for employee engagement as they affect internal motivation, commitment to the organization, and employee perceptions of their work environment. Key aspects include increasing motivation and morale, fostering loyalty and belonging to the organization, and ensuring employees feel valued and recognized by management.

Training significantly boosts employee motivation and morale. When employees are given opportunities to develop themselves and feel that the organization is investing, it naturally fuels enthusiasm to perform better. This investment fosters a sense of belonging, motivation, and commitment to the organization. Furthermore, effective training fosters loyalty and belonging, creating emotional bonds and commitment among employees.

4.3. Internalization of Organizational Culture

Internalization of organizational culture is an important process by which employees understand and adopt the values, norms, and goals of the company. Training programs play a vital role in facilitating this process, ensuring that employees not only know but also embody and apply the organizational culture. Key elements include understanding the organization's vision, mission, and values; fostering awareness of personal contribution to organizational goals; and aligning perceptions and understandings across branches.

Training helps employees understand the organization's vision and mission, enabling employee to understand their role in achieving common goals. Training also fosters awareness of personal contribution, encouraging employees to be proactive in seeking solutions and expressing new ideas. In addition, training provides a platform for employees from different branches to interact and understand each other's work, promoting effective collaboration and a cohesive culture.

4.4. Adaptive Readiness

Employees' ability to adapt in an ever-changing work environment is a key to the sustainability and success of an organization. Training programs play a critical role in building this adaptive readiness, ensuring that employees are not only able to adapt to change but also remain resilient

under pressure. This section discusses how training improves resilience and stress management, and develops flexibility and cross-functional capabilities.

One of the main objectives of training is to enhance employees with the ability to adapt to evolving work systems and changes. Today's work environment is characterized by constant innovation and shifts, requiring employees to be agile in embracing new concepts. At Gama English Course, training programs are regularly updated to align with curriculum reforms, requiring adaptability to non-standard schedules and instructional shifts.

Training is designed to prepare employees for scenarios outside their routine, equipping with a flexible mindset. Employees at GEC have demonstrated the ability to adapt to new systems and easily switch between tasks or roles, even amidst structural changes or evolving needs. An important aspect of adaptive readiness is increasing employees' resilience and ability to manage stress. Change often comes with pressure and challenges, and training can provide employees with strategies to stay productive. Resilient employees are able to deal with challenges and changes more effectively, ensuring they stay focused on their goals and are able to find solutions independently.

Training also plays a role in developing employees' flexibility and cross-functional capabilities. In modern organizations, employees are expected to contribute across multiple areas, not just in their specific roles. Employees who undergo training feel better prepared to handle different tasks and face new situations in the workplace.

4.5. Enhancing Interpersonal Relationships

Strong and positive interpersonal relationships are an essential foundation for a healthy and productive work environment and a key factor in enhancing employee engagement. Training programs are designed not only to equip employees with technical skills, but also to strengthen social bonds and communication between employees. This section discusses how training contributes to strengthening social relationships and team collaboration, fostering a culture of mutual support and open communication, and increasing engagement and positive interactions between employees.

Training at GEC contributes to strengthening social relationships between employees and customers. The interactions that occur during training not only strengthen relationships between individuals, but also improve service to students and parents. Collaborative teaching programs further enhance social relationships between employees, as good relationships can improve cooperation and productivity.

Training plays a vital role in fostering a culture of support and open communication in the workplace, thereby increasing overall team effectiveness. Employees are encouraged to prioritize collaboration and information exchange, allowing them to solve problems collectively without relying solely on management.

Ultimately, all efforts to enhance interpersonal relationships lead to enhanced engagement and positive interactions among employees. An inclusive and collaborative training environment creates opportunities for employees to connect outside of the routine work context. When employees feel connected and interact positively, they tend to be happier, more satisfied, and more engaged in their work and organization.

4.6. Proactive Engagement

Proactive engagement reflects the level of employee initiative and participation that goes beyond standard job requirements. It is a strong indicator that employees are not only physically present but also mentally and emotionally engaged in the success of the organization. Training programs have proven to be effective in stimulating this important dimension. This section analyzes how training encourages active participation in organizational development programs and initiatives, facilitates involvement in relevant decision-making processes, and enhances independence and responsibility in task management.

Training serves as a key trigger for active employee participation in organizational development programs and initiatives. When employees perceive training programs as relevant to their needs and career goals, they are motivated to engage further. Employees at GEC demonstrate high levels of participation in training programs, actively participate in training activities, and demonstrate enthusiasm for learning and development.

In addition, training programs pave the way for employee involvement in relevant decision-making processes, thereby creating a safe environment for discussions. This encourages employees to express their valuable ideas and inputs with confidence. Employees are involved in providing feedback on the design of training programs, which enhances their confidence in expressing ideas and opinions regarding organizational development.

As a result of training, there is a marked enhance in employee independence and responsibility in task management. Employees who have mastered new skills and feel more confident tend to take more initiatives in carrying out responsibilities without relying solely on management directives. This proactive involvement fosters a sense of ownership and accountability among employees, which contributes to the overall productivity and innovation of the organization.

4.7. Providing Psychological Support

A healthy work environment encompasses not only physical facilities but also the mental and emotional well-being of employees. Training programs play a vital role in providing psychological support, creating an environment where employees feel safe, heard, and supported. This section discusses how training creates a safe space to ask questions, discuss problems, and express opinions; encourages courage to share ideas and solve problems; and builds a supportive and inclusive work environment.

One of the most significant impacts of training programs is their ability to create a safe space for employees to ask questions, engage in discussions, and express opinions. Employees often feel more comfortable expressing themselves without fear of judgment or unconstructive criticism. Training sessions provide an opportunity for employees to ask questions and openly share opinions, which helps to enhance their confidence levels.

A supportive training environment not only creates a sense of security, but also actively encourages employees to express ideas and solve problems. When employees know that their opinions are valued and that they will not be punished for asking questions or proposing solutions, they become more courageous. This supportive environment promotes open communication and strengthens collaboration between employees.

Structured training at Gama English Course contributes to building a supportive and inclusive work environment. A supportive environment means that employees feel supported by their

colleagues and management, while inclusivity ensures that all voices are valued and that each individual feels they have a place. This foundation is essential for engagement, as employees who feel supported and valued are more motivated to contribute.

4.8. Providing Feedback and Development Facilities

Effective training programs do not end with the learning session; they continue with a support system that allows employees to continue to grow and develop. Providing feedback and development facilities is key to ensuring that learning is integrated into everyday work practices and that employees have a clear path to career advancement. This section discusses how organizations conduct structured and ongoing program evaluations, provide monitoring and constructive feedback from management, identify employee development needs, and facilitate individual career development and potential.

To ensure the effectiveness and relevance of training programs, structured and ongoing evaluation is necessary. This process is essential for measuring the impact of training and making improvements. Regular evaluations serve as the basis for ongoing improvement, ensuring that each training program delivers maximum value to employees and the organization.

Monitoring and constructive feedback from management is an essential component of the development process. Regular feedback allows management to identify training strengths and weaknesses and assess the appropriateness of the material for a particular individual or branch. This feedback forms the basis for adjusting the training program to better align with the real needs in the field.

Before training is conducted, the process of identifying employee development needs is fundamental. This ensures that the program offered is relevant to the individual's skill gaps and career goals. Involving employees in the needs identification process enhances their sense of ownership of the program.

Ultimately, training programs and feedback systems aim to facilitate individual career development and potential. Employees feel more engaged when they see a clear path for growth and realize that the organization is investing in their future. When employees realize that training opens up new opportunities and helps them achieve their career goals, their engagement is strengthened.
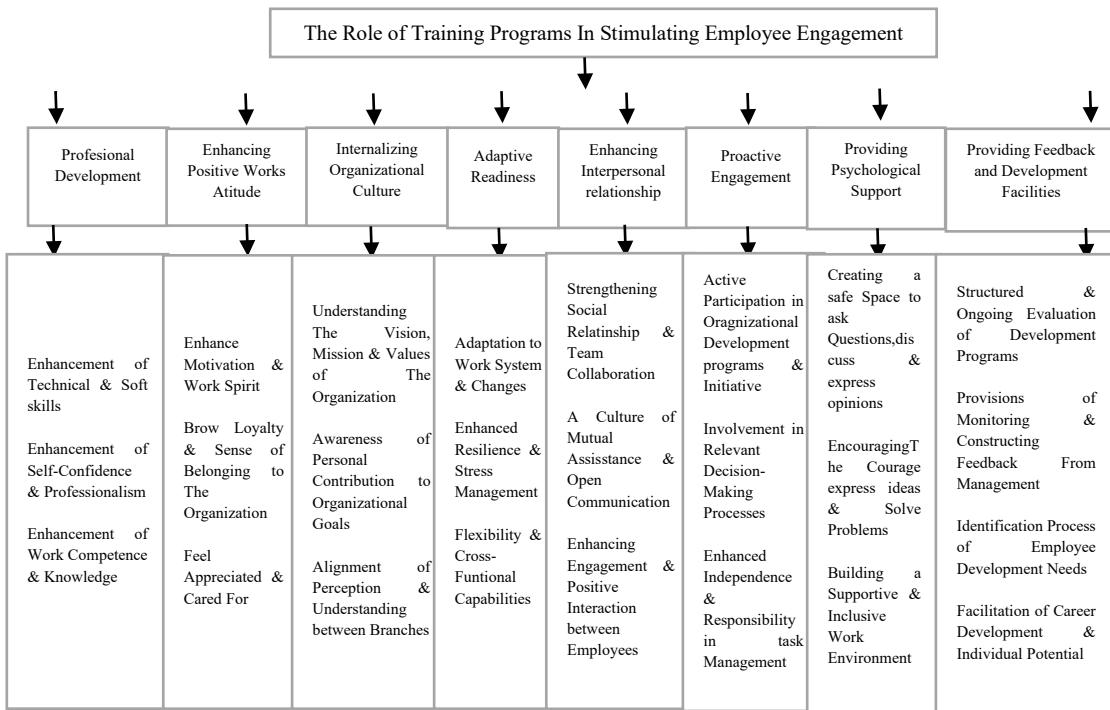
Fig 1. Thematic Diagram of Findings: The Role of Training Programs in Stimulating Enhanced Employee Engagement at GEC

5 Discussion

The findings of the thematic analysis in this study show consistency and differences when compared to previous studies on the role of training programs in enhancing employee engagement in organizations. This study is in line with the findings of Renhoran et al. (2024), which emphasizes the strategic role of training in enhancing employee engagement and productivity. Renhoran et al. highlight training as an irreplaceable long-term investment in human resource development. However, a key difference lies in the research approach. While Renhoran et al. utilized qualitative literature review data and focused on training within the broader framework of performance management strategies and general organizational productivity, the present study delves deeper into the role of training by exploring psychological, social, and cultural aspects within the organizational context of an educational institution. This includes factors such as a sense of security, loyalty, and team cohesion, providing a more nuanced understanding specific to Gama English Course Management [28].

Similarly, the findings resonate with Siddiqui and Sahar (2019), who demonstrated a significant positive influence of training and development on employee engagement, accounting for 55.6% of the variation in employee engagement. This is in line with our observation that strategically designed training programs at Gama English Course (GEC) directly contribute to improving aspects of engagement, such as work enthusiasm, sense of ownership, and proactive involvement. However, there are differences in methodology. Siddiqui and Sahar (2019) used

a quantitative approach, while this study enriches the understanding of the role of training programs through a qualitative perspective [31]. This study highlights that training not only improves performance but also fosters psychological and social conditions that are essential for comprehensive and sustainable employee engagement.

Furthermore, the findings emphasize the importance of adaptive readiness, interpersonal relationships, and psychological support as critical components of employee engagement, which have been under-emphasized in previous studies. The ability of training programs to foster adaptive readiness equips employees to navigate the complexities of a changing work environment, thereby enhancing their resilience and flexibility. This aspect is particularly relevant at Gama English Course, where the educational landscape is constantly evolving.

Additionally, enhancing interpersonal relationships through training programs contributes to a supportive work culture, which is critical for employee engagement. The emphasis on psychological support in training initiatives creates an environment where employees feel safe to express their ideas and concerns, further strengthening their commitment to the organization. These findings align with a growing body of literature recognizing the importance of emotional and social factors in employee engagement, while adding a unique perspective by focusing on the education sector.

In summary, this study contributes to the existing literature by providing a comprehensive understanding of how training programs can enhance employee engagement across multiple psychological, social, and cultural dimensions. The insights gained confirm previous research findings and expand the discourse by highlighting specific contextual factors influencing employee engagement at Gama English Course.

6 Conclusion

The research findings confirm that training programs play a significant role in increasing employee engagement at GEC in various forms. The forms of these roles are: (1) Increasing employee competence and professionalism; (2) Increasing technical and non-technical skills that can increase employee confidence to achieve optimal performance; (3) Increasing employee motivation, enthusiasm, work spirit, loyalty and sense of belonging due to receiving awards and recognition; (4) A catalyst for employees to understand the organization's vision, mission and core values, fostering awareness to contribute and aligning employee perceptions across branches; (5) Increasing the ability to adapt to various work systems and changes; (6) Increasing resilience, stress management and flexibility in facing future work challenges; (7) Improving the quality of social relations and team collaboration; (8) The emergence of a culture of mutual support and open communication that gives rise to positive interactions between employees; and (9) Increasing active participation in development initiatives and decision-making processes, as well as fostering independence and responsibility in task management. Organizations can utilize these findings to optimize existing training programs and design new, more effective initiatives to increase employee engagement. Management can design programs that better meet employee needs and create a work environment that supports individual growth and development. Regular evaluation and feedback from participants are also essential to maintain the relevance and effectiveness of these programs, as well as to ensure continuous improvement in enhancing employee engagement. Therefore, this study not only contributes to academic discourse but also provides actionable recommendations for improving employee performance and satisfaction. Future research is recommended to further explore the role of

training in enhancing employee engagement across various organizational contexts to validate and enrich the findings. Specifically, future research should expand its focus beyond the management perspective to include the perspective of employees as training participants

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The Influence of Work Motivation and Work Environment on Employee Loyalty at PT KAI (Persero) DAOP 5 Purwokerto

Afra Ramadani Oktaviani[1], Retno Dwiyanti[2], Ugung Dwi Ario Wibowo[3], Dian Bagus Mitreka Satata[4]

{afraoktaviani39@gmail.com[1], retnodwiyanti@ump.ac.id [2], ugungs@yahoo.com[3], dbagusms@ump.ac.id[4] }

Universitas Muhammadiyah Purwokerto[1], Universitas Muhammadiyah Purwokerto[2], Universitas Muhammadiyah Purwokerto[3], Universitas Muhammadiyah Purwokerto[4]

Abstract. Employee loyalty is essential for ensuring a company's operational stability and long-term sustainability. However, many organizations face challenges in maintaining high levels of loyalty. This study investigates the influence of work motivation and work environment on employee loyalty at PT KAI (Indonesian Railways) DAOP 5 Purwokerto. Using a quantitative approach and Simple Random Sampling, data were collected from 108 employees through questionnaires. The instruments included a loyalty scale (α = 0.803), a work motivation scale (α = 0.869), and a work environment scale (α = 0.930). Data were analyzed using multiple linear regression. The findings revealed a significant influence of work motivation and work environment on employee loyalty (F = 4.693, t = 6.655, p < 0.01). The coefficient of determination (R^2) was 0.082, indicating that both factors contributed 8.2% to employee loyalty, while 91.8% was influenced by other factors not examined in this study.

Keywords: Work Motivation, Work Environment, Loyalty, Employees.

1 Introduction

The transportation system in Indonesia consists of three types: land, sea, and air. One of the most widely used forms of land transportation today is the train, due to its advantages in terms of time efficiency, affordability, and large carrying capacity in a single trip. It is also considered faster and free from obstacles such as traffic jams, making it increasingly attractive to the public [1].

PT Kereta Api Indonesia (Persero) or PT KAI, as a state-owned enterprise (BUMN), plays an important role in providing safe and affordable public transportation services. one of its main operational areas is PT KAI Operational Area 5 (DAOP 5) Purwokerto, which covers a strategic region in Central Java that plays a vital role in ensuring the smooth operation of railway transportation services while strengthening connectivity between regions on the island of Java.

The operational success of PT KAI DAOP 5 cannot be separated from the role of human resources (HR) in the current era of globalisation, which plays an important role in achieving the goals set by the company. One of the important steps taken by the company is to improve the quality of its employees and manage their loyalty well. Without quality human resources, the company will find it difficult to achieve its goals even if other aspects are adequate [2] Employee loyalty is also a form of positive attitude towards the company. Employees with high loyalty do not only work for personal gain but also contribute to the success of the company [3]

The preliminary study conducted by the author in collaboration with the management of PT KAI (Persero) DAOP 5 Purwokerto identified signs of declining employee loyalty, including resistance to overtime, ineffective communication between superiors and subordinates, and low work motivation. This phenomenon indicates internal issues that could affect the company's operational sustainability.

Work motivation is one of the factors that can influence loyalty, as motivation is the drive an individual has to perform a task, whether it originates from within the individual or from external factors. Additionally, high motivation not only encourages individuals to work to their full potential but also significantly contributes to enhancing employee loyalty toward the company [4].

In addition to work motivation, the work environment also plays an important role in shaping employee loyalty. A conducive work environment can create physical and psychological comfort and build social relationships among employees. The work environment is also viewed as a factor that can influence company performance, both directly and indirectly. When employees feel comfortable, motivated, and emotionally connected to the company, this can enhance their loyalty and help the company retain high-quality employees while maintaining long-term performance stability [1].

However, previous research findings related to the influence of the work environment on loyalty show inconsistent results, for example, research conducted by [5] concluded that there is a significant relationship between the work environment and employee loyalty, but this is contrary to the results of the study conducted [6] The results of the study concluded that the work environment does not have a significant effect on employee loyalty.

The next research findings conducted [7] the results of the study reveal that work motivation has a positive and significant effect on loyalty, but these findings contradict the results of a study conducted [8] which reveals that work motivation does not have a significant effect on loyalty. These findings indicate a research gap that requires further study, particularly regarding the influence of work motivation and work environment on employee loyalty.

Based on the observed phenomena and the discrepancies in previous research findings, the researcher was motivated to conduct further research. Consequently, the researcher is interested in examining the 'Influence of Work Motivation and Work Environment on Employee Loyalty at PT KAI (Persero) DAOP 5 Purwokerto.' This study is expected to provide a deeper understanding of how work motivation and the work environment influence employee loyalty in a more specific context.

2 Literature Review

2.1 Employee Loyalty

Loyalty is a reflection of the psychological bond that connects employees to the company, creating a strong emotional attachment and identity between employees and the organisation. Employee loyalty can also be defined as behaviour that demonstrates consistent support and loyalty to the company where they work [9]. According to [10] Loyalty is the devotion and obedience of an individual or group of employees to the company they work for, this loyalty reflects the mutually binding relationship between employees and the company.

According to [11] loyalty is a commitment shown by employees to remain with the company, which includes a willingness to work overtime, maintain confidentiality of information, comply with regulations without strict supervision, and prioritise the company's goals over personal interests. In evaluating employee loyalty, it is not only necessary to measure physical work results but also to look at the overall performance of tasks, which includes various aspects such as employee loyalty [11] Employee loyalty includes: a sense of belonging to the company, willingness to stay, and trust.

Employee loyalty is not merely physical presence in the company but involves emotional commitment and willingness to sacrifice for the benefit of the company, this loyalty is reflected in the willingness of employees to carry out their duties in accordance with established rules and to maintain the company's image in the public eye.

2.2 Work Motivation

Work motivation is the force that drives a person to continue working so that they achieve goals that are satisfying for both the employee and the company [12]. Work motivation is the driving force that causes employees to willingly and happily direct their abilities, expertise, skills, energy, and time to carry out various activities that are their responsibility and fulfil their obligations, in order to achieve the goals and objectives set by the company [13] There are several aspects of work motivation [14] which include four main regulations within the context of Self-Determination Theory: intrinsic motivation, identification regulation, introjection regulation, and external regulation.

Based on expert opinion, work motivation influences the extent to which employees are willing and enthusiastic to work. At PT KAI DAOP 5 Purwokerto, work motivation can be reflected in the enthusiasm of employees to maintain passenger safety, punctuality of departure schedules, and service quality, whether driven by personal or company satisfaction.

2.2 Work Environment

The work environment encompasses various tools and materials used, the location where an individual performs their tasks, the methods employed in working, as well as the arrangements that support work activities both individually and in groups. This indicates that the work environment is not only composed of physical aspects but also includes social and methodological dimensions that influence individual and team productivity [15]. A supportive work environment is characterised by employees' perceptions that their colleagues are highly engaged in their work and that there is support and facilitation from supervisors for employees' work efforts [16]. The work environment encompasses all conditions surrounding employees

that can influence the performance of their tasks and responsibilities, both physical and non-physical [17].

In this study, the work environment aspect refers to three dimensions: the relationship dimension, the personal growth or goal orientation dimension, and the system maintenance and change dimension. The indicators used include engagement, peer cohesion, supervisor support, autonomy, task orientation, work pressure, clarity, control, innovation, and physical comfort [16].

Employee loyalty can be strengthened through high work motivation and a conducive work environment. Employees who are intrinsically or extrinsically motivated tend to show greater commitment and dedication to the company. Similarly, a supportive work environment can enhance comfort, a sense of belonging, and the desire to remain with the company.

3 Method

This study uses a quantitative approach, with the population consisting of all 140 employees of PT KAI (Persero) DAOP 5 Purwokerto. In this study, each sample was selected using probability sampling. Probability sampling (random sampling) is a sampling technique that gives every member of the population an equal chance of being selected as a sample member [18] The sample size was determined to be 108 people based on the Krejcie and Morgan table. Data collection in this study was conducted using questionnaires and scales. The measurement scale serves as an initial reference for determining the length or shortness of the intervals in the measuring instrument, so that the measuring instrument can provide quantitative data when used for measurement [18] The scale used in this study is the Likert scale with 5 categories. The Likert scale ranges from 'strongly disagree' to 'strongly agree.'

The instruments used in this study include the employee loyalty scale, the work motivation scale, and the work environment scale. The loyalty scale in this study is a modified version developed [10] with aspects of ownership, willingness to stay, and trust. The work motivation scale in this study is a modified version developed [14] based on aspects of intrinsic motivation, identification regulation, introjection regulation, and external regulation. The work environment scale in this study is a construct using a theory developed [16] that refers to indicators of involvement, peer cohesion, supervisor support, autonomy, task orientation, work pressure, clarity, control, innovation, and physical comfort, which are contained in three aspects, namely the relationship dimension, the personal growth or goal orientation dimension, and the system maintenance and change dimension.

The data in this study were analysed using multiple linear regression to determine the simultaneous and partial effects of work motivation (X1) and work environment (X2) on employee loyalty (Y). Prior to this, classical assumption tests were conducted, followed by hypothesis testing using SPSS version 26.

4 Result

Table 1. Results of the Work Motivation Test

Variable	*Unstardarized Coefficient (B)*	t	F	*Sig*	*R Square*
(constanct)	33.230			0,000	0,070
Work Motivation	0,204	2.824	7.973		

Table 2. Results of the Work Environment Test

Variable	*Unstardarized Coefficient (B)*	t	F	*Sig*	*R Square*
(constanct)	33.763			0,000	0,046
Work Environment	0,093	2.272	5.160		

Table 3. F-test results

Variable	*Unstardarized Coefficient (B)*	t	F	*Sig*	*R Square*
(*constanct*)	29.933	6.655		0,000	0,082
Work Motivation	0,163	2.019	4.693		
Work Environment	0,053	1.176	4.693		

Table 4. Coefficient of Determination

Model Summary[b]

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
1	.286[a]	.082	.065	4.328

a. Predictors: (Constant), x2, x1
b. Dependent Variable: y

5 Discussion

The T-test in this study was conducted to determine the relationship between work motivation and work environment variables on employee loyalty. The results of this study show that the significant value of work motivation (X1) on employee loyalty (Y) is 2.284 < 0.05, indicating that H1 is accepted and there is a significant effect of work motivation on loyalty, as shown in Table 1. The results of this study are consistent with previous studies that have shown that work motivation can increase employee loyalty [19].

For significant results in Table 2, the work environment (X2) on employee loyalty (Y) is 2.272 < 0.05, indicating that H2 is accepted, which means that there is an influence of the work environment on employee loyalty. The results of this study are in line with previous studies that have shown that the work environment influences employee loyalty [20].

The F-test in Table 2 shows that the variables of work motivation (X1) and work environment (X2) simultaneously influence employee loyalty (Y) with a significance value of 0.011 < 0.05. This can be interpreted as work motivation and work environment simultaneously influencing employee loyalty.

For the coefficient of determination, the results obtained based on Table 3 show a coefficient of R-square of 0.082 or (8.2%). This indicates that the percentage contribution of the independent variables, namely work motivation and work environment, to employee loyalty is 8.2%, while 91.8% is contributed by other factors outside the scope of this study.

6 Conclusion

This study found that the variables of work motivation and work environment have a significant influence on employee loyalty. When employees have high work motivation and feel comfortable at work, their loyalty to the company increases.

The F-test results indicate that work motivation and work environment simultaneously influence employee loyalty. Based on an R-square value of 0.082, it shows that work motivation and work environment contribute 8.2% to employee loyalty, while 91.8% is contributed by other factors outside the scope of this study.

This study indicates the importance of increasing work motivation as one strategy to enhance employee loyalty. This study has limitations, so further research is expected to improve the results of future studies. In this study, the research was conducted at only one location, so the results cannot be fully applied to other companies or operational areas of PT KAI. Therefore, it is recommended that future research expand the scope of the study area or conduct research in locations not previously studied by researchers, as well as include additional factors influencing employee loyalty, such as job satisfaction, employee engagement, and leadership style, to produce even better research outcomes in the future.

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The Effect of Employee Engagement Training on Organizational Citizenship Behavior among Warehouse Employees at CV. X

Nira Immanuela Saputri[1], Reny Yuniasanti[2]

{225110030@student.mercubuana-yogya.ac.id, *reny.yuniasanti@mercubuana-yogya.ac.id*}

Fakultas Psikologi, Universitas Mercu Buana Yogyakarta, Indonesia[1,2]

Abstract: The modern industrial technology era demands workers to exhibit Organizational Citizenship Behavior (OCB) to adapt and overcome workplace challenges. This study aims to examine the effectiveness of employee engagement training in enhancing OCB among employees. The subjects were 20 warehouse employees divided into an experimental group (EG) and a control group (CG) using random assignment. The instruments used were the OCB scale (α=0.983) and the employee engagement scale (α=0.769). Hypothesis testing employed the Mann- Whitney U test and Wilcoxon signed-rank test, revealing a statistically significant change in OCB levels before and after training ($Z = -2.809$, $p = 0.005$; $p < 0.05$). The mean OCB score in the experimental group was 15.50, significantly higher than the control group's score of 5.50. This study is expected to contribute to the development of OCB enhancement strategies and serve as a reference for companies to implement employee engagement training as a preventive measure.

Keywords: Employee engagement, Organizational Citizenship Behavior (OCB), training

1 Introduction

Data from the Central Statistics Agency in 2024 shows that the manufacturing industry dominates as the main sector with the most significant contribution compared to other sectors. It is noted that the contribution of the manufacturing industry to GDP reached 18.98% in 2024, 18.67% in 2023, and 18.34% in 2022, which means that there has been an increase in the contribution made by the manufacturing industry every year. This figure indicates that the manufacturing industry is experiencing a phase of expansion or growth, signaling increased optimism among industry players [1]. The manufacturing sector is defined as a series of economic activities aimed at transforming goods through mechanical, chemical, or manual procedures to produce final or semi-final products. This process also includes increasing the value of goods that were originally of little value to become more valuable and more suitable for use by end consumers [1]. One of the manufacturing companies in Indonesia is CV. X.

CV. X is a company engaged in the manufacture of soil, concrete, asphalt, hydrology, and climatology testing equipment, located in the Yogyakarta area. Within the Warehouse area, there are two interrelated units, namely the Operations Department and the R&D Department. The Operations Department is responsible for *sales orders* coming from the Marketing Department. In addition to being responsible for the product manufacturing process, the Operations Department is also responsible for providing *after-sales service.*

Meanwhile, the R&D (Research & Development) Department is responsible for developing high-quality products that are competitive in the market. This department conducts research and development on existing products, as well as other products that serve as references. The results of the development or new findings from the research conducted by the R&D team are then coordinated with the Operations Department so that they can be produced in accordance with the existing design, and then coordinated with the Marketing Department for marketing.

Currently, more and more similar businesses are emerging and becoming competitors for CV. X. This is also a challenge for CV. X to attract customers to place orders and establish continuous cooperation. According to Sunarto & Muhid [2], increased business competition will certainly be a challenge for every company to be dynamic and innovative in developing their business. To remain relevant and competitive in this dynamic environment, companies often rely on employees who demonstrate superior performance and expertise [3]. This opinion is reinforced by Wahjunianto [4], who states that in this era of modern industrial technological development, the challenges faced by companies not only require employees to be equipped with high-tech devices, but also demand a workforce with extraordinary skills and resilience to overcome various obstacles in the workplace.

The key to achieving success in business lies in the workforce. The proactive contribution of workers in advancing business productivity is very important. This shows that the success of achieving business goals does not only depend on officially assigned tasks, but also on the initiative and willingness of workers to voluntarily provide additional effort [5]. Muhdar [6] also states that without employees who demonstrate organizational citizenship behavior (OCB), a company will not be able to achieve success or survive for long. Organizational citizenship behavior is defined as voluntary actions taken by individuals in the workplace to promote the collective well- being of the group [7]. According to Alhasani, Suswati, & Wahyono [8], the progress of a company's performance is closely related to the actions exhibited by its employees, where employees are expected to not only engage in behaviors related to standard task performance (in-role), but also engage in behaviors that go beyond these tasks (extra-role). As stated by Soedarmadi [9], one example of organizational citizenship behavior is voluntarily helping coworkers, which can improve harmonious relationships and team effectiveness. This is also important for employees of CV. X, where the company requires employees to perform beyond what they are expected to do. In other words, the company gives employees the freedom to help each other outside of their main duties and responsibilities, as well as to learn new things or take on new tasks outside of their main duties so that they can help and support each other in achieving the company's goals.

Based on interviews conducted with the Finance Manager, Support Manager, Marketing Manager, Operations Manager, and three employees, it was found that employees lack the organizational citizenship behavior necessary to achieve success in their work. Employees appear apathetic toward active participation in managerial activities, show an unwillingness to be promoted, and are not proactive in presenting strategic ideas during morning briefing sessions. Meanwhile, according to Gunnesch-Luca & Moser [7], individuals who exhibit positive organizational citizenship behavior tend to actively participate in organizational activities and pay attention to the survival of the organization (civic virtue). Employees tend to refuse to help colleagues with work problems, choosing to concentrate on individual tasks and responsibilities without offering help or asking about the difficulties faced by others. while according to Gunnesch-Luca & Moser [7], individuals who exhibit positive organizational citizenship behavior tend to take the initiative to provide assistance to coworkers or take over responsibilities when needed, are willing to set aside time to help

coworkers, and strive to handle and avoid problems that may arise (helping behavior); employees often express complaints about fluctuating bonuses and salary deductions as part of sanctions in joint sessions with HR, without trying to meet target on time at work or provide suggestions to increase turnover so that bonuses increase, whereas according to Gunnesch-Luca & Moser [7], individuals who exhibit positive organizational citizenship behavior tend to be calm and accepting of working conditions that are not in line with their wishes, but they remain committed to performing their duties to a high standard without showing dissatisfaction (sportsmanship); lack of dedication to completing tasks and a high employee turnover rate exceeding 10%, whereas according to Gunnesch-Luca & Moser [7], individuals who exhibit positive organizational citizenship behavior tend to protect and defend the organization (loyalty); and high rates of tardiness among warehouse employees compared to their counterparts in other offices, a habit of arriving at work but not immediately starting work, and a tendency to sleep during working hours, which indicates inefficient use of working time, whereas according to Gunnesch-Luca & Moser [7], individuals who exhibit positive organizational citizenship behavior tend to strive to work beyond the expectations set by the company (conscientiousness).

2 Literature Review

To address the issue of organizational citizenship behavior, one approach that can be applied is through training programs [10]. Training is key for companies to equip their employees with the necessary skills so that they can act more productively and solution-oriented in facing challenges in the workplace [11]. Training is designed to strengthen organizational citizenship behavior by focusing on increasing employee engagement as one of the main factors that drive such behavior [12]. According to Organ [13], factors that can influence organizational citizenship behavior include internal and external factors, where employee engagement is an internal factor in influencing organizational citizenship behavior.

Santosa [14] reveals that employee engagement is a manifestation of employee dedication to work tasks that exceed organizational expectations, where employees participate actively and enthusiastically in their work. Apriwanti [15] adds that employee engagement is considered crucial because it can trigger positive attitudes among employees, including happiness at work, dedication to the organization, and a strong understanding of organizational identity. According to Phuangthuean et al [16], individuals who are actively involved in their work, characterized by a willingness to take part and take the initiative in completing their assigned tasks, tend to show high dedication to their duties. Employees will be focused and fully concentrated, giving their all in carrying out their responsibilities, displaying a deep level of attachment to the values, vision, and goals of the company to which they contribute. This high level of attachment fuels enthusiasm and motivation to complete every work challenge effectively, while low attachment can result in suboptimal work results, disappointment, and even a tendency to leave the company [17]. Meanwhile, according to Kahn [18], the aspects of employee engagement include intellectual engagement, social engagement, and affective engagement. The aspects according to Kahn [18] were used as the aspects of the training sessions conducted in this study.

The training method used is in line with Lewin's model theory, which explains that in order to change employee behavior, it is necessary to first introduce and provide knowledge about the behavior to be formed so that employees have the desire to change their behavior in accordance with the company's expectations [19]. Lewin's model theory includes stages in

making continuous changes in long-term organizational management, namely unfreezing, movement, and refreezing. Employee engagement training will be conducted using the structured experience method, where training participants will be invited to think and analyze an experience through a learning process. Structured experience consists of five stages, namely experiencing, publishing, processing, generalizing, and applying. The training is not only intended to provide additional knowledge to participants, but also to encourage them to apply what they have learned in the form of attitudes and behaviors in their work environment. The training is conducted using various learning methods, namely lectures, discussions, reflections, and games.

Organizational citizenship behavior can be improved through training methods, where employee engagement training is expected to increase organizational citizenship behavior among employees. Based on research conducted by Setyawan & Sahrah [10] and Widayanti [19], the training methods provided were able to improve organizational citizenship behavior in employees. In addition, based on research conducted by Wibowo & Izzati [21]; Sari, Harahap, & Sari [22]; Priskila, et al. [23] state that employee engagement plays an important and significant role in improving organizational citizenship behavior, where employees who are engaged in their organization will do more than what is required by the organization where they work, take less sick leave, increase productivity, and have a high level of commitment to the organization. Therefore, it is crucial for companies to invest time and resources in developing and improving employee engagement as a strategy to achieve optimal work performance.

The hypothesis proposed in this study is: (1) There was a difference in organizational citizenship behavior between the experimental group and the control group. The level of organizational citizenship behavior in the experimental group was higher than in the control group after participating in the training. (2) There is a difference in organizational citizenship behavior between the experimental group before and after participating in training employee engagement. The level of organizational citizenship behavior in the experimental group after participating in the training was higher than before participating in the training.

This study aims to determine the effect of employee engagement training on organizational citizenship behavior among warehouse employees at CV. X. This study is expected to contribute to the development of psychology, particularly in the field of industrial and organizational psychology, from a theoretical perspective. It is hoped that these findings will serve as a useful guide for further research aimed at enriching the science of organizational citizenship behavior and exploring employee engagement training strategies in greater depth. The practical benefits of this study lie in the research results, which serve as a contribution to thinking and a reference for companies in formulating strategies related to training programs to improve workforce effectiveness and prepare employees to anticipate the dynamics of change. This study aims to broaden the understanding of employee engagement and its influence on increasing workforce productivity. Furthermore, companies and practitioners can implement employee engagement training strategies when faced with issues related to organizational citizenship behavior.

3 Method

The subjects of this study were warehouse employees at CV. X who had moderate and low

levels of organizational citizenship behavior based on the results of a pretest. There were 20 research subjects divided into two groups, namely 10 people in the experimental group and 10 people in the control group. The researcher divided the respondents randomly using a drawing system to divide the subjects into the experimental group and the control group. The measurement tool used in this study was the Organizational Citizenship Behavior Scale developed by Gunnesch-Luca & Moser [7], which includes five (5) dimensions, namely civic virtue, helping behavior, sportsmanship, loyalty, and conscientiousness, and the Employee Engagement Scale developed by Phuangthuean, et al [16], which includes three (3) dimensions, namely intellectual engagement, social engagement, and affective engagement. Both scales underwent an adaptation process based on the theory proposed by Douglas & Craig [24], which states that there are two stages in the adaptation process of measurement tools with a cross-cultural context, namely forward translation and back translation. After testing, the organizational citizenship behavior scale showed a reliability coefficient of 0.983, so that the scale can be categorized as highly reliable for use in this study [25]. Then, the employee engagement scale showed a reliability coefficient of 0.769, so that the scale can be categorized as quite reliable for use in this study [25].

This study used a quasi-experimental research design by dividing the subjects into two groups, namely a number of subjects who received treatment as the experimental group and a number of subjects who did not receive treatment or became the comparison group as the control group [26]. In this study, the experimental group and the control group were given a pretest, then the experimental group was given treatment in the form of employee engagement training, while the control group was not given any treatment beforehand. Next, a posttest will be conducted on the experimental group and the control group after the experimental group has been given training to determine the results or differences before and after the treatment was given. This is done to determine whether employee engagement training has an effect on increasing the level of organizational citizenship behavior in the research subjects compared to the pretest scores.

The employee engagement training program was developed based on the theory of Phuangthuean, et al. [16] in the form of an employee engagement training module. The steps taken during the training included the Opening Session, Session I Affective Engagement: Think Positive!, Session II Intellectual Engagement: Be Productive!, Session III Social Engagement: Same Goals!, Session IV Conclusion and Reflection, and Closing Session: Training Evaluation. The evaluation was conducted using the Kirkpatrick model after the training activities were completed, consisting of three levels: reaction level, learning level, and behavior level.

The data analysis method used in this study employed IBM SPSS version 25. The data will be analyzed using non-parametric tests, namely the Mann-Whitney test to test whether there is a difference in organizational citizenship behavior between the experimental group and the control group; and the Wilcoxon test to test the difference between the two related data groups to determine whether there is a difference in the level of organizational citizenship behavior in the experimental group before and after employee engagement training.

4 Results

Reaction evaluation is the result of participants' assessment of the material, organizers, facilities, and trainers. Based on the results of the reaction evaluation that has been carried out, it was found that the average reaction evaluation score was very good with an average

score of 4, which means that the material provided was relevant and useful, the activities carried out were liked by the participants, the trainers mastered the material and were able to transfer knowledge to the participants, the tools used during the training process were considered helpful and supported the training process, and the refreshments provided were liked by the training participants. Regarding the material presented, participants gave a rating of 4, which means that the research subjects felt that the material presented was in line with the needs and conditions of their work in carrying out their duties in the work environment. Furthermore, the Activities aspect had an average score of 4, which is in the very good category, but in terms of timeliness, it received a score of 3.9 due to delays in the implementation of training activities. Furthermore, the Trainer aspect received an average score of 4, which is in the very good category, meaning that participants easily understood the material provided by the trainer, the trainer also mastered the material clearly and explained it systematically, was able to answer participants' questions, and encouraged a desire to work together. Furthermore, in terms of Tools, it has an average score of 4, which is in the very good category, meaning that the facilities and tools during the training process were in good condition and able to support the ongoing training process. Furthermore, in terms of Others, it has an average score of 4, which is in the very good category, meaning that participants were satisfied with the food provided and felt that the training was beneficial.

1. Knowledge Evaluation. Based on the results of the knowledge evaluation, it can be seen that after the employee engagement training was conducted, the participants' understanding of the material provided increased. Before the training was given, the average overall knowledge score on the pretest was 46, which is in the low category, meaning that before the training was given, the participants did not yet know about the concepts and knowledge of the training that would be conducted. However, after the training was given, the total average knowledge evaluation score was 100, which is in the high category, meaning that after the training was given, the participants already knew about the concepts and knowledge of the training that was conducted.

2. Behavior Evaluation. The behavior evaluation results used a pretest-posttest employee engagement scale. Based on the mean score before the training was conducted, the score was 22.40, and after the training was conducted, the score was 30.40. This indicates a change in the behavior of the training participants after the training was conducted, where after the training it was higher than before the training, so there was a difference between the posttest and pretest in the experimental group.

Hypothesis Test

The results of the *Mann-Whitney* test that has been carried out are shown in the table below, namely.

Table 1 Mann-Whitney Test

	OCB
Mann-Whitney U	.000
Wilcoxon W	55.000
Z	-3.819
Asymp. Sig. (2-tailed)	.000
Exact Sig. [2*(1-tailed Sig.)]	.000[b]

Table 2. *Mann-Whitney* Test *Ranks*

	Group	N	Ranks Mean Rank	Sum of Ranks
OCB	Experimental Group	10	15.50	155
	Control Group	10	5.50	55.00
	Total	20		

Based on the *Mann-Whitney* test results, a Z value of -3.819 with a significance of 0.000 (p<0.005) was found. This indicates a difference between the *organizational citizenship behavior* scores on *the posttest* of the experimental group and the control group. This difference can be seen in *the rank* of the experimental group with a score of 15.50 and the control group with 5.50. Based on the table above, it can be concluded that the *organizational citizenship behavior* scores in the experimental group are higher when compared to the *organizational citizenship behavior* scores in the control group, with an average *rank* difference of 10.5. The second hypothesis test used the *Wilcoxon* test, with the results shown in the table below.

Table 3 Wilcoxon Test Ranks

		N	Mean Rank	Sum of Ranks
Posttest OCB - Pretest OCB	Negative Ranks	0 a	.00	.00
	Positive Ranks	10[b]	5.50	55.00
	Ties	0 c		
	Total	10		

a. Posttest OCB < Pretest OCB
b. Posttest OCB > Pretest OCB
c. Posttest OCB = Pretest OCB

Based on the *Wilcoxon Rank* Test data table above, it can be seen that 10 subjects experienced an increase in *organizational citizenship behavior* after being given *employee engagement* training compared to before being given *employee engagement* training.

Table 4 Wilcoxon Test

Test Statistics[a]	
Z	2.809[b]
Asymp. Sig. (2-tailed)	.005

a. Wilcoxon Signed Ranks Test
b. Based on negative ranks.

Based on the results of the *Wilcoxon* test, it is known that the Z value is -2.809 with a significance of 0.005 (p<0.05). This indicates that the hypothesis is accepted, namely that there is a change in *organizational citizenship behavior* in the experimental group before and after being given *employee engagement* training.

5 Discussion

The training was provided to employees who met the characteristics, namely warehouse employees of CV. X. The training subjects were predominantly male, numbering 8 people, while there were 2 female employees; the length of service of the employees was 3 people for 1 year, 2 people for 2 years, 2 people for 3 years, 2 people for 5 years, and 1 person for 10 years. The age range of the training subjects was from 23 to 40 years old. Based on the results of the hypothesis test to determine the difference in *organizational citizenship behavior* before and after the *employee engagement* training was given, a Z value of -2.809 with a significance of 0.005 (p<0.05) was found, so the proposed hypothesis was accepted. Furthermore, based on the *Wilcoxon* Test *Ranks* data table, it can also be seen that 10 subjects experienced an increase in *organizational citizenship behavior* after receiving *employee engagement* training compared to before receiving *employee engagement* training, so it can be concluded that *organizational citizenship behavior* has increased significantly.

This accepted hypothesis is also supported by the training process that took place. This can be seen from the results of the evaluation of participants' responses to the material, activities, trainers, teaching aids, and so on. Participants' positive reactions to the *employee engagement* training contributed to the overall success of the training program. When participants felt satisfied with the material, the delivery method, and the trainers' abilities in
By explaining the topic clearly, practically, and systematically, training participants will show a high level of engagement during the training process. Based on research conducted by Sahrah & Yuniasanti [27] it is explained that training methods that use game models will encourage each training participant to participate actively, making participants feel more involved and eager to practice the results of the training.
This is also reinforced by the results of knowledge evaluations, which show a significant increase in knowledge scores before and after the employee engagement training was provided. Based on research by Siregar [28], high participant satisfaction can influence the training implementation process in an effort to increase participant knowledge, which will influence changes in participant behavior. Furthermore, Siregar [28] also explains that increased knowledge will have a positive impact on the transfer of learning to employees in carrying out their daily tasks or work. Thus, the positive reactions of training participants are not only an indicator of satisfaction, but also serve as the main driver for achieving training objectives. The new knowledge gained during training provides training participants with the ability to recognize and utilize aspects of employee engagement in the context of their daily work.
Based on the results of behavioral evaluation, it can also be seen that there were behavioral changes experienced by training participants after being given employee engagement training. The results show a significant increase in scores before and after the training, with a mean score of 22.40 before the training and 30.40 after the training. This indicates a change in behavior among training participants after the training, where the post-training score is higher than the pre-training score, showing a difference between the post-test and pre-test in the experimental group.
Based on the Mann-Whitney test results, it is known that there is a posttest value in organizational citizenship behavior between the experimental group and the control group,

which shows a Z value of -3.819 with a significance of 0.000 ($p<0.005$), where a difference was found between the organizational citizenship behavior scores in the posttest of the experimental group and the control group. This difference can also be seen in the ranks of the experimental group with a score of 15.50 and the control group with a score of 5.50, which shows that the level of organizational citizenship behavior in the experimental group that received employee engagement training was higher than in the control group that did not receive employee engagement training. Thus, it can be concluded that employee engagement training can increase organizational citizenship behavior among CV. X warehouse employees.

In the civic virtue dimension, the average pretest score obtained before participating in the training was 5.6, while the average posttest score after participating in the training was 10.5. Based on this data, it can be seen that there was an increase in the civic virtue dimension, indicating that after the training was given, the level of employees' contribution to company activities and a high sense of responsibility for the continuity of the company in each individual increased. This increase shows that employees care and are willing to be actively involved in the organization by attending meetings, providing input, and caring about the policies and direction of the organization's development, where employees feel that they are part of the organization and have a moral responsibility to contribute fully to the organization.

In the helping behavior dimension, the average pretest score obtained before participating in the training was 4.6, while the average posttest score after participating in the training was 6.4. Based on this data, it can be seen that there was an increase in the helping behavior dimension, indicating that after the training was given, the level of support provided to coworkers increased. This increase shows that employees voluntarily help their coworkers by providing support, sharing information, helping to complete tasks, and showing empathy in difficult situations experienced by coworkers, even though this is not part of their formal responsibilities.

In the sportsmanship dimension, the average pretest score obtained before participating in the training was 3, while the average posttest score after participating in the training was 6. Based on this data, it can be seen that there was an increase in the sportsmanship dimension, indicating that after the training was given, employees had increasingly optimistic views and a willingness to put the collective needs of the company above their personal interests. This improvement shows that employees are more tolerant of challenges or changes that occur in the current work environment and are able to maintain a professional attitude at work even when faced with stressful situations, obstacles, or organizational decisions that may not be in line with employees' personal expectations, thereby reducing the potential for unproductive complaints, gossip, or interpersonal conflicts.

In the loyalty dimension, the average pretest score obtained before participating in the training was 2, while the average posttest score after participating in the training.

Based on this data, it can be seen that there was an increase in the loyalty dimension, indicating that after the training was given, the level of employee dedication to completing tasks, positions, and overall roles within the organization increased. This increase shows that employees have a desire to continue to support, maintain a positive image, and defend the organization when it faces challenges or criticism from internal or external parties, as well as to maintain the good name of the organization by conveying the good things about the organization to the surrounding environment.

In the conscientiousness dimension, the average pretest score obtained before participating in the training was 7, while the average posttest score after participating in the training was 14. Based on this data, it can be seen that there was an increase in the conscientiousness dimension, indicating that after the training was given,

Employees' initiative to expand their knowledge and skills, willingness to take on more

responsibilities beyond their formal duties, arriving at work earlier than scheduled, and using working hours as efficiently as possible are on the rise. This increase indicates that employees have a high sense of responsibility, discipline, punctuality, and compliance with organizational rules and procedures without the need for strict supervision by the organization.

The contribution of employee engagement in improving organizational citizenship behavior is oriented towards the dimensions that build employee engagement, which include intellectual engagement, social engagement, and affective engagement. The level of intellectual engagement refers to the cognitive involvement of employees in their work, which includes attention, concentration, and critical thinking towards the tasks at hand, where employees with high levels of intellectual engagement tend to exhibit organizational citizenship behavior in the form of conscientiousness and civic virtue, which not only completes tasks according to standards but also takes the initiative to improve the quality of work and actively participates in organizational activities [29]. Furthermore, social engagement refers to employees' social involvement, including positive interactions with coworkers and participation in the work environment, where employees with high social engagement tend to exhibit organizational citizenship behavior in the form of helping behavior and sportsmanship, namely employees who are willing to help coworkers, maintain harmonious working relationships, and show tolerance for less than ideal working conditions in the organization. Finally, affective engagement refers to employees' emotional attachment to their work and organization, characterized by enthusiasm, spirit, and pride in their work, where employees with high affective engagement tend to exhibit organizational citizenship behavior in the form of loyalty and civic virtue, employees will show loyalty to the organization, actively participate in organizational activities, and support organizational goals.

6 Conclusion

Based on the results of the study, it can be concluded that there is a difference in the level of organizational citizenship behavior between the experimental group that received employee engagement training and the control group that did not receive employee engagement training. Employee engagement training was able to increase the level of organizational citizenship behavior in the experimental group. This can be seen from the organizational citizenship behavior scores in the experimental group, which were higher than the organizational citizenship behavior scores in the control group. Furthermore, there was a difference in the level of organizational citizenship behavior in the experimental group between before and after receiving the treatment in the form of employee engagement training. This can be seen from the Wilcoxon Rank Test data, which shows that there were 10 participants experienced an increase in organizational citizenship behavior levels after receiving employee engagement training, compared to before receiving organizational citizenship behavior training.

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The Influence of Work-Life Balance and Organizational Climate on Job Satisfaction of Employees of PT KAI Daop 5 Purwokerto

Tasya Angelina Pesik[1], Retno Dwiyanti[2]

{pesikangelina@gmail.com, retnodwiyanti@ump.ac.id}

Faculty of Psychology, Muhammadiyah University of Purwokerto[12]

Abstract. Job satisfaction is an emotional attitude of employees that arises in response to work, influenced by aspects of life and the work environment. This study aims to examine the effect of work-life balance and organizational climate on job satisfaction in employees of PT KAI Daop 5 Purwokerto. The study used a quantitative approach with 108 respondents and instruments in the form of Job Satisfaction Survey (Spector), Work-Life Balance Scale (Fisher), and Organizational Climate Questionnaire (Litwin & Stringer). The regression analysis results show that work-life balance has a positive and significant effect on job satisfaction (t = 8.240; R^2 = 0.141; p = 0.00), as well as organizational climate (t = 5.452; R^2 = 0.331; p = 0.00). Simultaneously, both variables contributed 47.8% to job satisfaction (F = 48.148; R^2 = 0.478; p = 0.00). This finding confirms the importance of work-life balance and positive organizational climate in increasing employee job satisfaction.

Keywords: Job satisfaction, work-life Balance, organizational climate

1 Introduction

Indonesia is a country with various types of transportation, one of which is land transportation in the form of trains which is a favorite choice for the public because of its speed, schedule accuracy, affordable costs, and comfortable service [1] . PT Kereta Api Indonesia (KAI) as a state-owned enterprise engaged in transportation services has a strategic role in serving the public through its operational network on the islands of Java and Sumatra [2]. One of the important operational areas is Daop 5 Purwokerto which is supported by competent human resources (HR) and plays an important role in supporting the company's goals. Quality HR will be more motivated and comfortable if their job satisfaction is met [3]. Therefore, companies need to pay attention to factors that influence job satisfaction.

Job satisfaction is a positive emotional state experienced by individuals when their work meets expectations, the work environment is supportive, and they receive good treatment [4]. When employees have a positive perception of the organizational environment, constructive attitudes and behaviors will emerge that support performance [5]]. However, the results of initial interviews with the HR manager of PT KAI Daop 5 Purwokerto showed employee dissatisfaction due to excessive working hours and an unsupportive work environment. This indicates the importance of a balance between work and personal life or work-life balance in supporting job satisfaction [6]. Job satisfaction is also related to perceptions of the organizational climate which influences comfort and safety at work [7].

Previous research has shown that work-life balance and organizational climate have a positive relationship with job satisfaction, namely research conducted by [8] [9] . Imbalance between work and personal life and an unconducive organizational climate can reduce the quality of work life and employee commitment. Conversely, when these two factors are managed well, employees will feel more satisfied, loyal, and motivated. PT KAI Daop 5 Purwokerto needs to pay attention to this as part of its HR management strategy. Based on this phenomenon, this study was conducted to determine the effect of work-life balance and organizational climate on job satisfaction among PT KAI Daop 5 Purwokerto employees.

2 Literature Review

2.1 Job satisfaction

Job satisfaction is an emotional attitude that employees show towards their work, characterized by positive or negative responses to various aspects of the job. According to Spector [11], [10] Job satisfaction is influenced by nine aspects, namely salary, promotion, supervision, additional benefits, awards, work procedures and regulations, coworkers, the work itself, and communication. Herzberg [11] distinguishes between motivational (intrinsic) and hygiene (extrinsic) factors that influence attitudes toward work. Motivational factors such as achievement and responsibility correlate with job satisfaction, while hygiene factors such as salary and company policies are related to dissatisfaction if not met. The level of job satisfaction also reflects the quality of psychological well-being and employee morale. Therefore, understanding these aspects is important for designing effective organizational interventions.

2.2 Work-life balance

Work-life balance is defined as an individual's ability to manage and balance the demands of work with their personal life. Fisher et al., [12] proposed four aspects of work-life balance: work interferes with personal life, personal life interferes with work, work enhances personal life, and vice versa. Previous research has shown that work-life balance positively contributes to job satisfaction. Imbalance tends to trigger stress, role conflict, and decreased performance, especially if work demands sacrifice personal time. Implementing strategies such as flexible work schedules, family leave, and family support facilities is highly recommended to improve employee well-being. Therefore, work-life balance is not only beneficial for employees, but also has a positive impact on the organization as a whole.

2.3 Organizational climate

Organizational climate refers to employees' perceptions of the organization's atmosphere and social structure, including prevailing values, norms, and leadership styles. Litwin & Stringer [14] define organizational climate as the result of employees' experiences that shape their perceptions of the work environment. A positive organizational climate is characterized by clear structures, rewards, support, and a strong sense of responsibility among team members. A study by Del Ángel- Salazar et al., [9] found a positive correlation between organizational climate and job satisfaction levels. Employees who feel comfortable and valued in the organization tend to demonstrate higher loyalty and performance. Therefore, organizational climate is an important aspect in creating a healthy and productive work environment.

2.4 Previous research.

Previous research has extensively discussed the relationship between work- life balance and job satisfaction, as well as between organizational climate and job satisfaction. A study by Yusnani and Prasetio [12] confirmed that work-life balance significantly influences job satisfaction. Similarly, Adrian and Arianto [15] found that a conducive organizational climate can increase employee job satisfaction. However, research remains limited in the context of state-owned enterprises, particularly in the transportation sector. The limited number of studies examining both variables simultaneously within PT KAI Daop 5 Purwokerto indicates a relevant research gap. Therefore, this study is important to provide an empirical contribution to the development of human resource management practices in the public sector.

Based on theoretical review and previous research, it can be concluded that work-life balance and organizational climate are two factors that conceptually and empirically have a significant relationship with job satisfaction. Work-life balance affects employees' psychological and emotional well-being, while organizational climate shapes perceptions of the work environment. Therefore, this study is based on the conceptual framework that the better the work- life balance and organizational climate, the higher the level of job satisfaction experienced by employees. work-life balance and organizational climate are among the external factors that influence job satisfaction.

3 Method

This study uses a quantitative approach with a correlational research design that aims to determine the effect of work-life balance and organizational climate on job satisfaction among employees of PT KAI Daop 5 Purwokerto. This design is used to empirically test the relationship between variables based on data collected through a survey.

3.1 Participants

The population in this study was all 150 employees of PT KAI Daop 5 Purwokerto. Based on Krejcie and Morgan (1970) , the sample taken was 108 respondents. The sampling technique used was probability sampling with a simple random sampling method, so that each member of the population had an equal opportunity to be selected as a sample. The respondent recruitment process was carried out through coordination with the company's HR department.

3.2 Instrument

Data collection was conducted using three types of psychological scales, namely Job Satisfaction measured using the Job Satisfaction Survey (JSS) from Spector, [11] which has been adapted and validated in the Indonesian context. This scale consists of 36 items covering 9 aspects such as salary, promotion, supervision, additional benefits, and communication. Work-Life Balance was measured using the Work-Life Balance Scale developed by (12) which consists of 17 items. This scale measures four dimensions: work interferes with personal life, personal life interferes with work, work enhances personal life, and vice versa. Organizational Climate was measured using the Organizational Climate Questionnaire (OCQ) from Litwin & Stringer [14] which consists of 24 items. This scale covers dimensions such as structure, standards, responsibility, rewards, support, commitment. All instruments use a 5-point Likert scale (1 = strongly disagree to 5 = strongly agree). Language and cultural context adjustments were carried out through content validity tests by experts.

3.3 Procedure data collection

Data collection was conducted by distributing questionnaires directly to respondents after obtaining permission from the company's human resources. Participation was voluntary, and respondents were informed about the purpose of the study and the right to refuse or discontinue participation at any time. This study was conducted in accordance with ethical research principles, including informed consent and data confidentiality. All respondents signed a consent form before completing the questionnaire. Personal data was kept anonymous and used for academic purposes only.

3.4 Data analysis techniques

The data obtained were analyzed using SPSS version 20 software. Prior to the main analysis, the data were tested for normality, linearity, multicollinearity, and heteroscedasticity. Hypothesis testing was performed using simple regression and multiple linear regression to determine the effect of each independent variable on job satisfaction. The significance value was set at $p < 0.05$.

4 Results

4.1 Respondent characteristics

This study used 108 respondents who were employees of PT KAI Daop 5 Purwokerto. Respondents were selected using a simple random sampling technique from a total population of 150 people.

4.2 Descriptive statistics

Descriptive analysis was conducted on three main variables: work-life balance (WLB), organizational climate (OC), and job satisfaction (JS). The calculation results show the minimum, maximum, average (mean), and standard deviation (SD) values as follows:

Table 1. Descriptive statistics

No	Variables	N	Min	Max	Mean	Std. Dev
1	Job Satisfaction	108	69.00	90.00	79.86	4.15
2	Work-Life Balance	108	27.00	36.00	31.94	1.84
3	Organiztional Climate	108	58.00	75.00	63.75	2.98

4.3 Multiple linear regression test results

Before conducting the regression analysis, the data was tested for classical assumptions such as normality, linearity, multicollinearity, and heteroscedasticity. The results showed that all assumptions were met, making the data suitable for further analysis. Multiple linear regression testing was conducted to determine the effect of work-life balance and organizational climate on job satisfaction. The following are the regression test results:

Table 2. Results of Multiple Linear Regression Test

No	Variables	T	R²	P
1	Work-Life Balance	8.240	0.141	0.000
2	Organiztional Climate	5.452	0.331	0.000

Table 3. F test results

F	R²	P
48.148	0.478	0.000

From the results above, it can be concluded that work-life balance contributes 14.1% to job satisfaction, organizational climate contributes 33.1% to job satisfaction and simultaneously, both variables contribute 47.8% to job satisfaction.

5 Discussion

The results of the study indicate that work-life balance has a significant effect on job satisfaction, contributing 14.1%. This finding indicates that the higher the balance between work and personal life, the higher the level of job satisfaction experienced by employees. This result is in line with research by Yusnani and Prasetio [12] , who found that work-life balance contributes positively to job satisfaction in service sector employees. In the context of PT KAI Daop 5 Purwokerto, work-life balance can be an important strategy in increasing employee loyalty and productivity. This finding reinforces the importance of preventative work wellness programs against work burnout.

Organizational climate was also found to have a significant effect on job satisfaction, contributing 33.1%. This means that employees' perceptions of the organizational climate—such as structural clarity, rewards, support, and interpersonal relationships—contribute significantly to their level of job satisfaction. This finding is supported by research by Adrian and Arianto [16], which showed that the more positive the organizational climate, the higher the employee job satisfaction in a manufacturing industry.

Simultaneously, work-life balance and organizational climate contributed 47.8% to the variation in job satisfaction. This indicates that nearly half of employee job satisfaction can be explained by these two variables. This strengthens the theoretical model used in the study and supports previous research that suggests a combination of internal and external factors within an organization influences job satisfaction [10]. With these consistent results, organizations like PT KAI Daop 5 can focus more on these two aspects in developing HR management strategies.

The data used has undergone classical assumption tests and meets regression criteria, including normality, linearity, absence of multicollinearity, and absence of heteroscedasticity. This indicates that the regression model used is valid and can be relied upon to draw conclusions. This study has several limitations. First, the sample size used was only 108 people from a total population of 150 employees. Although calculated using the Krejcie and Morgan table, this proportion still leaves the possibility of bias or limited representativeness. Furthermore, this study was only conducted in one operational area, so the results cannot

necessarily be generalized to all work units of PT KAI or other similar organizations.

Based on these limitations, further research is recommended using a larger sample size, even encompassing the entire population if possible. Furthermore, future research could employ a mixed methods approach to capture deeper qualitative aspects of employee work experiences. Cross-regional or cross-industry studies should also be considered to assess the consistency of results across different organizational contexts.

6 Conclusion

Based on the results of the study, work-life balance and organizational climate on employee job satisfaction in the company, it can be concluded that: Work-life balance has an influence on job satisfaction in employees of PT KAI (Persero) Daop 5 Purwokerto Office, Organizational climate has an influence on job satisfaction in employees of PT KAI (Persero) Daop 5 Purwokerto Office and Work-life Balance and Organizational climate have an influence on job satisfaction in employees of PT KAI (Persero) Daop 5 Purwokerto Office. Suggestions that can be given by researchers for further research are to involve more than one company from various sectors in order to obtain a more comprehensive understanding. Furthermore, for PT KAI (Persero) Daop 5 Purwokerto Office to pay more attention to the importance of balance between work and personal life of employees, as well as building a positive organizational climate. After that, the last suggestion for employees of PT KAI (Persero) Daop 5 Purwokerto Office is to be more active in recognizing personal boundaries and needs at work. Maintaining a work-life balance can be started by managing time effectively and not hesitating to take a break when needed.

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Hardiness Personality on Subjective Well-Being in Adolescents Exposed to Sexual Harassment at Mts Negeri 2, Gorontalo District

Anik Indarwati [1], Marsyanda Eka Putri [2], Firsta Hannni Enggaring Galih[3]

{anikindarwaty@umgo.ac.id[1], marsyandaekaputri5@gmail.com[2], firsta24hannni@gmail.com[3] }

Faculty of Psychology, Universitas Muhammadiyah Gorontalo, Indonesia[1,2]
Faculty of Medicine, Universitas Negeri Gorontalo, Indonesia[3]

Abstract. Cases of sexual harassment among adolescents have shown an alarming increase across various contexts, including families, schools, and digital spaces. Such experiences adversely affect adolescents' subjective well-being, often leading to difficulties in emotional regulation, reduced psychological resilience, and limited coping strategies. This study examines the influence of personality hardiness on subjective well-being among adolescents exposed to sexual harassment at MTs Negeri 2 Gorontalo Regency. Using a quantitative approach, data were collected through hardiness and subjective well-being scales, alongside screening instruments to identify victims of sexual harassment. From 564 students, 60 respondents met the inclusion criteria through purposive sampling. Data were analyzed using simple linear regression. The results revealed a significant positive effect of hardiness on subjective well-being, contributing 45% to its variance. These findings highlight the importance of fostering hardiness to improve adolescents' psychological adaptation, suggesting that interventions should emphasize resilience-building programs for victims of sexual harassment.

Keywords: hardiness, subjective well-being, sexual harassment

1 Introduction

Sexual harassment, a traumatic experience involving unwelcome sexual advances or behavior, is pervasive across various settings, including schools, homes, and public spaces. It can affect individuals regardless of gender; however, societal power imbalances often place females at a greater risk. Adolescents who experience sexual harassment are more likely to exhibit low levels of subjective well-being, as the psychological consequences of such experiences are long-lasting and far-reaching. These individuals struggle with emotional regulation and often experience low psychological resilience, which makes it harder for them to cope with life's challenges. Understanding how sexual harassment affects the subjective well-being of adolescents is crucial for providing adequate support and interventions for these vulnerable individuals [1].

Adolescence is a developmental phase characterized by substantial emotional and psychological changes. During this period, individuals are transitioning from childhood into adulthood and navigating complex social and emotional challenges. Adolescents are often learning to assert their independence, form their own identities, and manage relationships with family, peers, and the broader community. This process is often accompanied by internal conflicts, as they try to

understand who they are, what they value, and how they relate to others. The ability to adapt to social environments, evaluate the appropriateness of others' behaviors, and develop healthy interpersonal relationships plays a significant role in adolescents' emotional and psychological development [2]..

However, not all adolescents are able to navigate these challenges successfully. Some face significant distress due to experiences of sexual harassment, which creates additional layers of trauma that interfere with their emotional development. The experience of sexual harassment exacerbates existing emotional and psychological difficulties and makes it more challenging for adolescents to build self-esteem, develop resilience, and maintain positive relationships with others. These negative experiences can lead to a breakdown in their ability to regulate emotions, creating long-term effects on their mental well-being.

The impact of sexual harassment on adolescents' well-being is profound. Research has shown that the consequences of sexual harassment can lead to a range of psychological disturbances, including emotional instability, persistent negative moods, feelings of shame, withdrawal from social interactions, and fear of further victimization. In some cases, victims may avoid school altogether or withdraw from previously enjoyed activities. The emotional toll of sexual harassment often leads to more severe mental health challenges, such as anxiety, depression, and post-traumatic stress disorder (PTSD). These negative psychological effects can hinder the victim's ability to concentrate, regulate their emotions, and engage in everyday activities.

The effects of sexual harassment on adolescent victims are often underestimated, and the psychological damage caused by such experiences can persist for years. For example, adolescents may develop negative thought patterns, internalize feelings of guilt or shame, or struggle to trust others. These emotional and cognitive disturbances undermine their overall subjective well-being, making it more difficult for them to manage stress, build relationships, or engage meaningfully in their academic or social lives.

While the emotional and psychological consequences of sexual harassment can be debilitating, certain personality traits can help mitigate these effects. One such trait is hardiness, which is defined as an individual's ability to endure and cope with stressful situations without succumbing to emotional instability or stress. Hardiness plays a significant role in determining how individuals respond to adversity, and it is closely related to subjective well-being. Adolescents who possess high levels of hardiness are better equipped to deal with stress and trauma, which helps them maintain higher levels of subjective well-being, even in the face of challenges such as sexual harassment.

Conversely, adolescents with low levels of hardiness may struggle to cope with the psychological consequences of sexual harassment. These individuals may be more prone to negative thinking, hopelessness, and emotional distress, which can significantly lower their subjective well-being [3]. Low hardiness is associated with difficulty managing stress, poor emotional regulation, and a tendency to ruminate on negative experiences, all of which can exacerbate the emotional impact of sexual harassment. As a result, victims of sexual harassment who exhibit low hardiness may experience greater psychological harm and face more challenges in their recovery [4].

Given the significant impact of sexual harassment on adolescent well-being and the potential buffering effect of hardiness, this study aims to investigate the influence of hardiness on the subjective well-being of adolescents exposed to sexual harassment at MTs Negeri 2 Gorontalo Regency. By examining the relationship between these variables, the study seeks to better understand how psychological resilience can help adolescents cope with the trauma of sexual harassment. The research will explore whether hardiness plays a role in enhancing the subjective well-being of adolescents who have been victimized, thereby offering insights into the potential for interventions aimed at improving their psychological health.

The findings of this study may have important implications for the development of support programs that focus on building resilience in adolescents exposed to sexual harassment. By fostering hardiness, mental health professionals and educators may be able to help these individuals better cope with their experiences and improve their overall well-being. Additionally, this research could provide valuable insights for policymakers and educators, highlighting the need for comprehensive approaches to addressing sexual harassment in schools and other environments, while simultaneously promoting resilience and positive mental health outcomes for affected adolescents.

Adolescents exposed to sexual harassment face significant challenges in maintaining their subjective well-being, which is closely linked to emotional regulation and psychological resilience. The traumatic effects of sexual harassment often lead to emotional instability, cognitive disturbances, and a decline in overall well-being. However, adolescents with high levels of hardiness are better equipped to cope with these challenges, demonstrating greater resilience and maintaining higher levels of subjective well-being. This study aims to explore the relationship between hardiness and subjective well-being among adolescents exposed to sexual harassment, offering insights into how psychological resilience can buffer the negative effects of such trauma. By understanding this relationship, we can better support adolescents who have experienced sexual harassment, providing them with the tools and resources necessary to overcome adversity and improve their mental health.

2 Literature Review

2.1 Hardiness Personality

Hardiness is typically characterized by three main components: control, commitment, and challenge. Individuals with high hardiness feel a sense of control over their circumstances, believe in their ability to overcome obstacles, and view challenges as opportunities for growth rather than threats [4]. These individuals are more likely to manage their emotions effectively, maintain a sense of purpose, and recover from stress more quickly. Adolescents who possess high levels of hardiness are more resilient in the face of adversity, and their subjective well-being is less likely to be negatively affected by external stressors, including trauma such as sexual harassment [5].

2.2 Subjective Well-Being

Subjective well-being (SWB) is a fundamental aspect of an individual's psychological health that encompasses their overall life satisfaction, emotional well-being, and the balance between positive and negative emotions. Adolescents, in particular, are at a stage where their subjective

well-being is highly sensitive to the influences of external and internal factors, including personal experiences, social relationships, and environmental stimuli. The adolescent years are a time of rapid emotional, psychological, and social development, making individuals in this group especially vulnerable to emotional distress and mental health challenges [6]. When adolescents are exposed to traumatic events, such as sexual harassment, their subjective well-being often significantly diminishes. Victims of sexual harassment commonly experience emotional instability, persistent negative moods, cognitive disturbances, and difficulty concentrating, all of which have a profound impact on their emotional and mental health [6].

2.3 Sexual Harassment

Sexual harassment is a form of gender-based violence that can take many forms, from verbal abuse and inappropriate comments to physical harassment and sexual violence . It can occur in various environments, such as schools, workplaces, public transportation, and within families. The psychological and emotional consequences of sexual harassment are severe, and adolescents who are victims of such harassment often experience significant distress. Sexual harassment can take place at any time and in any setting, from schoolyards to the workplace, and can involve a variety of perpetrators, including peers, teachers, or family members [7].

3 Method

3.1 Research design

This study employed a quantitative research design to examine the effect of hardiness personality on subjective well-being among adolescents who have been exposed to sexual harassment at MTs Negeri 2, Gorontalo Regency. The research utilized a correlational approach, aiming to determine the extent to which hardiness contributes to adolescents' subjective well-being.

3.1 Participants

The population of this study consisted of 564 students enrolled at MTs Negeri 2, Gorontalo Regency. Using purposive sampling, 60 students were selected as respondents based on inclusion criteria identifying those who had experienced sexual harassment. These participants were screened using a preliminary questionnaire designed to ensure suitability for the study.

3.2 Instruments

Data were collected using two main psychological scales, namely hardiness scale and subjective well-being scale. Hardiness scale used to measure the level of hardiness personality in adolescents. The scale assessed three core components of hardiness: *commitment*, *control*, and *challenge*. Subjective Well-Being Scale used to assess participants' levels of happiness, life satisfaction, and emotional balance. Both instruments were adapted and validated for use in the adolescent population, ensuring content and construct validity.

3.3 Procedure

The research began with the administration of screening instruments to identify potential participants who had experienced sexual harassment. After obtaining informed consent, eligible respondents completed both the Hardiness and Subjective Well-Being scales under the supervision of the researchers. Data collection was conducted in a confidential and supportive environment to ensure participants' comfort and ethical protection.

3.4 Data Analysis

The collected data were analyzed using simple linear regression analysis to determine the effect of hardiness on subjective well-being. Prior to the main analysis, tests for normality, linearity, and homogeneity were conducted to ensure that the data met the statistical assumptions required

for regression analysis. The results revealed a significant positive influence of hardiness on subjective well-being, with hardiness accounting for approximately 29.4% of the variance in subjective well-being.

4 Result

Respondents in this study were 60 students of MTsN 2, Gorontalo Regency.

Table 1. Hardiness Categorization

		Frequency	Present
Valid	Low	13	21.7%
	Currently	37	61.7%
	Tall	10	16.7%
	Total	**60**	**100.0%**

Based on the hardiness categorization table above, the number of respondents was 60 people, resulting in 13 respondents (27.7%) in the low category, 37 respondents (61.7%) in the medium category, and 10 (16.7%) respondents in the high category.

Table 2. Subjective Well- being Categorization

		Frequency	Present
Valid	Low	9	15.0%
	Currently	39	65.0%
	Tall	12	20.0%
	Total	**60**	**100.0%**

Based on the hardiness categorization table above, the number of respondents was 60 people, resulting in 9 respondents (15.0%) in the low category, 39 respondents (65.0%) in the medium category, and 12 respondents (20.0%) in the high category.

Table 3. Anova

	Sum of Squares	df	Mean Square	F	Sig.
Between Groups	2409.633	29	83,091	1,474	148
Within Groups	1690.950	30	83,091		
Total	4100.583	59			

Based on the homogeneity test above, it obtained a significance value of 0.148 with a

significance level of ≥0.05. So it can be concluded that both variables have the same variance.

Table 4. Contribution of hardiness variables to subjective well-being

Variables	R	R Square	Information
Hardiness			Significant
And			
Subjective well-being	0.542	0, 294	0,000

Based on the results of the analysis above, the R value is 0.542 and the coefficient of determination (*R Square)* is 0.294. This means that the influence of variable X on variable Y is 29.4%.

5 Discussion

Based on the results obtained from this study, it can be concluded that hardiness personality significantly affects subjective well-being (SWB) in adolescents exposed to sexual harassment at MTsN 2, Gorontalo District. This finding is supported by the hypothesis testing results, which show that H1, assuming an influence between hardiness and subjective well-being in adolescents exposed to sexual harassment, is accepted. The analysis reveals that the higher the level of hardiness, the higher the subjective well-being perceived by the adolescents. Conversely, the lower the level of hardiness, the lower the subjective well-being. This indicates that hardiness functions as a protective factor in dealing with stress and emotional difficulties faced by adolescents who experience sexual harassment.

Based on the analysis of the hardiness variable categories, male respondents showed a fairly even distribution, with 20.8% in the low category, 58.3% in the moderate category, and 20.8% in the high category. This shows that the majority of male respondents have a moderate level of hardiness, allowing them to endure and cope with the pressures they face. Regarding the subjective well-being variable, 66.7% of male respondents were in the moderate category, indicating that the majority of male respondents had a relatively good level of subjective well-being despite being exposed to sexual harassment.

Meanwhile, the results for the female respondents in the hardiness variable category showed that 16.7% were in the low category, 58% in the moderate category, and 25% in the high category. This distribution indicates that, although the majority of female respondents had moderate levels of hardiness, a larger proportion (25%) were in the high category compared to

male respondents. This suggests that there is a potential for female respondents to have stronger psychological resilience, which may play a role in managing the negative impacts of sexual harassment. In the subjective well-being category, 66.7% of female respondents were in the moderate category, indicating a relatively good level of subjective well-being, although some still experienced difficulties in coping with the impacts of sexual harassment.

These findings are consistent with the results obtained by Urrochman [8], which showed that hardiness positively influences subjective well-being. This study explored the relationship between hardiness and subjective well-being in adolescents, demonstrating that individuals with higher levels of hardiness experience better well-being even in stressful conditions such as sexual harassment [9].

Khasanah & Asiyah [10] also support these findings, showing a significant relationship between hardiness and subjective well-being with a correlation value of 0.702, indicating a strong relationship. The study also confirmed that increasing hardiness can contribute to enhancing subjective well-being. This suggests that individuals with higher hardiness tend to have better psychological well-being even when facing stressful situations.

The psychological dynamics of sexual harassment victims are highly complex and influenced by both internal factors (such as self-acceptance and motivation) and external factors (such as social support). These dynamics shape their ability to recover and move forward. This study suggests that comprehensive support systems, including family, social services, and therapeutic environments, are crucial for helping adolescents exposed to sexual harassment cope with their trauma.

Research by Anggraini & Prasetyo [11] also demonstrated a significant positive relationship between hardiness and subjective well-being, with hardiness contributing 57.5% to an individual's subjective well-being. This finding supports the argument that individuals with high hardiness are better equipped to maintain psychological well-being despite the stress caused by sexual harassment. Similarly, research by Irawan & Rahayu [12] revealed a significant relationship between hardiness and optimism with subjective well-being, where optimism serves as a mediator that enhances the positive impact of hardiness on subjective well-being.

Although the level of hardiness among adolescents exposed to sexual harassment at MTsN 2, Gorontalo District, is categorized as moderate, these findings show that they can still endure, adapt, and maintain emotional stability when faced with unpleasant events. Hardiness personality plays a crucial role in providing psychological strength to cope with traumatic experiences, as well as enhancing an individual's ability to respond more positively to stress and challenges. This shows that hardiness can act as a protective factor that reduces the negative impact of sexual harassment on adolescents' psychological well-being.

Individuals with higher levels of hardiness are better able to adapt to high-pressure and stressful situations, maintaining better subjective well-being. In stressful situations such as sexual harassment, individuals with high hardiness are more likely to feel capable of coping with anxiety, anger, and feelings of pressure, which in turn can improve their overall quality of life. Conversely, adolescents with low hardiness may be more vulnerable to the negative impacts of sexual harassment, such as anxiety, depression, and life dissatisfaction, which can reduce their subjective well-being [12].

This is supported by research from Urrochman [8], which investigated the relationship between hardiness and subjective well-being in adolescents, showing that individuals with higher levels of hardiness experience better well-being even in stressful conditions such as sexual harassment [13].

This study has important implications for the development of intervention programs aimed at increasing hardiness in adolescents exposed to sexual harassment. Programs designed to strengthen psychological resilience can help adolescents enhance their subjective well-being and provide tools and strategies to cope with trauma and negative feelings arising from sexual harassment. Therefore, interventions focusing on the development of hardiness and emotional empowerment in adolescents are crucial for improving their psychological well-being.

6 Conclusion

There is a significant positive influence of hardiness personality on *subjective well-being* of adolescents exposed to sexual harassment at MTs Negeri 2, Gorontalo Regency. This means that the higher the hardiness personality, the higher *the subjective well-being* . vice versa.

Suggestion

1. Theoretically, it is expected that this research will be able to provide a contribution of thought in increasing insight into theories regarding scientific studies in the field of psychology related to the influence of hardiness on *subjective well-being* in adolescents exposed to sexual harassment.
2. For the Subjects, this study is expected to help students, especially adolescents who are exposed to sexual harassment, to be able to understand their personality type, especially the hardiness personality, to respond to various problems they experience related to *subjective well-being.*
3. For researchers, this study can increase knowledge and personal experience in terms of research on hardiness with *subjective well-being* of adolescents exposed to sexual harassment.

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Self Control and Peer Conformity on Fear of Missing Out: Study on Adolescent Tiktok Users in Jakarta

Zahrina Ghaisani Fadhilah[1], Eka Rizki Meilani[2*]

{zahrinagf@gmail.com, ekarizkimeilani18@ump.ac.id}

Fakultas Psikologi, Universitas Muhammadiyah Purwokerto, Indonesia[1,2]

Abstract. In the current technological era, TikTok is one of the dominant social media platforms among teenagers. It serves as a medium to overcome boredom and entertainment saturation. However, the high number of TikTok users has raised concerns about *Fear of Missing Out* (FoMO), which can be influenced by a lack of self-control and peer conformity. This study aims to examine the effect of self-control on FoMO, the effect of peer conformity on FoMO, and the combined effect of self-control and peer conformity on FoMO among 450 adolescents aged 12–21 years who use TikTok in Jakarta. A quantitative approach was used, employing a Likert-scale questionnaire consisting of a self-control scale, a peer conformity scale, and a FoMO scale. The study results highlight that self control has an effect of 20.1% on fear of missing out with a regression coefficient value of -0.643, peer conformity has an effect of 10.1% on fear of missing out with a regression coefficient value of 0.226, Self Control and Peer Conformity in this study have an effect of 30.3% on Fear of Missing Out. This research indicate that when individuals are able to adapt to groups in a healthy way and have the ability to control impulses, the tendency to experience FoMO can be suppressed.

Keywords: Fear of Missing Out , Peer Conformity, Self Control

1 Introduction

Recently, technology and information have progressed very significantly, this progress has made more and more social media in the form of applications that can make it easier for each individual to obtain the latest information, one of which is an application called TikTok [1]. TikTok is a social media application originating from China, launched in 2016 coinciding in September. The availability of features to add music, beautifying filters and effects to videos makes it easier for users to express themselves through the TikTok application.

TikTok users in Indonesia has increased greatly in just a few months. In January 2024 there were 126.83 million TikTok users in Indonesia while in July 2024 the number of TikTok users in Indonesia increased to 157.6 million users. In Jakarta, 22% of TikTok users, followed by East Java with 18%, West Java with 13%, North Sumatra with 8%, and Central Java with 7% [2]. With this data, it makes sense for researchers to use Jakarta as an area in this study. Tiktok users in Indonesia are dominated by teenagers with an age range of 14 to 24 years who come from big cities [3].

In the theory put forward by Santrock 940 individuals are said to be adolescents from the age range of 12 to 21 years. Adolescence is also a period that has many opportunities to socialize, with friendship groups so that they can broaden their horizons. Teenagers have great curiosity so they often do not hesitate to try new things because they are influenced by their surroundings.

This condition encourages teenagers to always follow the latest trends and try to get the best facilities in the current era [5].

The TikTok application has become one of the popular entertainment alternatives among teenagers, because TikTok helps overcome boredom. However, the use of TikTok also brings good and bad impacts that need to be considered by its users. The positive side is as a means of entertainment and creativity. As for the negative impact, teenagers ignore prayer, study time, are disrespectful to elders, and spend a lot of time with smartphones, making individuals undisciplined [6].

The difference between TikTok social media and Instagram social media can be seen from the algorithm. Currently the algorithm on Instagram is more randomized while the algorithm on TikTok is based on user interaction. Other differences can be seen from YouTube social media, there are several factors that make Gen Z prefer TikTok compared to YouTube, namely, the number of advertisements on YouTube, videos that are accessed are longer in duration so it is less practical. As with Facebook and Twitter social media, it can be seen that both social media tend to focus on providing information, news, and contact with people nearby [7].

Adolescents can change their behavior just because of TikTok social media, this behavior change can occur if adolescents experience social media addiction where they will be too focused on their activities on the application, so they can ignore other responsibilities [8]. Addiction due to excessive use of social media can result in individuals experiencing FoMO or Fear of Missing Out [9]. Fear of Missing Out is a feeling of worry related to missing out on the latest information, thus making individuals dependent on social media [10]. This phenomenon is increasingly prevalent among adolescents who are highly active on platforms such as TikTok. Many adolescents experience anxiety or discomfort when they cannot check or participate in online activities, especially those involving their peers. Individual dependence on using social media is caused by a lack of self-control over addictive behavior.

Self control is an important technique that each individual must have, especially adolescents. If an adolescent has good self-control techniques, he will be able to control all his behaviors and thoughts properly in accordance with existing norms. In addition, self control also teaches that there will be consequences for the actions chosen, so that individuals will learn how to be responsible, control emotions and behave better [11]. Adolescents who are able to control themselves well tend to be able to control all behaviors that can lead them in a negative direction. Therefore, self-control is needed by every individual, especially adolescents, so that adolescents can control behavior in their daily lives in accordance with the environment [12]

Lack of self-control can make adolescents not have self-limitation against an unfavorable environment. Apart from self-control, peer conformity is also an influence on the occurrence of negative behavior for adolescents [13]. In the phase of searching for self-identity, adolescents tend to spend more time with their peers [14]. So that adolescents will form peer groups and will break away from the adult environment such as their own parents [15].

Adolescents who are members of a peer group will feel left behind if they do not participate in certain activities. Fear of missing out is a problem that often occurs in a person's social life, so that the person will feel anxious, afraid and worried about something he does not [16]. An individual can fulfill their psychological needs by seeking pleasure for themselves, by following the latest trends from social media so that the individual will continue to connect with other people and their peers [17].

Adolescents who spend a lot of time with their peers have a tendency to want to be accepted in the peer group, thus making individuals to imitate the behavior in the group [18]. The pressure to imitate peers is usually very strong in adolescence. Conformity in this phase can have both good and bad effects on the individual himself [19]. Therefore, adolescents are described as individuals who really like to spend time with their peers and form groups that influence each other, so that a demand arises in the group as a form of cohesiveness and loyalty to the peer group [14].

Based on the description that has been submitted previously, the researcher concludes that Self-Control and Peer Conformity can affect the onset of feelings of Fear of Missing Out in adolescent TikTok social media users. So that makes the basis for researchers interested in researching about: Self Control and Peer Conformity on Fear of Missing Out: Study on Adolescent Tiktok Users in Jakarta. The hypothesis of this research is there is a significant influence between self control and peer conformity of Fear Missing Out (FoMO) in Adolescent TikTok user in Jakarta.

2 Literature Review

Research that has been conducted by Putri [21] in this study emphasizes the importance of the ability to control oneself in social media so as not to experience discomfort caused by FoMO. Research from Sujarwo dan Maula [22] self-control has a very significant relationship with fear of missing out on social media users at Bina Warga 2 Palembang High School. The difference with this study is in the subject, place of research and the focus of social media.

As for further research related to Peer Conformity conducted by Azalika et al., [23] the results of his research show that there is a significant influence of Fear of Missing Out (FOMO) and the influence of peer conformity on impulse buying behavior among students in Semarang City. The research from Khoirullisa [24] also highlights the impact of peer conformity on consumptive behavior in adolescents. The results of this study indicate that there is a positive and significant influence between peer conformity and consumptive behavior in adolescents. However, the main difference in this study lies in one of the variables, the focus of social media, as well as in the subject and location to be studied.

Based on the literature search that has been conducted, no research has been found that discusses directly related to the Self Control and Peer Conformity on Fear of Missing Out: Study on Adolescent Tiktok Users in Jakarta. So this research will be different from previous research, and its authenticity can be accounted for.

3 Method

This research uses a quantitative approach, which is an approach that produces numerical data [25]. A Likert scale was used in this study as the data collection instrument, using a Likert scale in the form of a self control scale, a peer conformity scale and a fear of missing out scale. The data were collected by google form, by 450 adolescent who is 12-21 years old TikTokers in Jakarta.The measurement tool applied has been modified to meet the specific needs of this study. Statistical methods are essential in analyzing quantitative research data. The quantitative approach itself produces data in numerical form (numbers). To evaluate the impact of this study,

researchers applied multiple regression analysis. In the data analysis process, the researcher used SPSS version 29 software.

4 Result

Subjects in this study were 450 adolescent subjects domiciled in Jakarta with an age range of 12 to 21 years, dominated by women with a percentage of 74% and men 26%. The subjects in this study were dominated by adolescents with an age range of 18-21 years with a percentage of 72.4%.

Table 1. Demographic Data Subject

No	Criteria	N	%
1	**Gender**		
	Female	333	74%
	Male	117	26%
2	**Age**		
	12-15 years	54	12%
	15-18 years	70	15,6%
	18-21 years	326	72,4%
3	**Domicile**		
	Jakarta	450	100%

The significance value resulting from the regression test of the effect of Self Control on Fear of Missing Out is <0.001 this figure is <0.05 and F count 112.822 is greater than F table 3.86. So it is said that there is an influence of Self Control on Fear of Missing Out. Based on the Rsquare value of 0.201 or 20.1%, it can be interpreted that the Self Control variable has an influence of 20.1% on Fear of Missing Out. The level of Self Control in adolescents in Jakarta is mostly at a moderate level, as many as 157 teenagers with a percentage of 34.9%.

Table 2. Regression Table

Variable	Regression Coefficient	R Square	F	Sig
Self Control	-0,643	0,201	112,822	<0,001

Meanwhile, teenagers who have high Self Control are 138 teenagers, with a percentage of 30.7% who have high Self Control. These results prove that the Self Control possessed by adolescents who live in Jakarta is relatively moderate.

Table 3. Significance Table.

Categorization	Score Range	Frequency	Percentage
Very Low	$X \leq 22,12$	40	8,9%
Low	$22,12 < X \leq 28,04$	92	20,4%
Medium	$28,04 < X \leq 33,96$	157	34,9%
High	$33,96 < X \leq 39,88$	138	30,7%
Very High	$39,88 < X$	23	5,1%
Total		**450**	**100%**

Peer Conformity and Fear of Missing Out with a significance level of 5%, resulting in a significance value of <0.001 the number <0.05 and F count 50.595 greater than F table 3.86. So it is said that there is an influence of Peer Conformity on Fear of Missing Out. Based on the

Rsquare value of 0.101 or 10.1%, it can be interpreted that the Peer Conformity variable has an influence of 10.1% on Fear of Missing Out. In other words, 89.9% of Fear of Missing Out is influenced by other variables not examined by the researcher.

Table 4. Table Regression

Variable	Regression Coefficient	R Square	F	Sig
Peer Conformity	0,226	0,101	50,595	<0,001

There are 138 adolescents with high levels of peer conformity in Jakarta, which is 30.7%. This figure is not much different from adolescents who are at a low level of peer conformity, which is 136 people or 30.2%. Judging from the results that have been obtained in this study, it proves that peer conformity owned by adolescents who live in Jakarta is relatively high.

Table 5. Multiple Regression

Categorization	Score Range	Frequency	Percentage
Very Low	$X \leq 33,16$	31	6,9%
Low	$33,16 < X \leq 45,14$	136	30,2%
Medium	$54,14 < X \leq 57,12$	128	28,4%
High	$57,12 < X \leq 69,1$	138	30,7%
Very High	$69,1 < X$	17	3,8%
Total		**450**	**100%**

Multiple regression tests were conducted to determine the effect of Self Control and Peer Conformity on Fear of Missing Out with a significance level of 5% resulting in a significance value of <0.001 where the value is <0.05 and F count 97.026 greater than F table 3.01. So that from the significance value and F count obtained in this regression test, it states that Self Control and Peer Conformity have an effect on Fear of Missing Out. In other words, hypothesis three is accepted.

Based on the Rsquare value from the results of this multiple reliability test, a value of 0.303 is generated or in other words 30.3%. The percentage of 30.3% shows that this figure is the amount of influence from Self Control and Peer Conformity on Fear of Missing Out. So it can be said that 69.7% of fear of missing out is influenced by other variables not examined by researchers.

Table 6. R Square table

X1	X2	Y	R Square	F	Sig
Self Control	*Peer Conformity*	*Fear of Missing Out*	0,303	97,026	<0,001

This study states that many teenagers who experience fear of missing out are at a moderate level, namely there are 203 teenagers or 45.1% in Jakarta. The results obtained indicate that teenagers in Jakarta still have self-control when using social media because the level of fear of missing out is in the moderate category. There may be some people who tend to have a fear of missing out because they are afraid of missing out on information on social media, but the feeling of fear and worry about being eliminated if their social group friends are getting stronger with the current popularity.

Table 7. Categorization

Categorization	Score Range	Frequency	Percentage
Very Low	X ≤ 49,05	14	3,1%
Low	49,05 < X ≤ 57,72	127	28,2%
Medium	57,72 < X ≤ 66,21	203	45,1%
High	66,21 < X ≤ 74,70	56	12,4%
Very High	74,70 < X	50	11,1%
Total		**450**	**100%**

5 Discussion

Self Control according to Averill [26] is the ability that individuals have to change behavior, process information properly, and to determine actions or behavior in accordance with what is believed. Self-control is the individual's ability to regulate emotions, thoughts, and behaviors to achieve long-term goals. Adolescents with high self-control can manage impulses and resist the urge to constantly check social media. Conversely, those with low self-control struggle to limit their online activity, making them more prone to FoMO.

The Self Control variable has an influence of 20.1% on Fear of Missing Out, Self-control refers to the ability to regulate one's thoughts, emotions, and behaviors in order to resist short-term temptations and stay aligned with long-term goals. In the context of social media, self-control involves the capacity to limit the urge to constantly check notifications, scroll through content, or compare oneself with others online. From the results that have been obtained, it reveals that adolescents with an age range of 12-21 years have a moderate level of self-control that affects the fear of missing out using TikToK social media. The results of this study are in line with several previous studies, which state that the average teenager's self-control is in the low category [29]. The results of previous research are, self control with fear of missing out has a negative relationship and the relationship between self control and fear of missing out is included in the moderate group [28].

Taylor et al., [29] conformity is the behavior shown by individuals, which is caused by other people who show similar behavior. Peer Conformity has an influence of 10.1% on Fear of Missing Out. Peer conformity refers to the tendency of individuals, especially adolescents, to adjust their attitudes, behaviors, and opinions to align with the norms or expectations of their peer group. In social media contexts like TikTok, peer conformity manifests when users imitate trends, follow what friends are posting, or feel pressured to engage in popular online activities to gain social acceptanceThe results that have been obtained in this study, it proves that peer conformity owned by adolescents who live in Jakarta is relatively high. Adolescents who have a high level of conformity tend to be less able to reduce the negative risks posed by fear of missing out. The findings of this study are in line with previous studies Iklimah [30] which show a significant positive correlation between conformity and FoMO in generation Z adolescents. The magnitude of this correlation is quite substantial, even researcher Cibro and Simbolon [31] noted a positive relationship of 15.7% between FoMO and conformity in adolescent TikTok users.

FoMO or fear of missing out is a feeling of anxiety that a person experiences when they feel they are not getting the latest information from others. This encourages individuals to always

be connected and continuously keep up to date with the latest developments on various matters [32]. Self Control and Peer Conformity have an effect of 30.3% on Fear of Missing Out. So it can be said that 69.7% of fear of missing out is influenced by other variables. From the results that have been obtained, it reveals that adolescents in Jakarta with an age range of 12-21 years have a moderate level of self-control and a high level of peer conformity, which affects the fear of missing out using TikTok social media. The results obtained indicate that adolescents in Jakarta still have self-control when using social media because the level of fear of missing out is in the moderate category. There may be some people who tend to have a fear of missing out because they are afraid of missing out on information on social media, but feelings of fear and worry about being eliminated if their social group friends are getting stronger with the current popularity. For TikTok users, FoMO manifests as the constant need to stay updated with trends, viral challenges, or friends' activities. Individuals with low self-control tend to have difficulty managing impulses related to social media use, making them more vulnerable to FoMO.

Based on the research that has been conducted, this study has several limitations, among others: It is hoped that further research will use a wider sample. This study tested variables that have little effect on the fear of missing out. So that further research needs to be developed to examine other variables that have a major effect on fear of missing out.

6 Conclusion

Based on the results of research and discussion regarding the influence of Self Control and Peer Conformity on Fear of Missing Out in adolescent TikTok social media users, as follows: There is an influence of Self Control on Fear of Missing Out. on teenage TikTok social media users in Jakarta. There is an influence of Peer Conformity on Fear of Missing Out.on teenage TikTok social media users in Jakarta. There is an influence of Self Control and Peer Conformity on Fear of Missing Out. on teenage TikTok social media users in Jakarta.
Practical suggestions for future research are as follows: Future researchers are expected to focus on what factors influence the high number of women accessing TikTok social media.
Further research needs to be done on the factors that influence adolescents aged 18-21 years to be the most users of TikTok in this study. Teenagers are expected to better control themselves and their environment, especially in friendships and group selection, especially in social media, namely in accessing TikTok social media. It is hoped that further research will use a wider sample.

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Spiritual Practices in the Millennial Era: 40-Day Personal Transformation to Build Inner Peace

Akhmad Liana Amrul Haq[1], Imron[2], Muhammad Adha Alfarisi[3]

{akuamrulhaq@unimma.ac.id [1] imron1807yes@unimma.ac.id [2] Adhalfarisi@unimma.ac.id [3]}

Department of Psycholog and Humanities, Muhammadiyah University of Magelang [1,3]
Department of Islamic Studies Muhammadiyah University of Magelang[2]

Abstract. The rapid development of technology has brought both progress and psychological challenges for the millennial generation, including a decline in spiritual awareness. This study explores how consistent 40-day spiritual practices can foster personal transformation and inner peace among university students. Using a qualitative reflective approach, data were collected from students' daily reflection journals in the Sufism Psychology course over four academic years (2020–2024). Thematic reflective analysis revealed three core dimensions: religiosity, spirituality, and meaningfulness of life. Students who practiced mahdhah worship (ritual-based) reported strengthened religiosity and spirituality, while those performing ghairu mahdhah worship (non-ritual acts) experienced enhanced life meaning. The findings highlight that structured spiritual practices can promote self-awareness, emotional balance, and inner peace, offering a psychological framework for integrating spirituality into mental well-being education.

Keywords: Spiritual Practice; 40 Days; Inner Peace

1 Introduction

The range from 1985 to 2020 shows that themes about religious studies, religiosity, and spirituality have consistently demonstrated good quality over time [1]. Several previous studies have focused on the well-being effects such as life satisfaction, anxiety, or fear when facing death. Some experts agree that spirituality is the highest power possessed by each individual. [2], The personal nature of spirituality and its presence in the subconscious make spirituality something that is difficult to prove scientifically. Spirituality also becomes a norm and a map for how behavior should be manifested, with each individual having their own way of realizing spirituality according to their thoughts, feelings, and experiences [3]. Some people can achieve the pleasure of spirituality when they succeed in doing something challenging and seemingly impossible to achieve, [4] Research on the feelings experienced by mountain climbers who successfully reach the summit shows that most climbers feel satisfied with their emotions but cannot express them. Additionally, there are experiences of traveling to rural areas for a brief respite from activities and the hustle and bustle of work [5] the result is that their travel experiences can fulfill their spiritual needs. There are many ways to interpret spirituality itself, so connecting it with ritual practices that produce inner peace is interesting to study.

The journal on transpersonal psychology was first published in 1969. Since then, this field of study has been widely pursued as both a theory and an application [6]. The process of religious worship practices colors the advancement of this field of knowledge, combining rituals to reach the highest saturation point in order to enjoy limitless happiness. The enjoyment of spirituality will emerge alongside the consistent practice of worship rituals, with inner peace and

indescribable satisfaction becoming a double reward if individuals challenge themselves to complete worship rituals that are considered easy to perform. The millennial generation consists of individuals born between 1981 and 1996 [7, 8]. The rapid advancement of technology and information, along with various digital platforms that allow everyone to access and compare with others' lives, increases the likelihood of anxiety, stress, and the emergence of other psychological disorders [9]. Spiritual practices are becoming increasingly popular among various generations as a relevant approach to building inner balance and mental health [10]. Meditation, mindfulness, journaling, prayer, and daily self-reflection, meditation, prayer, journaling, contemplation, and fasting are some forms of spiritual practices that have been scientifically proven to enhance psychological well-being. [11]. Research indicates that the average time required to form a new habit is around 21 to 66 days [12], Another key factor in forming new habits, besides the time span, is being structured and consistent [12], The three things above will not only change the mind but also contribute to spiritual development. This research aims to scientifically test whether consistent worship practices over a certain period can build inner peace.

The difference between religiosity and spirituality needs to be emphasized in the context of millennial subjects. Religiosity focuses more on introducing individuals to religious teachings and rituals. As for spirituality, it is an entity present in every individual that is related to their knowledge of their relationship with God [13]. The number 40 holds a strong symbolic meaning in many religious practices to attain spiritual enjoyment. Forty days are considered sufficient time to form new habits and appreciate the efforts made in the context of positive change [12]. The challenge of attaining spiritual enjoyment and inner peace in the digital era requires a relevant and contextual approach in line with the research subject, namely the millennial generation living amidst rapid technological development and social change. Appropriate spiritual practices can serve as a bridge to face life's challenges more comfortably, balanced, peacefully, and calmly. This study aims to scientifically examine whether consistent engagement in worship practices over a certain period can cultivate inner peace among students. Beyond merely testing this relationship, the research also seeks to understand the underlying reflective process through which spiritual practices both ritual ('ibadah mahdhah') and non-ritual ('ibadah ghairu mahdhah') contribute to emotional stability, self-awareness, and the sense of connection with the Divine. By exploring this process qualitatively, the study highlights that inner peace is not simply an outcome of religious behavior, but a transformative state emerging from sustained mindfulness, sincerity, and meaningful engagement with faith-based practices in daily life.

2 Literature Review

Document study serves as a tool for collecting secondary data in this research, utilizing software tools such as Mendeley, Publish or Perish, and Google Scholar. Using three keywords "Spirituality," "Spiritual Practices," and "Inner Peace," the article search was limited to the years 2020 to 2021. Based on the search conducted, there are hundreds of articles that use the above keywords. After reading and filtering by publication year, there are 10 articles that align with the theme raised in this research. Table 1. Briefly explain 10 reviewed articles, including the article title, author, journal name, publication year, and research results. The general conclusion from the 10 articles presented in Table 1 includes a positive relationship between spirituality, mindfulness, and mental health. Spirituality and religiosity are more often independent variables used to examine mental health and psychological well-being. In this study, "spiritual practices" are defined as a series of consciously and repeatedly performed religious activities carried out

by students with the aim of deepening their relationship with God, enhancing self-awareness, and cultivating inner peace. Additionally, the variable directly related to the enhancement of inner peace is mindfulness; university students and the millennial generation are considered suitable for practicing mindfulness to improve inner peace. Cultural variations also influence how religiosity and spirituality are practiced. Research conducted in the United States explains that there is a separation between religion and spirituality; in this context, spirituality is not always associated with a person's religious practices. Unlike research in India, spirituality is often linked to religious practices, whereas in China, many people are less inclined to believe in spirituality due to the prevalence of atheism. The ten articles above suggest further research on longitudinal studies that need to be conducted, with variables such as cultural context and social support being proposed as alternative mediating variables. Lastly, mixed methods are also recommended for future research to other studies that wish to examine the above variables. The connection between the literature review and the research design lies in the theoretical understanding of spiritual practices and cross-cultural experiences of inner peace, which form the conceptual foundation of this study. Previous studies have indicated that spiritual experiences can be more deeply understood through reflective approaches that emphasize self-awareness and the search for personal meaning. Building on this foundation, this study employed a reflective–thematic analysis to explore how students interpreted their spiritual experiences during practice.

Table 1. Literatur Review

No	Article Title	Author Name	Journal Name	Year	Result Research
1.	Content Analysis of Spiritual Life in Contemporary USA, India, and China	Elsa Lau, Clayton McClintock, Marianna Graziosi, Ashritha Nakkana, Albert Garcia, Lisa Miller	Journal Religions, Volume 11, Issue 286, 2020	2020	Thematically, spiritual experiences are based on Religion; Contemplative Practices, Ancestor Worship, and Metaphysical Phenomena; Culturally distinguished In the US, there is a polarization between religion and spirituality, with many individuals identifying as spiritual but having no connection to religiosity. In India, spirituality is often connected with religious practices and transcendental experiences. In China, many individuals identify as atheists and hold a skeptical view of formal religion.[14]
2.	Dispositional Mindfulness and Past-Negative Time Perspective The Differential Mediation Effects of Resilience and Inner Peace in Meditators	Jingjing Ge, Jingjing Yang, Jingjing Song, Guangyu Jiang, Yong Zheng	Psychology Research and Behavior Management	2020	Mindfulness is positively related to resilience and inner peace [15]
3.	Homeless people's trait mindfulness and their resilience – a mediation test on the role of inner peace and hope	Junfei Lu, Courtney A. Potts, Rebecca S. Allen	Journal of Social Distress and Homelessness	2020	There is a significant positive correlation between the trait of mindfulness and resilience in homeless individuals (r = 0.44). [16]
4.	A Consideration of Transpersonal Research Methods for Studying Yoga and Mindfulness in Schools	Bethany Butzer	International Journal of Transpersonal Studies, Volume 40, Issue 2, 2021	2021	Research conducted in high schools in Boston shows that although quantitative results are not always significant, qualitative interviews reveal positive benefits from the yoga intervention. [17]
5.	Spirituality, Religiousness, and Mental Health: A Review of the Current Scientific Evidence	Giancarlo Lucchetti, Harold G. Koenig, Alessandra	World Journal of Clinical Cases	2021	Research shows that S/R has a significant relationship with various mental disorders, including depression, suicide, and substance use. The results show that S/R can function as a protective factor against mental disorders, although the underlying mechanisms of this relationship still need further investigation. [18]

		Lamas Granero Lucchetti		
6.	Positive Psychology and Spirituality: A Review Study	Merve Baysal	Spiritual Psychology and Counseling	2022	Research shows that positive psychology emphasizes the importance of the positive aspects of individuals and life, and recognizes spirituality as an important character strength. The integration of spirituality in positive psychotherapy can enhance individual well-being and provide new perspectives for practitioners and researchers.[19]
7.	The Association between Mindfulness and Resilience among University Students: A Meta-Analysis	Xuepeng Liu, Qing Wang, Zhenzhen Zhou	Sustainability	2022	The research results indicate that there is a significant correlation between mindfulness and resilience with a moderate effect (r = 0.465). The type of mindfulness measurement scale proved to be a significant moderator, while cultural background and economic development levels did not moderate the relationship. The mindfulness dimension "observing" shows the lowest correlation with student resilience, while "acting with awareness" and "non-reacting" are the most relevant.[20]
8.	Exploring Generation Z and Young Millennials' Perspectives of a Spiritual Self-Care App and Their Spiritual Identity (Skylight): Qualitative Semistructured Interview Study	Susanna Y Park, Jacqlyn Yourell, Kelsey L McAlister, Jennifer Huberty	JMIR Formative Research	2023	Users use the app for relaxation, mood enhancement, and overall health.[21]
9.	Muslim millennials fashion self-congruity: How the religiosity and spiritual well-being affect?	Nurus Shalihin, Darmaiza, Muhammad Sholihin, Muhammad Yusuf	Cogent Social Sciences	2023	The research results show that the dimension of religiosity, particularly "guidance," has a positive effect on "ideal Islamic fashion self-congruity" (IIFSC). Spiritual well-being functions as a mediating variable between the dimensions of religiosity and measures of fashion self-congruity, such as actual fashion self-congruity (AFSC) and ideal Islamic fashion self-congruity (IIFSC). [22]
10.	The Relationship of Life-Changing Spiritual Experiences to Current Religious/Spiritual Attitudes and Practices: A Pilot Study	Orsolya Cseh, István Karsai, Attila Szabo	Pastoral Psychology, Volume 73, Pages 227-238, 2024	2024	The research results show that the dimension of religiosity, particularly "guidance," has a positive effect on "ideal Islamic fashion self-congruity" (IIFSC). Spiritual well-being functions as a mediating variable between the dimensions of religiosity and measures of fashion self-congruity, such as actual fashion self-congruity (AFSC) and ideal Islamic fashion self-congruity (IIFSC). [23]

3 Method

This research uses a qualitative descriptive approach to examine students' spiritual practice experiences. The participants in this study were undergraduate students from the Psychology Study Program at Universitas Muhammadiyah Magelang who took the Sufi Psychology course over four academic years, from 2020 to 2024. In total, 148 students participated in the study, consisting of 112 females and 36 males. The implementation of this activity is part of the learning activities in the Sufism Psychology course. Students were asked to record the most memorable spiritual experiences during the practice, and the collection of these significant notes was conducted once a week during the Sufism psychology course in class. The collected data is analyzed using the reflective method [24], This analysis separates the reflective experiences of students who choose to perform mahdhah worship (prayer or fasting) and the reflective experiences of students who choose to perform ghairu mahdhah worship (charity, helping with household chores, or feeding others), students chose forms of worship or spiritual practices that aligned with their personal beliefs and inclinations.

Subsequently, the students' reflective experiences are categorized into three aspects: religiosity, spirituality, and meaningfulness of life. The validity of the data was ensured using time and source triangulation techniques by comparing the reflective notes of students from 4 different cohorts, The analysis of students' reflective journals was carried out using a thematic reflective analysis approach. The data obtained from students' daily reflection notes were manually analyzed using a systematic analytical process, in which all codes, categories, and themes were documented in an Excel-based worksheet [25]. At the beginning of this spiritual practice, all students filled out a consent form to write one practice that would be carried out for 40 consecutive days, ending with the written statement "I will carry out and complete this practice sincerely and with full responsibility." Thus, all the data presented have received approval from the research subjects, in this case, the psychology students of the 2020-2023 batch.

4 Result

In Table 2 below, the number of students per cohort who practiced spiritual activities from the years 2020, 2021, 2022, and 2023 is presented. Table 2 will also explain the percentage of students per cohort who completed the 40-day practice and those who did not. This data is based on weekly monitoring conducted by the researcher during each psychology of Sufism lecture. The researcher also recorded the types of worship chosen by each student in each cohort, categorized into two types of worship: obligatory worship and non-obligatory worship, as well as the results of reflective notes based on the impact on religiosity, spirituality, and meaningfulness of life.

Table 2. Research Subject Data

Cohort	Number of Students	Obligatory Worship (Ibadah Mahdhah)	Non-obligatory Worship (Ibadah Ghairu Mahdhah)	Percentage Completed	Percentage Not Completed
2020	13	0	13	11	2
2021	35	0	35	32	3
2022	27	0	27	23	4
2023	19	0	19	10	9

A total of 94 students participated in the study, divided into 4 cohorts: the 2020 cohort with 13 students, the 2021 cohort with 35 students, the 2022 cohort with 27 students, and the 2023 cohort with 19 students. Out of the 94 students practicing spiritual activities, none chose to perform maghdhoh worship. The success rate of students who completed the 40-day spiritual practice was 76 students, or 80.85%. Based on reflective notes, some reasons for their consistency included the ease of the chosen worship practice, prior habits, and support from parents, siblings, or friends to carry out the activities. As for the 18 students or 19.5% who did not complete the 40-day practice, according to reflective notes, the reasons include often forgetting to do it, being hindered by other activities, and lacking support from close relatives to remind them.

The categorization of the performed religious practices is divided into 5 categories, namely: the first is reading/writing/memorizing verses of the Qur'an, dhikr, or sending blessings; the second is performing the Sunnah Dhuha prayer or the Tahajjud prayer; the third is giving alms and donations of any amount; the fourth is being dutiful to parents by massaging their feet/hands, helping with household chores, or praying for both parents; and the fifth is performing ablution before sleeping. Based on the categorization, out of 94 students, the first group, which involves reading/writing/memorizing verses of the Qur'an, dhikr, or sending blessings, consists of 56 students. The second group, which involves performing the Sunnah Dhuha prayer or the Tahajjud prayer, consists of 21 students. The third group, which involves giving alms and donations of any amount, consists of 6 students. The fourth group, which involves being dutiful to parents through actions such as foot/hand massages, helping with household chores, or praying for both parents, consists of 5 students. The fifth group, which involves performing ablution before sleeping, consists of 6 students.

5 Discussion

The success of 80.85% of students in completing this worship practice is influenced by several factors, including the ease of performing the worship, its routine nature, and social support. This aligns with the principle of how habits are formed, which requires behaviors that are easy to perform and will then become habits [12]. On the contrary, 19.15% of students who failed to complete this challenge indicate the need for external support to ensure that their worship is carried out consistently. [26] explaining that the social environment greatly influences a person's behavior, including in the context of religion. The focus on 'ibadah ghairu mahdhah' was chosen because it provides greater flexibility and personal reflection, aligning with the context of the Sufi Psychology course that emphasizes inner experience, spiritual awareness, and personal

meaning rather than formal ritual observance.The first act of worship is reading or memorizing the Quran, as well as dhikr and salawat, which are chosen by 59.57% of students. This is because these acts of worship can be performed anywhere and anytime, do not require any cost, do not involve external parties outside the students themselves, and have already become a habit among the Muslim community in general. The second category of worship is performing the Sunnah Dhuha prayer or the Tahajjud prayer. Although chosen by 21 students, it presents its own challenges. For instance, if this worship is performed during the time when this practice is being challenged, it will feel difficult to achieve success and consistency. However, if students are already accustomed to performing this worship before being assigned this course task, it will feel easy. This is based on the principle that consistent and continuous behavior will result in good attitudes and habits [27]. Meanwhile, the third form of worship is performing charity and donations of any amount, and the fourth is honoring parents through actions like massaging their feet/hands, helping with household chores, or praying for both parents. Although these have high value, they require external support, such as having someone to give charity/donations to or meeting with parents every day.

Based on the daily reflections written by the students, it was found that the practice of worship consistently performed for 40 days not only formed good habits but also had implications for psychological, emotional, spiritual, and social aspects [18]. Some students wrote that they felt calmer, more patient, and more comfortable in their daily lives during this 40-day practice, and were better able to control their emotions when facing pressure. "I can control my anger better and am not easily restless, especially after doing dhikr or after tahajjud." The students' reflective notes also reveal that during the practice of worship, their affairs and needs felt easier to achieve and their prayers were answered. The motivation to worship among the students also increased during the 40 days of worship. "I felt something was missing if I didn't perform that worship, and suddenly it was as if someone was reminding me." Although some students initially stated that they did it out of obligation, over time they began to enjoy the process. Students who choose to perform the duha prayer, recite Surah Al-Waqi'ah, or give charity, write about similar experiences, namely feeling financial tranquility and not worrying too much about money. They feel assured that their sustenance will always be sufficient, which becomes a strong motivation for the students to do this [23], In some student notes, they also wrote about unexpected experiences when they didn't have money or wanted to buy something but didn't have enough money.

The effect of performing the 40-day practice is also reflected in the inner peace obtained, thinking more clearly when making decisions, or not being hasty in choosing, which are things gained during and after the students undertake the 40-day practice. Another effect is the emergence of new habits and critical and positive thinking. Reflective notes show that students who diligently practice the 40-day ritual leave behind bad habits and develop new ones. Disciplined behavior and increased care for others also follow as a result. Events beyond the logic and reasoning of students have also been noted by several people [20], "I only had 10,000 rupiah, and even if I bought gasoline with it, it wouldn't be enough for a round trip. At that moment, I happened to pass by a gas station and recklessly used my 10,000 rupiah to buy gasoline." An unexpected event occurred when a red-plate motorcycle filled up with gas before me, and it turned out that after just a few thousand, the motorcycle was already full. In the end, the remaining gas from that motorcycle was filled into my motorcycle for free. Experiencing unexpected ease also happened to a student, like when "my friend transferred money to me, saying he was giving me money because he didn't give me a bonus during Eid. I was very happy because I was about to pay my tuition right at the deadline, but I was short on money, and

suddenly someone gave me money." The religious practices carried out by students have a positive impact on personal transformation towards a more positive direction, increased calmness in thinking and acting, emotional control, and psychological well-being [17]. If successful in practicing worship for 40 consecutive days, students will also experience an increase in their psychological well-being [22], the integration of worship practices into daily life is also one of the applications of positive psychology [19], Another benefit is that religious practices can prevent various mental disorders and depression [18].

The reflective analysis of students' journals revealed that their spiritual experiences during the practices centered around three interrelated aspects: religiosity, spirituality, and meaningfulness of life. Religiosity was expressed through students' consistency in engaging in worship activities aligned with their individual faiths—ranging from dhikr, prayer, and Qur'an recitation to non-ritual devotional acts ('ibadah ghairu mahdhah') such as helping others or caring for the environment. These practices not only deepened their vertical connection with God but also nurtured a sustained sense of religious awareness in daily life. Spirituality, in turn, emerged through inner experiences characterized by serenity, sincerity, and a profound sense of closeness to the Divine. The reflective process allowed students to become more attuned to their emotions, acknowledge their limitations, and perceive divine presence and meaning even in ordinary moments. Finally, meaningfulness of life surfaced as a transformative outcome of this contemplative journey. Many students described a renewed sense of purpose, heightened gratitude, and an orientation toward goodness and inner harmony. Collectively, these insights suggest that spiritual practice serves as a vital medium for self-growth, emotional balance, and the attainment of inner peace.

6 Conclusion

The 40-day worship practice has a profound and comprehensive impact on personal transformation for students, both spiritually and psychologically. In addition to forming new habits, this 40-day worship practice also brings about a sense of inner peace, emotional stability, ease in life, ease in affairs, prayers and hopes that seem easily granted, calmer decision-making, other positive behaviors that follow, and the emergence of miracles beyond reason. Some limitations and forms of exploration for future research include the use of more structured methods, pure quantitative approaches to measure relationships, or experimental quantitative methods to determine cause and effect, which can be linked to psychological variables such as subjective well-being or emotional intelligence. Limitations section stating that the findings of this study are not intended to be generalized to the entire millennial population. Future researchers could also consider the influence of social and environmental support as additional variables.

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Cultural Wisdom Across Generations: Local Values and Parenting in Javanese Society

Widyaning Hapsari[1], Zuli Qurniawati[2], Marisna Aprilia Putri[3]

{widyaninghapsari@umpwr.ac.id[1], zulyqurniawati@umpwr.ac.id[2], marisna.prilia@gmail.com[3]}

Universitas Muhammadiyah Purworejo, Indonesia[123]

Abstract. This study aims to examine how Javanese local wisdom—gotong royong, tepa selira, and unggah-ungguh—shapes transgenerational parenting practices and how these values persist under modernization. Using a pragmatic, convergent mixed-methods design, the research surveyed 100 Javanese adults (84 women, 16 men) and conducted thematic analysis of interview data to capture value transmission across generations. Descriptive statistics summarize the application of local values in daily parenting, while qualitative themes illuminate mechanisms of inheritance and contemporary challenges. Findings indicate that local wisdom remains integral to parenting, with unggah-ungguh (respectful conduct and politeness) most consistently emphasized in family interactions. At the same time, exposure to modern norms prompts selective adaptation rather than abandonment, suggesting continuity with calibrated change. These results highlight culturally grounded pathways for strengthening parenting programs and character education that honor tradition while accommodating current social dynamics.

Keywords: cultural transmission, gotong royong, Javanese local wisdom, modernization and culture, parenting practices

1 Introduction

Child-rearing patterns are a core pathway through which families transmit norms, roles, and moral reasoning across generations, shaping children's socioemotional development and civic conduct over the life course, including in contemporary Indonesian and Javanese contexts where intergenerational role modeling and dialogic communication remain central. In Javanese society, these practices are embedded in locally salient values—gotong royong (mutual aid), unggah-ungguh (respectful conduct and deference), and tepa selira (empathic self-restraint)—that regulate everyday interaction and role expectations within households and communities, thereby sustaining harmony and social order through exemplification, habituation, and family communication routines. At the same time, accelerating modernization and digital exposure introduce alternative scripts for autonomy, communication, and discipline, creating tensions between traditional expectations and contemporary parental goals as families adopt responsive digital parenting while attempting to preserve core Javanese virtues. Empirically, there remains limited evidence that quantifies how these Javanese values are enacted in day-to-day parenting and how they are transmitted between generations under current social change, with recent studies calling for mixed methods to capture both measurable patterns and lived mechanisms of value transmission. Addressing this gap provides a culturally grounded basis for parenting guidance and character education by linking statistical indicators of value internalization with
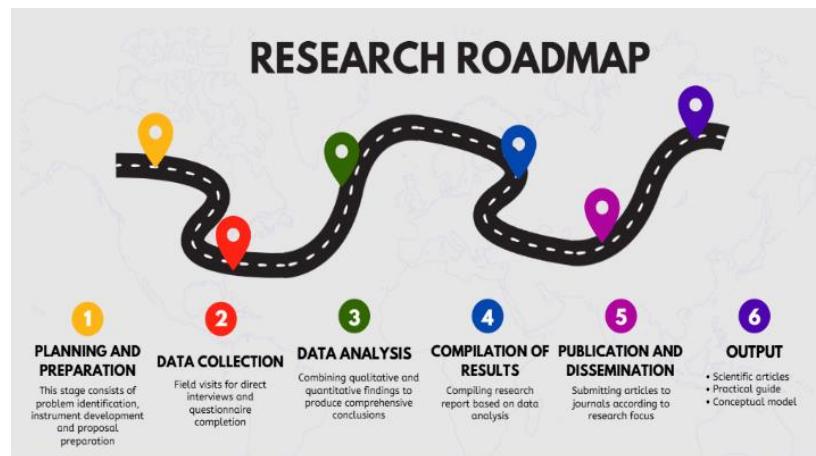
Figure 1. Research roadmap

qualitative accounts of intergenerational negotiation in Javanese families. Accordingly, this study examines the salience and transmission of gotong royong, unggah-ungguh, and tepa selira in Javanese families, and explores how these values adapt—or persist—in the face of modernization through strategies such as role modeling, positive habituation, and democratic-contextual parenting in the digital era [1].

The local wisdom embedded in Javanese culture is rooted in a cultural philosophy that prioritizes social harmony and respect for authority, two principles that are very important in Javanese life[2]. Parenting based on local wisdom not only forms the relationship between parents and children but also helps preserve Javanese cultural identity amidst growing modernization. However, globalization and rapid social changes pose significant challenges to the preservation of these values, especially among younger generations who increasingly reinterpret unggah-ungguh and tepa selira as flexible guidelines while navigating autonomy and digital peer cultures [3]

Previous research in the last decade indicates that local cultural values play an important role in child-rearing and child development in Indonesia, with ethnographic and phenomenological evidence from Javanese families highlighting value internalization through example and routine family practices [4]. Nevertheless, studies that specifically quantify and trace how these local wisdom values are passed on and applied in Javanese parenting across generations remain limited, particularly regarding the interplay between grandparental influence, mother–grandmother co-parenting, and parents' digital mediation strategies. Therefore, this study aims to explore the role of local wisdom values in shaping transgenerational parenting patterns in Javanese society and to understand how these values survive or change in a society increasingly influenced by global culture, focusing on mechanisms of transmission and adaptation observed in multigenerational households [5].

Theoretically, this research contributes to family sociology and character education by elaborating contemporary models of cultural value transmission that emphasize adaptive reinterpretation rather than static preservation, situated within Javanese communicative norms and family resilience frameworks. Practically, the findings aim to inform families, communities, and educational institutions on preserving and applying local cultural values in modern parenting through concrete strategies—role modeling, structured habituation, and responsive digital parenting—that align with current developmental and technological demands in Javanese households. By grounding guidance in recent peer-reviewed evidence, the study supports the development of culturally based parenting models that remain relevant to today's family needs while sustaining the ethical and relational core of Javanese local wisdom [6].

2. Literature Review

In this section, the author should provide a comprehensive review of the literature relevant to their research topic. The literature review should summarize and critically evaluate previous studies, highlighting key findings, trends, and gaps in existing knowledge. The authors are encouraged to organize the review thematically or chronologically, and clearly show how existing research contributes to the current study. All references should be properly cited according to the required citation style. Previous research has extensively covered aspects of parenting patterns, local wisdom values, and generational dynamics. Below are some studies relevant to this topic, focusing on local wisdom values and transgenerational parenting patterns in Javanese society:

Ethnoparenting and Cultural Transmission in Indonesian Contexts
Research on Javanese parenting frequently emphasizes cultural values like respect, harmony, and communal harmony as foundational to child development. For instance [7] explored these elements in early childhood rearing, revealing that Javanese practices often initiate during pregnancy through rituals and myths inherited across generations [1]. Their findings illustrate how such traditions foster adaptive behaviors in children, yet the study overlooks the mechanisms of value transmission between grandparents, parents, and offspring, limiting its applicability to transgenerational contexts. This thematic focus on prenatal and early-life influences aligns with broader trends in anthropological studies of Indonesian cultures but reveals a trend toward static cultural descriptions rather than dynamic, multi-generational processes.

Influence of Local Wisdom on Parenting and Child Education
Another relevant study conducted [8], published in the Journal of Al-Azhar Indonesia Seri Humaniora, examines how local wisdom values influence early childhood parenting patterns. Local wisdom—encompassing proverbs, rituals, and ethical norms—plays a pivotal role in shaping parenting behaviors, as evidenced by studies on its integration into daily child education. Suwardi and Siti Rahmawati demonstrated that habituating children to wisdom-based routines, such as communal storytelling and ethical decision-making, internalizes values like gotong royong (mutual cooperation) in early childhood [2]. While this work effectively highlights behavioral outcomes, it prioritizes immediate educational impacts over long-term transmission, neglecting how these practices evolve or erode across generations. Critically, this gap reflects a common trend in humaniora research: an emphasis on contemporary applications without tracing historical continuity, which this study seeks to rectify by examining three-generational perspectives.

Ethnoparenting: An Alternative Parenting Pattern of Indonesian Society
A study by [9] published in Aulad: Journal on Early Childhood discusses parenting practices based on traditions, culture, and local wisdom in Indonesia, including the Javanese community. This study emphasizes that Indonesian society, especially Javanese, has distinctive characteristics in parenting based on local wisdom values. It is stressed that parenting patterns in Indonesian society are rooted in local traditions and culture passed down through generations. However, this study emphasizes ethnoparenting in general and does not specifically investigate the transgenerational aspects of parenting, which is the main focus of this research.

Local Wisdom Values as Character Shapers
Another important study by [10] in the Journal of Character Education aimed to explore the content of local wisdom values living in the Magelang Raya community and how these values function as a guideline in shaping the character of the local community. This study provides a deeper understanding of the application of local wisdom values in daily life. However, it does not specifically discuss the application of these values in the context of transgenerational parenting in Javanese society, thus opening opportunities for further research on this aspect.

Knowledge Gaps
Although the above studies provide valuable insights regarding the role of local wisdom values in parenting, there remains a gap in research specifically examining how these values are passed down across generations in the Javanese community. Many studies discuss local wisdom values in child-rearing but few specifically study transgenerational parenting patterns in Javanese society, where the process of passing on local wisdom values can be influenced by social, cultural, and temporal changes. This study aims to fill this gap by exploring how these values are inherited and applied in child-rearing by three generations in Javanese families, as well as understanding the challenges faced in preserving these values amid modernization and globalization. This literature review shows that although much research has discussed culture-based parenting and local wisdom values in Indonesia, especially in Java, there are still few studies that explore transgenerational parenting in this context. This research will contribute significantly to filling this gap by studying the role of local wisdom values in transgenerational parenting transmitted within Javanese families.

3 Method

This study uses a pragmatic paradigm, which integrates qualitative and quantitative approaches to provide a holistic understanding of the role of local wisdom values in transgenerational parenting patterns in Javanese society. The pragmatic approach was chosen because it allows researchers to explore the deep meaning of local values through in-depth interviews and to examine empirical relationships using surveys. This paradigm assumes that reality is dynamic and complex, requiring a combination of methods to fully understand the phenomenon.

The research design is a survey, which aims to measure the impact of local wisdom values on transgenerational parenting patterns in Javanese society. The independent variables in this study are local wisdom values, such as gotong royong, tepa selira, and unggah-ungguh, while the dependent variable is transgenerational parenting patterns. Data were collected through the distribution of Likert-based questionnaires, which allow measuring how these values are applied in everyday life. The collected data will be analyzed using descriptive analysis to describe the characteristics of respondents and inferential analysis, such as linear regression, to test relationships between variables. This approach is expected to provide results that can be generalized, while also contributing to understanding the dynamics of local cultural value transmission.

The research will be conducted in several systematic stages. The first stage is preparation, which includes a literature review on local wisdom values, parenting patterns, and the transmission of values across generations. Next, researchers will develop data collection instruments in the form of questionnaires and test the validity and reliability of the instruments through a pilot test. In the second stage, data collection will be conducted by distributing questionnaires to Javanese families that meet the criteria, i.e., families with at least two generations (parents and adult

children). The sampling technique used is purposive sampling with a target of 100 respondents. Data will be collected through field visits or online, depending on the situation of the respondents.

Once the data is collected, the third stage is data analysis. The collected data will be processed using statistical software such as SPSS, where descriptive analysis will be used to describe respondent characteristics, while linear regression or path analysis will be used to test the relationship between local wisdom values and transgenerational parenting patterns. The final stage is reporting the research results, including the interpretation of findings, discussion of theoretical and practical implications, and preparation of a scholarly article for publication in an indexed journal. The results of this research will also be disseminated through presentations at international seminars.

The research involves Javanese families with at least two generations (parents and adult children) as the research population. This population is chosen because it has the potential to maintain, apply, or transform local wisdom values in transgenerational parenting patterns. Purposive sampling is used to select respondents based on specific criteria, namely families that still recognize or apply local wisdom values. The sample consists of 100 respondents from families with various geographic, educational, and socioeconomic backgrounds to ensure data variation.

The research instruments consist of questionnaires, interviews, and documentation. The questionnaire uses a Likert scale to measure the level of understanding and application of local wisdom values in cross-generational parenting patterns. The data collection process is conducted either in person or online, depending on the respondents' location. Research ethics are maintained by obtaining voluntary participation consent (informed consent) from each respondent and ensuring the confidentiality of respondent data. With a systematic procedure and comprehensive design, this study is expected to make a significant contribution in understanding the role of local wisdom values in transgenerational parenting patterns in Javanese society, as well as providing practical guidance for preserving local cultural values in the context of child-rearing in the era of modernization..

4 Result

This study aims to provide a deeper understanding of the role of local wisdom values such as gotong royong, tepa selira, and unggah-ungguh in shaping transgenerational parenting patterns within Javanese society. Guided by a pragmatic paradigm, both quantitative and qualitative data were integrated to support comprehensive insights into how these cultural values are transmitted and adapted across generations.

From the qualitative perspective, thematic analysis of in-depth interviews and observations revealed variations in value retention and adaptation processes. Three primary themes emerged. First, enduring values such as respect for elders and harmonious social relations remain consistently practiced, sustained through daily interactions and family rituals led by the older generation. Second, some values, including tepa selira and unggah-ungguh, show signs of moderation among the younger generation, influenced by digital culture and urban lifestyles that prioritize individual expression over communal conformity. Third, the transmission of

values has increasingly shifted from oral traditions and storytelling to indirect modeling and social media-based interactions, reflecting a changing mode of cultural inheritance. These findings highlight generational reinterpretation rather than total erosion of traditional values. Quantitative analysis was conducted to measure the influence of local cultural values on parenting styles and intergenerational continuity. Statistical results indicated a significant correlation between the strength of cultural value internalization and the consistency of parenting behaviors across generations. Families with higher reported adherence to Javanese wisdom values demonstrated stronger emotional bonds, cooperative decision-making, and stable patterns of child-rearing practices. Quantitative trends thus complement the qualitative interpretations by confirming that preserving these values contributes positively to intergenerational relations and family cohesion.

The integration of both qualitative and quantitative results follows the logic of the pragmatic paradigm, focusing on complementarity between empirical measurement and contextual understanding. Quantitative data provided measurable patterns and significance levels, while qualitative narratives enriched interpretations with contextual depth and meaning. Together, these approaches reveal not only the presence and strength of local wisdom values but also the dynamic processes through which they evolve in the face of modernization and globalization. The results of the research are shown in the graph below:
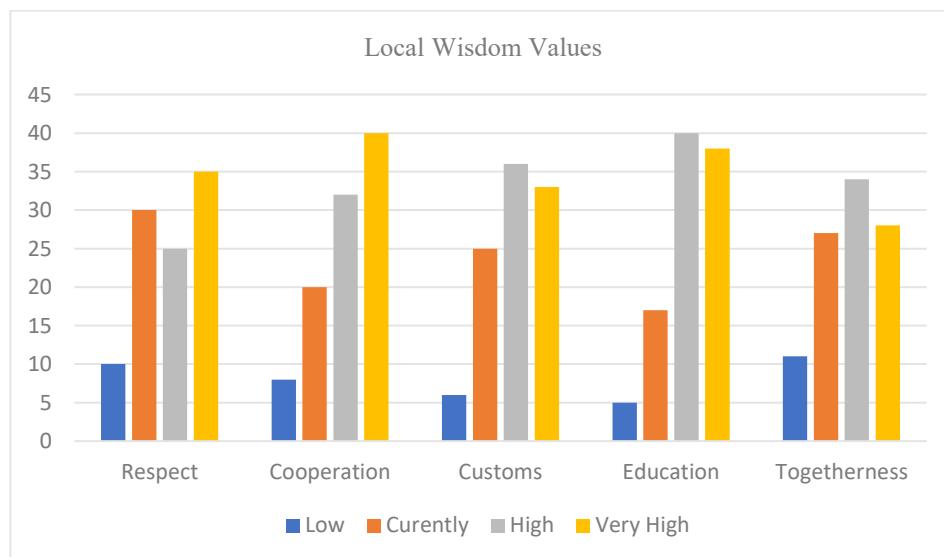

Figure 2. Local wisdom values in Javanese families

The figure above illustrates the local wisdom values that are still upheld and taught across generations in Javanese families. These values include five main aspects: respect for the elderly, gotong royong between siblings and neighbors, preserving Javanese traditions, education through ancestral advice passed from parents to children, and values of togetherness and family. These five values dominate with high to very high scores. From the quantitative analysis results, it was found that there is a relationship between the internalization of local wisdom values and specific parenting styles. For example, older generations, who have direct experience with these

values, tend to apply parenting patterns that emphasize local wisdom values, while the younger generation, who is more exposed to modern culture, may show a stronger influence of more permissive or authoritarian parenting styles. This finding provides a foundation for culturally-based parenting practices and serves as a reference for developing culturally relevant parenting guidelines that meet the needs of modern society. This research is expected to provide recommendations that can be used by the government or communities to design policies or programs that preserve Javanese cultural values in modern family life, such as parent training programs or cultural-based character education policies.

Thus, this research not only contributes to the development of knowledge but also enhances the quality of family parenting in Indonesia. These findings will provide deeper insights into the importance of preserving cultural values in parenting and how these values can adapt to social and cultural developments in contemporary society. Based on the research scale included, the results can be presented in categories or types of local wisdom values still applied in parenting patterns, which are measured through statements in the questionnaires filled out by the respondents. Below is the analysis of the results based on the scale:

Local Wisdom Values That Still Endure
Based on the questionnaire results, Javanese cultural values such as gotong royong, tepa selira, and unggah-ungguh applied in parenting are expected to show high scores on statements like:
a. "I teach my children to always respect parents and elders."
b. "Javanese cultural values (such as gotong royong, customs) are very important in educating children."
c. "I pass on the parenting values I received from my parents to my children."
d. "The older generation in my family often shares valuable parenting values with the younger generation."

These statements received the majority of "Agree" (S) or "Strongly Agree" (SS) responses from the respondents, showing that these values are still strongly applied in Javanese families today.

Local Wisdom Values That Are Starting to Fade
Meanwhile, some local wisdom values, such as changes in how cultural values are taught and differences in parenting styles between generations, are reflected in statements like:
a. "Parenting based on Javanese tradition often hinders the development of children in this modern era."
b. "Traditional Javanese values in family parenting are still applied in my family."

Most respondents selected "Disagree" (TS) or "Strongly Disagree" (STS) on these statements, showing that despite challenges, local wisdom values are still passed down in many families.

Factors Affecting Value Transmission
Factors affecting how these values are transmitted across generations were also identified in the data analysis, considering statements like:
a. "I feel there is a difference between how my parents raised me and how I raise my children concerning cultural values."
b. "I find it important to maintain the cultural values I received from my parents in parenting my children."

These statements provide insights into changes in parenting styles and how globalization or modernization influences the acceptance and application of cultural values in family life.

Application of Cultural Values in Parenting Patterns
The results of this analysis show the extent to which local wisdom values are still applied in transgenerational parenting patterns. This research also provides guidance for preserving local cultural values in modern family life. The findings contribute to understanding the dynamics of culturally-based parenting, which can help develop more relevant and culturally appropriate parenting models that fit the current social and cultural context in Indonesia.

5 Discussion

This study provides an in-depth understanding of how local wisdom values such as gotong royong, tepa selira, and unggah-ungguh are maintained, adapted, and sometimes diminished in Javanese transgenerational parenting. Drawing from both qualitative and quantitative analyses within a pragmatic paradigm, the findings demonstrate not only statistical patterns of value persistence but also contextual insights into how these values are negotiated within families facing modern influences.

Integration of Quantitative and Qualitative Findings
Quantitatively, survey results reveal a high level of agreement among respondents regarding the continued relevance of local wisdom values, particularly respect for parents and collective cooperation. High percentages in "Agree" and "Strongly Agree" responses indicate that these values remain foundational to child-rearing practices. The qualitative findings complement these trends by illustrating how such values manifest in daily parenting behaviors—through mutual assistance within extended families, intergenerational caregiving, and moral instruction conveyed through rituals and storytelling. These overlapping results strengthen the validity of both data sources, confirming that traditional values still play a vital role in Javanese family life despite cultural transitions.

In contrast, both datasets also reveal strains in value transmission. Quantitative responses show approval of statements recognizing that some traditional values may restrict children's independence, while qualitative interviews reveal narratives of negotiation—parents striving to balance obedience and autonomy. This reciprocity between datasets exemplifies the pragmatic paradigm's core principle: integrating numerical tendencies with rich contextual detail to generate a more comprehensive understanding of social phenomena. Together, the results indicate that modernization does not fully displace local wisdom but encourages selective adaptation aligned with changing family and societal structures.

Local Wisdom Values That Still Endure
The combined results suggest that enduring values such as gotong royong and filial respect remain prominent, supported by consistent behavioral reinforcement and intergenerational modeling. Qualitative accounts show that grandparents continue to function as cultural gatekeepers by teaching through everyday practices and oral guidance. These findings parallel earlier work by [8], reaffirming that cultural values remain integral to early education and

socialization. Quantitative data reinforce this pattern, highlighting the strong association between adherence to local wisdom values and familial harmony.

Local Wisdom Values That Are Starting to Fade

While core cultural principles persist, qualitative analysis indicates that the interpretation of certain values—particularly tepa selira and unggah-ungguh—has evolved. Younger parents describe these concepts as flexible moral guidelines rather than strict behavioral codes. Statistical results align with this trend, showing increased acceptance of attitudes prioritizing children's autonomy and self-expression. This finding resonates with the theoretical perspectives OF [11],[12] illustrating how collectivist traditions gradually integrate individualist elements in response to globalization and digital exposure.

Factors Affecting Value Transmission

The integration of both data types reveals that technological advancement, exposure to global media, and generational shifts in parenting ideology significantly affect the continuity of traditional practices. Qualitative narratives describe how millennial parents often seek child-rearing guidance from parent influencers or online forums rather than relying solely on family elders. Quantitative results corroborate this change, showing lower intergenerational transmission scores among respondents who rely heavily on digital sources. Nevertheless, enduring respect for parents and familial unity remains strong, indicating that modernization influences the form rather than the essence of Javanese parenting values. Supporting evidence from [13],[14] further illustrates how cultural adaptation coexists with preservation in different regional contexts.

Theoretical and Practical Implications

The integration of qualitative and quantitative insights provides a holistic understanding of cultural value transmission. Academically, the study extends existing theories by demonstrating that local wisdom endures not through rigid conservation but through adaptive reinterpretation shaped by intergenerational dialogue and modern exposure. Practically, the findings emphasize the need for family and educational interventions that strengthen positive traditional values while allowing flexibility for contemporary challenges. This integrative perspective underscores the potential of the pragmatic paradigm to bridge numerical trends with cultural meaning, creating a balanced understanding of Javanese transgenerational parenting in the twenty-first century.

6 Conclusion

Practically, this research provides a foundation for developing culturally-based parenting guidelines that are relevant to the challenges of the modern era. These guidelines can be used by educational institutions, cultural communities, or governments to design policies or programs that support the preservation of cult ural values in parenting children. For example, parent training programs that teach the importance of balancing traditional values with the need to adapt to contemporary developments.

Although the findings of this research provide important insights, there are several limitations to consider. One limitation is the focus on Javanese families, meaning the results may not fully generalize to a broader Indonesian society. Furthermore, while the questionnaire covers various

dimensions of parenting, the influence of more specific external factors, such as economics and education, may not have been fully explored. Future research could expand this approach by involving more cultural communities in Indonesia to understand how culturally-based parenting patterns are applied across different cultural backgrounds. Research could also expand the understanding of external factors influencing cultural value transmission, such as the role of social media and globalization in shaping younger generations' perceptions of traditional values. This research successfully revealed that local wisdom values, although still applied in Javanese family parenting patterns, experience changes as time progresses. Values such as gotong royong, tepa selira, and unggah-ungguh are still highly regarded, even though there is a tension between tradition and modernization. These findings provide significant contributions to understanding the dynamics of cultural value transmission and can serve as a basis for designing future cultural preservation policies and programs

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