

The Effectiveness of Social Media Utilization on Gen Z Communication Patterns in the Digital Era

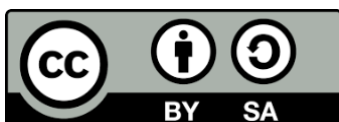
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Abstract

The development of digital technology has significantly changed people's communication patterns, especially among Gen Z, known as the digital native generation. This study aims to analyze the effectiveness of social media utilization on the communication patterns of students in the Digital Communication and Media Study Program, IPB Vocational School. The research approach used was quantitative with a survey method of 179 respondents. Data collection techniques were carried out through online questionnaires, while data analysis techniques included descriptive statistical tests, multiple linear regression tests, and hypothesis testing to examine the influence of independent variables on communication patterns. The results of the study indicate that social media utilization has a significant influence on student communication patterns, especially in aspects of interactivity, accelerating information dissemination, and expanding communication reach. Platforms such as Instagram, TikTok, and YouTube play an important role in supporting students to interact more effectively in the digital era. Individual characteristics such as age, gender, and pocket money do not have a significant influence on student communication patterns. Based on the results of the regression test, the variable of social media utilization has a significance value <0.05 , which indicates a real influence on students' digital communication patterns. This study concludes that social media contributes positively in facilitating communication in the digital era, especially for digital communication and media students. Optimizing the wise use of social media is expected to improve the effectiveness of academic and social communication. Research recommendations suggest that students utilize social media productively and educational institutions integrate digital platforms into the learning process to support more interactive and efficient academic interactions.

Keywords: Communication Effectiveness, Utilization of Social Media, Communication Patterns



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INTRODUCTION

The rapid development of internet technology has had a significant impact on various aspects of life, including social, economic, political, cultural, and educational aspects. The rapid and widespread growth of social media has transformed the way individuals communicate and access information. Digital innovation brings benefits in terms of convenience, efficiency, and the creation of new ways to carry out daily activities. Information in the world of education can be accessed anytime without having to go to the library in person. Social media allows individuals to stay connected, even with those far away.

Social media is an online platform that allows individuals to connect, share information, and interact digitally. Communication on social media includes text, images, video, and audio, which can be verbal or non-verbal. The advantages of social media are increasingly evident in the lives of Gen Z, a generation born in the era of advanced technology and utilizing digital platforms like Instagram, TikTok, Twitter, and YouTube for various needs. As a means of entertainment, social media for Gen Z serves as a space to build personal branding, express creativity, and support interactive and flexible learning processes. The increasingly dominant role of social media in modern life shows that these platforms are not just a trend, but have become an essential necessity in the digital era.

Students in the Digital Communication and Media Study Program at IPB Vocational School are part of Gen Z, who actively use social media in their academic and social lives. Their educational backgrounds focus on digital communication and media, and their ability to navigate various social media platforms, are likely to be more proficient. Further research is needed to determine the effectiveness of social media in improving learning quality, building professional networks, and supporting academic productivity.

This research uses two theories: Media Richness and Uses and Gratifications. The Media Richness theory, proposed by Daft and Lengel (1986), states that the effectiveness of a communication medium depends on the extent to which it can convey information richly and interactively. Media with a high level of richness not only allows for more effective message delivery but can also reduce ambiguity in communication through various features that support direct interaction.

This theory explains that individuals actively choose and use media based on their needs and desired gratifications. This theory emphasizes that each individual has specific motives for using media, such as seeking information, entertainment, social interaction, or even establishing a self-identity. The Uses and Gratifications theory is fundamental to understanding how and why Gen Z adopts and integrates social media into their lives. This theory also emphasizes the importance of needs and gratifications in optimally utilizing digital technology (Elihu Katz et al., 1973).

Individual Characteristics

Individual characteristics are distinctive traits that indicate a person's differences in motivation, initiative, the ability to persist in facing a task until completion or solving a problem, or how to adapt to changes closely related to the environment that affect individual performance (Robbins and Judge, 2023). Individual characteristics are demographic, psychological, and social traits inherent in a person and distinguish them from other individuals. This study uses demographic factors with three indicators: age, gender, and monthly pocket money. The adaptive characteristics of Gen Z towards technology explain their preference for platforms with real-time features.

Effectiveness of Social Media in Communication

The effectiveness of social media in communication is influenced by various factors, such as frequency of use, the type of platform used, and the individual's ability to select

appropriate information. Analysis is needed to determine the extent to which social media contributes to student communication patterns, especially in academic settings. A deeper understanding of the role of social media in student communication in higher education can help optimize its use more effectively. Social media is used as an educational tool by Gen Z (Firamadhina and Krisnani, 2020). This study used two indicators: frequency of use and duration of use.

Gen Z Communication Patterns in the Digital Era

Communication patterns in digital media have several key indicators that determine their effectiveness. Interactivity is one indicator that refers to the level of user involvement in the communication process, where users not only receive information but can also respond and interact directly (McQuail, 2010) in Mass Communication Theory. This study uses four indicators: interactivity, speed of information dissemination, reach, and user participation.

RESEARCH METHODS

The type of research used in this study is a quantitative research method, which aims to collect and analyze data in the form of numbers in order to obtain findings relevant to the problems studied. This study is about the effectiveness of social media utilization on the communication patterns of Gen Z with digital communication and media students of SV IPB located at Jalan Kumbang No. 14, RT. 02 / RW. 06, Babakan, Bogor Tengah District, Bogor City, West Java 16128. The time of implementation of this research is from February to May 2025.

The data collection techniques used in this study included questionnaires, observation, and literature review. Data processing techniques are the methods used to analyze and process the collected data. This process can be performed using various tools such as Microsoft Excel, Microsoft Word, and SPSS. Data analysis in this study utilized data from the questionnaires, which were analyzed quantitatively using descriptive statistical analysis, validity and reliability tests, multiple linear regression, and hypothesis testing.

The population in this study were 322 final-year students of the digital communication and media study program, class of 58. The number of respondents for this study was determined using a purposive sampling technique, where the sample was based on the criteria of actively using social media such as Instagram, Tiktok, X (Twitter), and YouTube in daily communication activities. The determination of this study sample was based on calculations using the Slovin formula with a margin of error of 5%, resulting in 179 samples needed as subjects for this study. The technique used to measure questionnaire data was a Likert scale of 1-5. The following table shows the Likert scale of 1-5 Interactivity:

Table 1. Likert Scale 1-5 Interactivity

Score	Level	Interactivity	Description
1	Very Low	Users seldom or	No role interact with content/social media
2	Low	Users interact occasionally, but not consistently	
3	Currently	Users interact quite frequently, but still in moderate amounts.	
4	Tall	Users often interact with content/social media	
5	Very high	Users are very active in interacting, such as frequently liking, commenting, sharing, or participating in discussions/interactive content.	

RESULTS AND DISCUSSION

Validity Test

A validity test is an instrument deemed valid when the statement is sufficiently clear and concise. Validity is considered valid if the calculated r value is greater than the tabulated r value. Validity can also be assessed using a t-test. The significance level commonly used in education is 0.01 or 0.05.

Table 2. Validity Test Results

Variables	<i>Corrected Item Total Correlation</i>	Information
X1.1	0.836	Valid
X1.1.1	0.701	Valid
X1.1.2	0.854	Valid
X2.1	0.535	Valid
X2.1.1	0.775	Valid
X2.1.2	0.823	Valid
X2.2	0.779	Valid
X2.2.1	0.815	Valid
X2.2.2	0.779	Valid
X2.2.3	0.612	Valid
Y1.1	0.629	Valid
Y1.1.1	0.506	Valid
Y1.1.2	0.612	Valid
Y1.1.3	0.723	Valid
Y1.2	0.592	Valid
Y1.2.1	0.579	Valid
Y1.2.2	0.418	Valid
Y1.3	0.586	Valid
Y1.3.1	0.521	Valid
Y1.3.2	0.640	Valid
Y1.4	0.647	Valid
Y1.4.1	0.763	Valid
Y1.4.2	0.814	Valid

Source: SPSS 29 output

Based on the data displayed in the test results table above, it can be explained that all tested items have a calculated r value greater than the table r value at a significance level of 0.05. This condition meets the validity testing criteria where the calculated $r >$ table r. It can be concluded that all tested instrument items are valid and suitable for use in data collection in this study. This validity indicates that the research instrument has a good ability to measure the concepts or variables to be measured in this study.

Reliability Test

Table 3. Validity Test Results

Variables	<i>Cronbach's Alpha</i>	N of Items
X1	0.680	3
X2	0.848	7
Y1	0.873	13

Source: SPSS 29 output

The table above shows the results of the reliability test, showing that all statements from variables X1, X2, and Y1 have a Cronbach's Alpha value $>$ the limit value or 0.60. It can be concluded that the instrument used to measure variables X1, X2, and Y1 has a high level of internal consistency. This high internal consistency indicates that the items in the instrument

are interrelated and measure the same construct consistently. With a Cronbach's Alpha value exceeding the minimum standard of 0.60, this research instrument is declared reliable and can be relied upon for use in research data collection.

Descriptive Statistical Analysis

Table 4. Descriptive Statistical Analysis Test Results

	N	Minimum	Maximum	Mean	Standard Deviation
Individual Characteristics	30	2.00	9.00	6.2667	2.09981
Utilization of Social Media	30	21.00	35.00	30.0667	4.37022
Communication Patterns	30	28.00	50.00	38.2333	6.36089
Valid N (listwise)	30				

Source: SPSS 29 output

Based on the results of the descriptive statistical analysis test above, we can describe the distribution of data obtained by the researcher as follows:

1. The Individual Characteristics Variable (X1) from the data can be described as having a minimum value of 2 while the maximum value is 9 and the average value of the individual characteristics is 6.2667. The standard deviation of the individual characteristics data is 2.09981. This indicates that the data distribution is not too far from the average value.
2. The Social Media Utilization Variable (X2) from the data can be described that the minimum value is 21.00 while the maximum value is 35.00 and the average value of social media utilization is 30.0667. The standard deviation of 4.37022 shows that the use of social media among respondents is quite varied, although it is still in a relatively centered range around the average.
3. The Communication Pattern variable (Y1) from the data can be described as having a minimum value of 28.00, a maximum value of 50.00, and an average value of 38.233. The standard deviation is 6.36089, indicating greater variation than the previous two variables. This indicates that respondents' communication methods via social media are quite diverse.

Normality Test

Table 5. Kolmogorov-Smirnov Test Results

		Unstandardized Residual
N		179
Normal Parameters ^{a,b}	Mean	.0000000
	Standard Deviation	5.13533674
Most Extreme Differences	Absolute	.048
	Positive	.048
	Negative	-.041
Kolmogorov-Smirnov Z		.048
Asymp. Sig. (2-tailed)		.200 ^d

a. Test distribution is Normal.

b. Calculated from data.

Source: SPSS 29 output

Based on the results of the normality test using the Kolmogorov-Smirnov method with a value of 0.448 at a significance level of 0.200 (Asymp. Sig. (2-tailed)). This significance value

is greater than the specified alpha level, namely p value > 0.05. It can be concluded that the residuals of the regression model tested are normally distributed. Residual normality is one of the important assumptions in regression analysis, because it shows that the error term of the model has met the requirements for valid statistical inference. Fulfillment of this normality assumption indicates that the model used has met one of the goodness of fit criteria and can be used for further analysis or statistical decision making.

Multicollinearity Test

Table 6. Test Results Multicollinearity

Model	Coefficients				Collinearity Statistics		
	Unstandardized Coefficients B	Std. Error	Standardized Coefficients Beta	t	Sig.	Tolerance	VIF
1 (Constant)	14,096	2,898		4,864	<.001		
Individual Characteristics	.287	.229	.077	1,252	.212	.999	1,001
Utilization of Social Media	.793	.085	.577	9,386	<.001	.999	1,001

Source: SPSS 29 output

Based on the table above, it is known that the VIF value of the individual characteristics variable (X1) and the social media utilization variable (X2) is $1.001 < 10$ and the tolerance value is $0.999 > 0.1$, so the data does not have multicollinearity, meaning that the two independent variables, namely individual characteristics (X1) and social media utilization (X2) do not have a high correlation with each other, so that each variable truly provides an independent contribution to the dependent variable, namely communication patterns (Y1) based on the previous context.

Heteroscedasticity Test

Based on the scatterplot visualization, it can be concluded that the regression model for the dependent variable of communication patterns (Y1) tends not to experience heteroscedasticity problems, meaning that the assumption of homoscedasticity (equality of residual variance) is met, which means that this regression model is valid for use in further analysis because it has a relatively constant error variance at all levels of the independent variable.

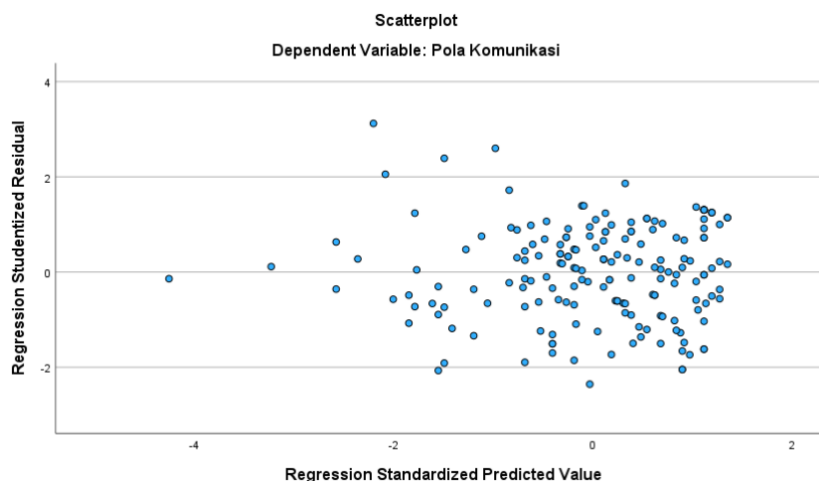


Figure 1. Scatterplot of Heteroscedasticity Test Results (Source: SPSS 29 Output)

F Test (Simultaneous)

Table 7. F Test Results (Simultaneous)

Model		Sum of Squares	df	Mean Square	F	Sig.
1	Regression	2376.343	2	1188.172	44,549	<.001b
	Residual	4694.160	176	26,671		
	Total	7070.503	178			

- a. Dependent Variable: Communication Patterns
- b. Predictors: (Constant), Social Media Utilization, Individual Characteristics

Source: SPSS 29 output

Based on the table above, it can be seen that the significance value for the influence of individual characteristics (X1) and the use of social media (X2) on communication patterns (Y1) is $0.001 < 0.05$ and for the calculated f value it is seen that it is $44.549 > 3.05$. In these variables, it shows that H03 is rejected and H03 is accepted, meaning that there is a significant influence of individual characteristics (X1) and the use of social media (X2) on communication patterns (Y1).

T-Test (Partial)

Table 8. Partial T-Test Results for Variable X1 Against Y1

Coefficientsa

Model		Unstandardized Coefficients		Standardized Coefficients	t	Sig.
		B	Std. Error	Beta		
1	(Constant)	37,863	1,722		21,986	<.001
	Individual Characteristics	.229	.280	.061		

- a. Dependent Variable: Communication Patterns

Source: SPSS 29 output

Based on the table above, it can be seen that the t test (partial) on variable X1 against Y1 shows that the calculated t value $>$ t table value of $0.818 < 1.793$, meaning that the significance value has no effect on individual characteristics (X1) on communication patterns (Y1). This shows that H0 states that there is no influence of individual characteristics (X1) on (Y1) and H1 states that individual characteristics (X1) do not have a significant effect on communication patterns (Y1).

Table 9. Partial T-Test Results of Variable X2 Against Y1

Coefficientsa

Model		Unstandardized Coefficients		Standardized Coefficients	t	Sig.
		B	Std. Error	Beta		
1	(Constant)	15,879	2,528		6,280	<.001
	Utilization of Social Media	.791	.085	.575		

- a. Dependent Variable: Communication Patterns

Source: SPSS 29 output

Based on the table above, it can be seen that the t test (partial) on the variable X2 against Y2 shows that the calculated t value $>$ t table of $9.341 > 1.973$, meaning that the significance value has an effect on the use of social media (X2) on communication patterns (Y1). This shows that H0 states that there is no effect of the use of social media (X2) on

communication patterns (Y1) or is rejected and H1 states that the use of social media (X2) has an effect on communication patterns (Y1).

Coefficient of Determination Test (R²)

Table 10. Results of the Coefficient of Determination (R²) Test

Model Summary

Model	R	R Square	Adjusted R Square	Standard Error of the Estimate
1	.580a	.336	.329	5.16443

Source: SPSS 29 output

Based on the table above, the r-square coefficient (r²) is 0.336, or 33.6%. It can be concluded that the influence of individual characteristics (X1) on communication patterns (Y1) is 0.336, or 33.6%. This figure indicates that changes in individual characteristics will have a significant impact on the resulting communication patterns.

Multiple Linear Regression Test

Table 11. Multiple Linear Regression Test Results

Coefficients^a

Model		Unstandardized Coefficients		Standardized Coefficients	t	Sig.
		B	Std. Error	Beta		
1	(Constant)	14,096	2,898		4,864	<.001
	Individual Characteristics	.287	.229	.077	1,252	.212
	Utilization of Social Media	.793	.085	.577	9,386	<.001

a. Dependent Variable: Communication Patterns

Source: SPSS 29 output

Berdasarkan tabel diatas menunjukkan bahwa nilai a sebesar 14,096 merupakan konstanta atau keadaan saat variabel pola komunikasi tidak dipengaruhi oleh variabel lain yaitu variabel karakteristik individu (X1) dan pemanfaatan media sosial (X2). Jika variabel independen tidak ada maka variabel pola komunikasi tidak mengalami perubahan. Pada B1 sebesar 0,287 menunjukkan bahwa variabel karakteristik individu mempunyai pengaruh yang positif terhadap pola komunikasi yang berarti bahwa setiap kenaikan satuan variabel harga maka akan mempengaruhi pola komunikasi sebesar 0,287 dengan asumsi bahwa variabel lain tidak diteliti dalam penelitian ini. Pada B2 sebesar 0,793 menunjukkan bahwa variabel pemanfaatan media sosial mempunyai pengaruh yang positif terhadap pola komunikasi berarti bahwa setiap kenaikan satuan variabel pemanfaatan media sosial maka akan mempengaruhi pola komunikasi sebesar 0,793, dengan asumsi bahwa variabel lain tidak diteliti dalam penelitian ini. Tingginya nilai B untuk pemanfaatan media sosial menunjukkan bahwa platform digital menjadi kanal utama komunikasi gen z dibanding karakteristik individu. Penggunaan media sosial berpengaruh signifikan terhadap pola komunikasi gen z (Sari dan Irena, 2023). Dampak media sosial terhadap karakter dan hubungan sosial gen z juga disampaikan oleh (Fadillah, R., et al, 2024)

CONCLUSION

Berdasarkan hasil penelitian menunjukkan bahwa intensitas penggunaan media sosial berpengaruh signifikan terhadap pola komunikasi gen z, sedangkan karakteristik individu tidak

memiliki pengaruh yang signifikan. Hal ini menegaskan bahwa gen z membangun preferensi komunikasi berdasarkan eksposur terhadap fitur-fitur media sosial yang cepat, interaktif, dan fleksibel. Komunikasi antarindividu dalam kelompok usia ini cenderung terbangun melalui pengalaman digital yang berulang, bukan semata-mata oleh latar belakang pribadi. Dengan demikian, optimalisasi pemanfaatan media sosial dalam konteks akademik dan institusional perlu mempertimbangkan preferensi ini, termasuk melalui strategi digital engagement berbasis visual, personalisasi, dan real-time interaction.

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