

Determinants of Digital Literacy and Communication Privacy in The Cybermedia Era

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Abstract. The frenetic pace of technological advancements has altered how people interact with one another, including how frequently they access media. The purpose of this study is to examine the effects of digital literacy on communication privacy in the age of cybermedia. The research used SPSS analysis tools to conduct a quantitative approach and was based on communication privacy management theory. The study's subject was communication science students from Serang City universities, with a total of 200 respondents. The environment and socioeconomic status were found to play a significant role in the investigation of student communication privacy on social media. According to the findings of the research, the private space that exists in the age of cybermedia has encouraged individuals to interact with one another and become public consumption objects used by the media to generate reciprocity with the idea of profit and loss.

Keywords: Communication Privacy, Digital Literacy, and Cybermedia.

1 Introduction

The age of digitalization has had a wide range of effects on a variety of human life activities, particularly in the telecommunications sector. As evidenced by the high internet penetration rate of 64 percent, or 175.4 million users [1], which then has an impact on the ease and speed of information flow through the internet, it is the responsibility of the public to be aware, smart, and wise in responding to the positive and negative impacts of internet use on everyday life [2]. In Indonesia, the era of digitalization has become a magnet for high public consumption of the internet [3].

The reality demonstrates that the high frequency with which Indonesians access information and social media, as well as a large number of internet users, do not necessarily indicate that Indonesians are mature users of the Internet. There have been numerous reports of various cases involving the use of the internet, including refraction of reality, hate speech, radicalism, invasion of privacy, and even the dissemination of hoaxes or fake news. The lack of digital literacy among internet users is to blame for these incidents. Most people only know how to use the internet, without knowing about the risks or how to use it properly. The modern, modern internet is frequently referred to as a privacy violator because nearly every individual is vying for their privacy through posts on the internet, particularly social media [4], [5].

Parties have made a variety of efforts to improve the community's digital media literacy in response to the negative cases of social media users online. The use of social media is the primary focus of digital media literacy [6]. The effort, which began many years ago, utilized a variety of strategies to address a variety of digital media-related issues. Some take a more general approach, giving a brief overview of digital literacy as a whole. Others take a thematic approach, focusing on particular subtopics like "anti-hoax" and "internet security," particular age groups like "teenagers" and "kids," or particular demographics like "teachers" and "housewives." According to Sulthan and Istiyanto[1], the goal of making people digitally literate or raising public literacy levels cannot be accomplished through a single strategy.

We believe that digital literacy is one of the best solutions for addressing the threats and negative risks posed by internet use today. As a result of the growth of the internet, there should be a balance between the availability of new media and the ability to manage and interpret messages on the internet [7]. This way, internet users will be able to filter out incorrect information before using it. Additionally, casualties resulting from frequent indulgence in privacy on social media can be avoided with the presence of digital literacy [8].

The Indonesian people and government are increasingly concerned about young people's digital literacy. Young people can get information and influence public opinion decentralized through digital media. Young people will be better able to evaluate information and distinguish fact from fiction with advanced digital literacy skills. When there is a problem, you need to have this skill. Strong public participation can result from strong public opinion. Young people avoid traditional forms of community involvement and are more likely to engage in digital media [9], [10], so a person may lack the social skills and participation to participate in an online conversation if they lack digital literacy.

2 Theoretical Framework

Digital literacy is essentially an ongoing development of classical literacy (such as reading and purchasing), audio-visual literacy (such as electronic media), digital literacy (such as digital technology), and more oriented literacy. The variety of the essence of media literacy can be seen in the collection that we think of when we think of knowledge; in particular, we think of various textbooks, magazines, or magazine posts [8], [11], [12].

The traditional notions of media literacy and literacy are extended to include digital literacy. A few investigations have shown what computerized education means for online open doors for teenagers. Rodriguez-de-Dios et al.[13] have conducted research on the subject, of how digital literacy influences online opportunities and predicts them. Young people will have access to more opportunities the more digitally literate they are. In addition, McGuinness and Fulton's[14] study demonstrates that, in the context of blended learning, e-tutorials that promote digital literacy increase student engagement because they ensure that students get the most out of the learning process. Other exploration shows the four parts of computerized education, factual examination, the utilization of data, correspondence, and creation, have a huge relationship with youth local area commitment [15].

One common term is privacy; because the term "privacy" is frequently used not only in direct conversation but also on social media. Many human rights are based on privacy, which is essentially a fundamental right to autonomy and dignity protection. The term "privacy" refers to a person's rights. To safeguard oneself from unwanted life intrusions, privacy enables a person to establish barriers and manage boundaries [2]. One way to prevent other people

from having access to things like places, communications, information, and other things is through privacy. Privacy is very important to everyone because it gives people space to be themselves without being judged, allows them to think freely without being judged, and gives them control over what they know about themselves.

Sandra Petronio was the one who developed privacy management for communications. Communication Privacy Management Theory is based on presumptions about human nature and how people think and communicates [3]. This hypothesis causes three suppositions about the human instinct to compare to rules and frameworks:

- a. Human beings make decisions.
- b. Human choices and rules are based on the considerations of others as well as of oneself.
- c. Humans make and follow the rules.

According to Petronio, people use "mental calculus" to decide what to tell others and what to keep private based on factors like culture, gender, and context, among others. These criteria take into account not only oneself but also the other people involved. As a result, Petronio substitutes the terms "disclosure" and "personal disclosure" for "self-disclosure" [16].

The image and representation of the human being involved in relational life to the extent that the self and the other are connected. Disclosure is connected to the idea of privacy as well as the self and other people in the relationship. Only in the dialectical conflict with the disclosure can privacy be understood. We would have no concept of privacy if we divulged everything. Conversely, the notion of disclosure is absurd if all information is private. It is exclusively by matching them that every idea is not set in stone [17], [18], [19], [20].

People who are in a relationship with another person will always manage the boundary line within themselves, which is the line between the public and private domains, between the emotions and thoughts they want to share with others and those they don't want to share with others [21], [18]. Every relationship has to deal with the need to share information and protect oneself, which necessitates negotiating and coordinating boundaries. When there are good reasons to do both, individuals should consider how to manage the tensions that arise from the desire to "disclose" or "store" personal information. However, individuals about other individuals do not make decisions to "disclose" information solely based on considerations of costs and rewards [7].

3 Research Methods

The purpose of this research is to examine the effects of digital literacy on communication privacy in the age of cybermedia. Quantitative research is the method of choice. Communication science students from Serang City's universities, such as Sultan Ageng Tirtayasa University, Bina Bangsa University, Serang Raya University, and Sultan Maulana Hasannudin State Islamic University, were the subject of the study. A total of 200 respondents were selected through snowball sampling. Using SPSS, a straightforward regression approach to data analysis. Sugiyono[22] made sense of that straightforward direct relapse examination depends on the practical or causal relationship of one free factor with one ward variable.

4 Result and Discussion

Analysis of Research Variable Scores

The purpose of the score value analysis is to determine the index values (percent) that are used to represent digital literacy and communication privacy. There are five types of scores for each score.

20,00-36,00	36,01-52,00	52,01 – 68,00	68,01-84,00	84,01-100,00
Very low Very bad	Low Bad	Keep Mediocre	Tall Good	Very high Excellent

The average response score of 68.85 percent of respondents to questions about digital literacy variables was found to be in the "good" category, with values ranging from 68.01 to 84.00. These outcomes show that for the most part understudies have very great computerized proficiency abilities. In the meantime, an analysis of respondents' scores on the communication privacy variables question items yielded an average of 76.05 percent, with the "high" category having a value range of 68.01 to 84.00. According to these findings, the majority of students have severe privacy restrictions regarding communication.

Instrument Test Results

In this study, the calculated r-value from the corrected item-total correlations on calculating the validity of each research variable showed that the validity of the research items was being tested. The number r-table of (0.248) was found with n=200 [23]. If the calculated r-value is greater than 0.138 at a signification level of 5% (two-party test), the item is considered valid.

Table 1. Digital Literacy Variables

Corrected Item-Total Correlation	
LiTDG1	.491
LiTDG2	.654
LiTDG3	.388
LiTDG4	.423
LiTDG5	.473
LiTDG6	.499
LiTDG7	.319
LiTDG8	.654
LiTDG9	.476
LiTDG10	.392

Source: data processed, 2022.

Table 2. Communication Privacy Variables

Corrected Item-Total Correlation	
PRIV1	.459
PRIV2	.474
PRIV3	.499

PRIV4	.506
PRIV5	.476
PRIV6	.732
PRIV7	.568
PRIV8	.364
PRIV9	.417
PRIV10	.522

Source: data processed, 2022.

It is realized that the least determined r-esteem is 0.319. Therefore, this result demonstrates that each item has been declared valid.

The purpose of reliability tests is to determine the degree to which measuring instruments can be relied upon and maintain consistency over multiple measurements. Using the alpha Cronbach method, the reliability test yielded alpha values of 0.782 and 0.803. The validity test results for both variables are said to be reliable and very reliable, which means they meet the assumption of high reliability.

Simple Regression Equation Analysis

A constant value (a) of 5.117 was derived from the regression equation: $Y = 5.117 + 0.622 X + e$. Even though the independent variable, digital literacy, has not changed or has a value of zero, these findings demonstrate that communication privacy has a fairly good fixed value a sign of positive value. The variable regression coefficient X was found to be 0.622, which indicates that an increase in digital literacy equals an increase in communication privacy by 0.622 units. The regression coefficient's positive value indicates that digital literacy improves communication privacy.

Hypothesis Test Results

Table 3. Hypothesis Test Results

Coefficients ^a		
Model	t	sig
1 (Constant)	4.325	.000
Digital Literacy	3.048	.000

a. Dependent Variable: Communications Privacy

Source: data processed, 2022.

It is known from the data in Table 3 above that calculated t values of 3.048% and sig values of 0.000 were obtained from hypothesis testing. Because the t-count (3,048) was higher than the t-table (1,972) and the sig (0.000) was lower than the sig (0.05), these findings indicate that digital literacy has a significant impact on communication privacy. A positive value in the calculation indicates that digital literacy has a positive effect on communication privacy, indicating that communication privacy increases with digital literacy.

Coefficient of Determination Test (R²)

The coefficient of determination (R²) gauges how far the model's capacity to portray the variety of bound factors is. A low R² value indicates that the independent variables (X) are unable to adequately describe the variation of the dependent variable (Y) [23]. The following are the outcomes of the coefficient of determination test:

Table 4. Coefficient of Determination Test Results

Model	R	R Square	Adjusted R Square
1	.660 ^a	.578	.499

a. Predictors: (Constant), Communications Privacy

Source: data processed, 2022.

It has an R-square of 0.578, as shown in the table above. This number indicates that digital literacy can explain communication privacy at a rate of 57.8 percent. While other variables outside of this study had an impact on the remaining 42.2%.

Discussion

The technological advancements of today have provided numerous channels of communication and information. Information is now extremely abundant and appears to have no boundaries due to the rapid development of communication and information technology [1]. The development of information and communication technology also provides its users with social changes, either with positive value when communication technology is used as needed or with negative value when all communication technology developments are used in a non-necessary way and even tend to have a negative impact [11].

According to Potter[24], media literacy is a set of perspectives that we actively use to interpret the messages we encounter when we access mass media. How audiences can control the media through media literacy. Media literacy is the ability to determine the usefulness of each type of message by analyzing its meaning and crafting a message to share with others [16].

With a positive regression coefficient of 0.622, the hypothesis test found that digital literacy has a significant impact on communication privacy. This means that communication privacy can be better managed with better digital literacy. These findings are consistent with the communication privacy management theory, which holds that individuals make decisions about what information to share and what information to keep private based on "mental calculus" based on factors like culture, gender, and context, among others. The mental calculus in this case is obtained through digital literacy, which ultimately enables a person to become a more aware and intelligent internet user [25], [6].

5 Conclusion

Digital literacy is seen as a way to maximize the opportunities and benefits of internet use while also anticipating the many unexpected, negative, and detrimental consequences that internet users face. According to the R-square value of 57.8%, this study concluded that digital literacy is a fairly dominant factor in determining the high and low privacy of communication. Because they are more aware of the significance of internet safety and convenience, people with strong digital literacy skills and comprehension will have a higher standardization of privacy boundaries. Further research is required because this study found that environmental and socioeconomic factors significantly influence changes in the privacy of individual communications.

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