

Social Support and Psychological Well-Being as Predictors of Academic Stress Among Vocational High School Students

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Abstract. Academic stress occurs due to a lack of adjustment and failure to handle academic demands. Unresolved stress can affect a student's thoughts, feelings, physical, and behavior. Several factors, including high social support and psychological well-being, can reduce stress. This study aims to determine the relationship between social support and academic stress with psychological well-being. This study is an example of correlational quantitative research. The study population was 900 students, and the researchers took a sample of 270 individuals (160 women and 116 men). The sampling technique is to use random sampling. Data were gathered using assessments for academic stress, social support, and psychological well-being. JASP 0.16.3.0 software for Windows was used to conduct the descriptive data analysis, which included normality and hypothesis testing. In addition, SPSS 22.0 for Windows was used to analyze the linearity test. The study found a significant negative correlation between academic stress, social support, and psychological well-being in high school ($y-x1 = -0.598$, $y-x2 = -0.736$, $p < .001$). This revealed a highly substantial negative link between academic stress, social support, and psychological well-being among high school students. This suggests that social support and psychological well-being have the ability to minimize academic stress in pupils.

Keywords: Social Support, Psychological Well-Being, Academic Stress, Vocational High School Students.

1 Introduction

Students pursuing vocational education are starting to enter adolescence, where they are very vulnerable to experiencing problems because they experience new changes in themselves. Adolescence itself means a transitional stage towards a higher status, namely the status of an adult. Based on developmental theory, adolescence is a time of rapid change, including fundamental changes in cognitive, emotional, social, and achievement aspects [1]. Vocational high school students also have various demands and obstacles in completing their education. Their obstacles and demands include homework that must be completed simultaneously, practicum, and vocational final assignments. As a result, students often bear this burden, leading to the manifestation of stress. Academic stress is the prevalent form of stress experienced by students, often accompanied by the emergence of stress-related indicators, including biological, cognitive, and emotional symptoms. Stress is a state of distress affecting individuals physically and psychologically [2].

The Basic Health Research (Riskesdas) results 2018 showed that 9.8% of the Indonesian population aged 15 years and over experienced mental disorders. The 2018 Riskesdas results

in the Sidoarjo area showed that 5.78% had mental-emotional disorders [3]. Through initial observations made by researchers on 3 SMK X students, there are several characteristics of academic stress behavior, namely leaving class during class hours, missing school without reason, lethargy or lack of enthusiasm when receiving material, not doing assignments, and several students who do homework but at school. These phenomena show indications of academic stress conditions in SMK X students.

According to Nur et al.'s (2021) research, 51.9% of respondents fell into the low-stress category, while 48.1% experienced high stress levels. This study underscores a notable correlation between family support and stress levels among students at SMK Kesehatan X. Study establishes a connection between peer social support and academic stress. Notably, the absence of social support from one's immediate environment is identified as a potential source of academic stress among students, as highlighted by Yusuf and Yusuf (2020). The level of health and stress experienced by students can be significantly impacted by the social support network they possess. In light of these references, it can be inferred that social support is crucial in mitigating academic stress. Consequently, researchers have incorporated these references into their study, encompassing three variables.

In addition to social support, high school students also need psychological well-being. [4] state that psychological well-being can help adolescents cultivate positive emotions, feel life satisfaction and happiness, reduce depression, and their tendency to behave negatively. A study conducted by [5] states that the stress a person feels has a significant negative relationship with psychological well-being, meaning that the better the psychological well-being of the individual, the lower the stress level. A person who has high psychological well-being will feel more psychological satisfaction and happiness in his life. Good psychological well-being can help them adapt and is expected to help them handle academic demands.

According to the explanation above, academic stress has a significant impact on students' learning process. As a result, researchers are interested in academic stress and its causes, namely social support and psychological well-being. The purpose of this study was to determine the association between academic stress, social support, and psychological well-being among SMK X students..

2 Literature Review

2.1 Academic stress

Academic stress is a state of individual pressure resulting from perceptions and judgments about academic stressors related to science and education [6]. Academic stress is an unpleasant feeling experienced by students caused by the emergence of negativity from parents, the environment, and various academic learning [7]. According to Helmi (Majri)[8], from a cognitive point of view, academic stress will have an impact, such as difficulty concentrating and forgetting quickly. While in terms of emotions, it will have an impact on irritability and quickly feel offended. In terms of social behavior, it will impact lazy learning and lying.

According to Sarafino and Smith [8], two aspects can cause academic stress: biological, physical, psychosocial, and cognitive and behavioral. The factors that affect academic stress are internal variables, including age, gender, genetics, intelligence, and education. Personality characteristics, personality characteristics include introvert or extrovert, stable

emotions, *locus of control*, and resilience. Cognitive and social variables include feeling social support from the closest people, social relationships and perceived personal control. Social and environmental relations (social support) means social support obtained and integration in interpersonal relationships. Coping strategies, meaning response ties, link elements of thought to solve every day. One of the things that can cause academic stress in students is the lack of social support from the surrounding environment [9].

2.2 Social Support

Social support means the quality of a relationship that is needed emotionally. Social support is the support received by individuals from the surrounding environment to avoid the risk of experiencing stress (Zimet, in Glozah, 2013). The impact of students' social support on their health and stress levels aligns with Smet's theory, which posits that individuals who receive solid social support from their surroundings tend to perceive stressful situations as more manageable, enhancing their ability to cope effectively with stressors [8]. According to Stewart & Sherbourne (1991), the aspects of social support are emotional or informative, meaning that there are people closest to them who are always good listeners and can provide advice or information when there is a problem. Real support is usually obtained from the family, such as someone preparing meals or cleaning up daily work. Affective support means that there is support from the closest person, which is in the form of affection, hugs, and so on, so that individuals feel they are wanted. Positive social interaction, available from the closest person to relax or have fun, aims to bring up positive values.

2.3 Psychological Well-being

Ryff (2013) states that someone who is psychologically well can accept their condition, establish positive relationships with others, be autonomous or independent, master the conditions around them, have life goals, and grow personally. Meanwhile, according to Ramos, psychological well-being is kindness, harmony, and good relationships between individuals and groups [12]. According to Edward (2009), individuals with psychological well-being will have a healthy psychological condition. Psychological well-being is a condition of individuals who have a positive attitude towards themselves and others, can make their own decisions and regulate behavior, can regulate and create an environment that is compatible with their needs, have life goals, and make adolescents' lives more meaningful, and try to explore and develop themselves [11]. Ryff (2013) outlines six facets of psychological well-being, encompassing autonomy, reflecting individuals' alignment with their personal beliefs; environmental mastery, signifying their ability to navigate life's challenges effectively; and personal growth, denoting the extent to which individuals can harness their talents and potential. Positive relationships with others gauge how well individuals foster connections with peers, while purpose in life measures the depth of meaning, purpose, and direction individuals perceive. Lastly, self-acceptance refers to an individual's awareness and acceptance of oneself, including acknowledging personal limitations.

3 Methods

This study used a correlational quantitative approach to investigate the relationship between academic stress variables, social support variables, and psychological well-being. The study covered the entire population of 900 students at SMK X, with a sample size of 270 students. Elementary random sampling is a technique that ensures each subject has an equal chance of

being selected as part of the sample.

Psychological scales were utilized for data collection, employing a Likert scale model ranging from 1 to 4. Respondents had four answer choices: strongly agree (scored as 4), agree (scored as 3), disagree (scored as 2), and strongly disagree (scored as 1)

The tool researchers use to collect data on academic stress variables is the academic stress scale developed by the researchers [14]. The measuring instrument consists of 20 items of biological and psychosocial aspects (which include cognitive, emotional, and social behavioral aspects). The reliability value is 0.933, while the item's differential strength value moves between 0.311 and 0.732.

The assessment of social support levels in this study utilized the Medical Outcomes Study Scale (MOS), consisting of 19 affirmative items. This scale encompasses four distinct facets of social support: emotional/informative support, tangible support, affective support, and positive social interaction. It's worth noting that the scale's reliability is exceptionally high, with a coefficient of 1.0, signifying perfect reliability, as established by Roach (2006). It's important to acknowledge that this scale was initially developed by Sherbourne and Stewart (1991)

The scale used to measure psychological well-being uses an adaptation of the *scale of psychological well-being with 18 items consisting of 9 favorable and nine unfavorable items. And there are six psychological well-being aspects: autonomy, environmental mastery, personal growth, positive relationships, life goals, and self-acceptance. This scale was developed by [11]. The level of consistency of Ryff's Psychological Well-Being Scale measuring instrument using Cronbach's alpha of all items obtained a reliability number of 0.845 [15]. Data analysis techniques using the Rho Spearman correlation method through JASP 0.16.3.0 and linearity tests using SPSS for Windows 22.0.*

4 Result

4.1 Description of Research Subjects

The subjects in this study were students of SMK X in Sidoarjo, grades 10 to 12, from all majors, male and female. The characteristics of respondents can be seen in table 1.

Table 1. Characteristics of Respondents

Characteristics		Sum	Percentage
Gender	Man	116	42.29%
	Woman	160	57.97%
Class	X	86	31.16
	XI	111	40.21
	XII	79	28.62
Department	Industrial Electrical Engineering	40	14
	Light Vehicle Engineering	24	8.69
	Visual Communication Design	52	18.84
	Fashion	72	26.87
	Leather Crafts	40	14.49
	Textile Crafts	48	17.39

4.2 Normality Test

The normality test is used to determine whether the distribution of data on independent and dependent variables can be known to be normally distributed or not. The data distribution is normal if ($p > 0.05$). If ($p < 0.05$), then the data distribution is considered abnormal—data normality analysis using JASP.0.16.3.0 with the Shapiro-Wilk test technique. The results of the analysis are described in Table 2.

Table 2. Data Normality Analysis Results

	Shapiro-Wilk	p
Academic Stress - Social Support	0.984	0.003
Academic Stress - Psychological Well-being	0.982	0.001
Social Support - Psychological Well-being	0.980	< .001

Based on the results of the normality test on the research distribution, it is known that the variables of academic stress, social support, and psychological well-being are not normally distributed because the p-value < 0.05 .

4.3 Linearity Test

The linearity test determines whether the research variables have a linear relationship. Both variables can be said to be linear if $p > 0.05$ and non-linear if $p < 0.05$. The results of the analysis are described in Table 3.

Table 3. Results of linearity analysis

Variable	Sig.(p)	F	Information
Academic stress*Social support	.000	159.432	Linear
Academic stress*Psychological Well Being	.000	302.558	Linear

The above table depicts the linearity test, which has a significance level of $p = .000$ ($p > 0.05$). As a result, there appears to be a direct link between academic stress, social support, and psychological well-being.

4.4 Hypothesis Test

The proposed hypothesis states that there is a negative association between academic stress, social support, and psychological well-being in students at SMK X in Sidoarjo. Hypothesis testing was conducted using non-parametric techniques, namely the Spearman rho correlation test, with the condition that the hypothesis is accepted if $p < 0.05$. The results of hypothesis testing are presented in the table below.

Table 4. Hypothesis test results

	Spearman" s Rho	p
Academic Stress – Social Support	-0.598	< 0.001
Academic Stress- Psychological Well-being	-0.736	< 0.001
Social Support - Psychological Well-being	0.675	< 0.001

The hypothesis test revealed a substantial association between academic stress, social support, and psychological well-being (p-value < 0.01).

5 Discussion

This study looks into the relationship between high school students in Sidoarjo's psychological health, social support, and academic stress. The correlation coefficient values for the $y-x_1$ and $y-x_2$ variables, respectively, are (-0.598 and (-0.736) according to the data analysis results ($p < .001$). These findings indicate a strong negative link between academic stress, social support, and psychological well-being. The student's academic pressure decreases as his or her social support and psychological well-being increase, and vice versa. This study proves that social support and psychological well-being considerably affect students' academic stress, implying that students can regulate themselves because others around them support them and have good psychological well-being. This follows the opinion [16] that the presence of social support can theoretically reduce the propensity of events that can cause stress. According to the research [17], a significant negative association existed between stress, psychological well-being, and social support.

Social support from family and friends is essential to reduce the risk of stress [18]. In the analysis of this study between the x_1-y variables, the coefficient value (-0.598) with ($p < 0.01$) means that there is a negative relationship between social support and academic stress in students. Previous research conducted by [19] shows that social support and academic stress have a negative relationship, meaning that social support can reduce stress levels in students. Other research conducted by [20] stated that family support has a role in reducing stress in SMK x students. Research [21] shows that there is a relationship between peer social support and academic stress, meaning that the social support provided by the closest people to students can foster perceptions in students to foster aspects of psychological well-being in students, one of the aspects referred to is *positive relationships* and *self-acceptance*. The existence of social support can make students feel valued and considered part of its members.

In the results of the analysis of this study between the x_2-y variables obtained the results (-0.736) with ($p < 0.01$) which means that there is a negative relationship between psychological well-being and academic stress in SMK x students—in previous research conducted by (Jannah et al., 2021) got a p-value (0.047) (< 0.05) with a correlation coefficient (-0.255) which means that there is a low negative relationship between psychological well-being and stress.

These findings support the research of Bowman, Aulia & Panjaitan (2019) that Individuals with high psychological well-being can navigate themselves effectively and skillfully in dealing with emerging challenges. Meanwhile, research by Sitorus & Maryatm (2020) stated a significant relationship between self-esteem and stress with psychological well-being in adolescents at the Western Cape Orphanage in Jakarta. In addition to social support, students also need good psychological well-being because social support and psychological well-being are predictors of academic stress in students.

The analysis showed the value of the correlation coefficient of the variables $y-x_1 = -0.598$ and $y-x_2 = -0.736$ with sig. $p < .001$, meaning a significant negative relationship exists between academic stress, social support, and psychological well-being. The higher the social support and psychological well-being of the student, the lower the academic pressure the student has, and vice versa; the lower the social support and psychological well-being of the student, the higher the academic pressure the student has.

This study shows a correlation between social support and psychological well-being, which

can also affect academic stress in SMK X students. The results of this study support the findings of Kurniawan & Eva (2020) that social support is significantly related to psychological well-being. This means that students with good social support and psychological well-being can reduce academic stress. Based on the explanation above, it can be concluded that students who have good social support and psychological well-being will have low levels of stress; this happens because of the support expected from the closest people by students, so academic demands and pressure from the school environment can be reduced and can have a good impact on student academics.

This study is expected to provide references for further research by combining social support and psychological well-being or other factors related to or affecting academic stress to be included in more psychological studies. The weakness of this study is that the questionnaire used is an adapted questionnaire from previous research with the consideration that there are similarities in the characteristics of the subject, so some items cannot be measured well. Other researchers who have an interest in researching similar themes can add the total population with slightly different characteristics.

6 Conclusion

The statistical analysis of SMK X students indicates a strong negative correlation between academic stress, social support, and psychological well-being. The study found a significant negative association between academic stress and social support (-0.598, $p < 0.01$), suggesting that increased social support leads to reduced academic stress. A significant negative correlation was also observed between academic stress and psychological well-being (-0.736, $p < 0.01$), indicating that higher psychological well-being corresponds to lower academic stress. In conclusion, the study affirms a negative relationship between academic stress, social support, and psychological well-being in SMK X students in Sidoarjo, supporting the research hypothesis with vital statistical significance.

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