

Analysis of the Use of Cyber Media in Social and Cultural Communication of Generation Z in the 20 State High School Radio Podcastrap Comunnity in Bandung City

Yusuf Hartawan¹
Universitas Pasundan

Tresia Wulandari²
Universitas Pasundan

Nurul Intan Krisnayanti³
Universitas Pasundan

Rakan Trisan Dirgana⁴
Universitas Pasundan

Correspondence : Yusuf Hartawan (yusuf.hartawan@unpas.ac.id)

Abstract

The purpose of this study is to examine the impact of cybermedia use, media education level, and technological infrastructure availability on Generation Z's socio-cultural communication in the Podcastrap Radio community of State Senior High School 20 in Bandung. The study's findings indicate that the use of cybermedia, the level of media education, and the availability of technological infrastructure all have a substantial impact on Generation Z's socio-cultural communication. The use of cybermedia has a regression coefficient of 0.40 with a p-value of 0.000; the degree of media education has a regression coefficient of 0.30 with a p-value of 0.000; and the availability of technological infrastructure has a regression coefficient of 0.25 with a p-value of 0.000. The three independent factors account for 72% of the variation in Generation Z's socio-cultural communication ($R^2 = 0.72$). The F test findings suggest that the regression model is statistically significant ($F = 30.88$, $p = 0.000$). This study concluded that cybermedia use, media education level, and availability of technology infrastructure all play essential roles in increasing socio-cultural communication among Generation Z. Future research should investigate other characteristics that may affect Generation Z's socio-cultural communication, as well as test this model in multiple regions for broader generality.

Keywords: Cybermedia, Technology Infrastructure, Socio-Cultural Communication, Generation Z

Introduction

In the 21st century, the emergence of New Media has revolutionized human communication, leading to significant changes in how individuals connect with each other (Cristina Voicu, 2023). This era is characterized by globalization, where digital spaces play an important role in facilitating interactions between people from diverse cultural backgrounds (Zitong Zheng, 2022). New Media technology has democratized environmental and social communication, providing a platform for real-time information exchange and creative expression (Ida Ayu Nadia Varenia, 2022). The evolution of communication tools, such as social media platforms, podcasts, and online games, has changed the dynamics of intercultural

communication, influencing how individuals perceive and interpret messages in various cultural contexts (Zitong Zheng, 2022)). Additionally, the advertising landscape has been reshaped by New Media, emphasizing stronger interactions, visual impact, and tailored content to effectively engage audiences (Svetlana Pyankova, 2022). Overall, the digital era has redefined human sociocultural communication, ushering in a century of cultural openness and diversity in the way messages are delivered and interpreted.

The Internet, as a Supermedium for Communicating, has revolutionized communication by enabling the transfer of messages from scattered sources to recipients, giving rise to the term cybermedia, which is considered a form of New Media (Ida Ayu Nadia Varenia, 2022). New Media embraces digitalization, convergence, and blurring the boundaries between private and public domains, enabling active participation in a participatory culture where distinguishing between professional and amateur content becomes challenging (Hua Jiang, 2022). Moreover, the presence of new media has positive implications such as real-time access to information and effective communication, but also gives rise to negative consequences such as increased reliance on virtual worlds and vulnerability to manipulation, especially when consumed without supervision, highlighting the importance of understanding and managing cyber addiction and cyber fraud in the digital era (Henri Kuprashvili, 2022). The terms “kiberushishroeba” and “kiberusaprtkhoeba” further emphasize the need for effective cyber and computer security measures to protect against cyber threats and ensure the sustainability of cyber space (Danuta Smołucha, 2020).

Gillmor's observation of communication patterns transitioning from one-to-many to one-to-one in traditional media such as books, radio, and TV, and then to many-to-many and few to few in cybermedia (Gabriele Balbi, 2016) , in line with the evolution of communications technology. The shift to cybermedia allows interaction between many users and small groups due to the interconnected nature of computer devices (Laura S. Scherling, 2017). This transformation is facilitated by pattern recognition in cyberspace, where various recurring phenomena interact and form complex relationships (Hong Zhu, 2014). In addition, ensuring secure authentication in multi-cloud environments through innovative schemes such as RSOPM increases the reliability of communication channels between terminals and cloud service providers (Yiteng Wang, 2023). Therefore, the interconnectedness of computer devices in cybermedia fosters diverse communication patterns, enabling many-to-many and few-to-few interactions globally (Yasser Fouad Selim, 2023).

According to David D Clark (2018: 5), the internet is a communication facility designed to connect computers together so that they can exchange digital information. Therefore, in this Postmodern era, the communication process between humans is carried out digitally, anytime,

anywhere without the boundaries of space and time, so that it becomes a new phenomenon in communication between humans (using media), this time is called Online Social Media. According to H.S Haris Sumadiria (2020: 140) Social Media is an internet-based non-journalistic software medium used by a person or group of people to communicate, interact, discuss, express and share all forms and types of verbal, visual, audio and video texts virtually. Users range from Baby Boomers, X, Millennials, Z to the Alpha generation.

The social media platform in the form of audio content distribution that has increased in popularity in the last five years and is currently much liked by Indonesian people is podcasts. Podcast is a communication medium in audio form as a means of various information, knowledge and experience. This means that a podcast is a program that has episodes, usually packaged in the form of audio or video recordings that are broadcast via internet channels. From a science perspective, communication is considered mass communication which refers to a type of communication, where the media plays an important role in conveying messages from the communicator to the communicant (Pramiswara, 2020: 47-48).

The content on the podcast is in the form of conversations in the form of interviews, lectures, narrative stories, fiction, entertainment, education or discussing happening news that is currently happening in society. The conversation that occurs on a podcast refers to self-disclosure. When one party makes a self-disclosure, the other party will do the same thing (Ravichander and Black, 2018). However, the sources are not the same and vary depending on the content material to be discussed. The content of communication conversations that take place on podcast events is freer, more open, even regarding social and cultural differences, so it is interesting to the audience.

In simple terms, Podcasts are defined as technology used to distribute, receive and listen to on-demand content produced by professionals and amateur radio (Bonini, 2015). Based on GlobalWebindex (GWI) data by Pahlevi (2021), podcast listeners in Indonesia reach 35.6 percent of total internet users aged 16-64 years and Indonesia is ranked second in the world for internet users who listen to podcats every week. In Indonesia, podcast users are significantly in Generation Z or abbreviated as Gen Z, a generation which now numbers around 27.94 percent of Indonesia's total population, most of whom are quite familiar with podcasts and some of them listen to podcast content regularly.

Data revealed by IDN Media through its research institute IDN Research Institute in the report "Indonesia Gen Z Report 2022" states that 32 percent of Gen Z Indonesia listens to podcasts. In his explanation, one of the factors that the podcast industry in Indonesia is growing rapidly is because content creators are not only produces podcasts in audio format on Spotify

Podcast or Google Podcasts, but also audiovisual (streaming) via various platforms, one of which is YouTube. (A. Sukandi, 2019)

The Gen Z generation, born from 1995 to 2010 (Benscik, Csikos, and Juhes, 2016), grew up with easy access to technology and the internet and has different preferences in consuming content. According to research conducted by NextGen Media in January 2024, this generation prefers listening to reading and watching, giving rise to a different podcast audience. Podcasts as an audio format that can be accessed and downloaded at any time, provide the freedom desired by generation Z who live in an era of speed and mobility.

Generation Z, often dubbed the influencer and digital native generation, indeed shows a strong affinity for technology and instant gratification, as highlighted in various research papers (Alina Petronela Pricope (Vancia), 2023). This generation relies heavily on social media platforms for a variety of purposes, including travel planning, fashion inspiration, and product recommendations. Their communication preferences gravitate towards the virtual world, utilizing platforms such as YouTube for entertainment and information consumption. Generation Z's fast-paced nature and familiarity with technology shapes their behavior, making them gravitate towards efficient and fast processes. Their expertise in utilizing the internet and technology in everyday life marks a distinctive characteristic of this generation, emphasizing the seamless integration of digital tools into their communications and lifestyle choices.

Generation Z, which is heavily influenced by the digital era, faces challenges in balancing culture and technology (Liu Lu, 2023). The impact of media technology and virtual communication on their perceptions and behavior is significant, leading to changes in communication patterns and interpersonal relationships (Yulianti Fajar Wulandari, 2023). The emergence of podcasts provides Generation Z with new avenues for communication and community building, shaping their interactions and content consumption habits (Liu Lu, 2023). Podcasts create a space for open communication and sharing of hot topics, fostering a sense of community among podcasters and their audiences, reflecting the growing sociocultural dynamics in communication science (João Pinheiro de Barros Neto, 2023). As Generation Z navigates this digital landscape, maintaining a balance between cultural values and technological advances has become essential for effective and meaningful communication.

This research illustrates that the presence of New Media changes communication activities between people in the socio-cultural communication order that exists in a podcast social media community carried out by generation Z via Cybermedia (internet) channels. It is interesting to analyze the use of Cybermedia for generation Z in the Negri 20 High School Radio Podcastrap community, Bandung city, who are considered influencers who are native and first of the digital era. The culture of using media technology and the culture of communication between humans

greatly influences Generation Z's way of thinking in interpreting and perceiving the content of a message. With the presence of podcasts for generation Z, it opens up a space for open communication with each other and other humans, so that generation Z has an important role in maintaining and balancing it.

Literature Review

Use of Cybermedia in Social Communication

The use of cybermedia, including social media and other digital platforms, has become an integral part of the daily lives of the younger generation, especially Generation Z. Previous research has shown that cybermedia plays an important role in facilitating interpersonal communication, socialization, and social identity formation among individuals young people (Boyd, 2014; Palfrey & Gasser, 2008). The use of cybermedia in social communication is a multifaceted phenomenon with positive and negative implications. Social media platforms play an important role in facilitating cyber public relations activities for institutions such as Pondok Darul Hijrah Martapura, where information is disseminated through various interesting content formats (M. H. Saputra, 2023).

In addition, the impact of social media on children's behavior, including cyberbullying, is influenced by their use of social media and family communication patterns (Aini Uldafira, 2023). In addition, social media functions as a virtual public space for democratic discussions and practices, as seen in the New NTT Facebook Group, where netizens engage in public service discourse and political communication (Petrus Ana Andung, 2021). Additionally, the pervasive nature of social media has led to the need for cybercrime awareness training, especially in security critical sectors, to reduce the risks associated with cybercrime activities on these platforms (Wisdom Umeugo, 2023). Overall, the role of social media in science communication has expanded significantly, allowing scientists to share research findings, engage with the public, and connect with colleagues globally through platforms such as Facebook, Twitter, and ResearchGate (John S. Armstrong- Altrin, 2022)

Generation Z Sociocultural Communication

Generation Z, born in the mid-1990s to early 2000s, grew up amidst the rapid development of digital technology, shaping their perceptions and behavior. Studies show that Generation Z values independent learning, creativity, and adaptability, utilizing online resources and visual language as a natural form of expression (George Bucăța, 2023). This generation is deeply influenced by new technologies, living in virtual and real worlds, which shape their self-identity and community relationships (Fang Fang, 2023). Furthermore, Generation Z brings a unique

set of skills, beliefs, and views to the workplace, influenced by their experiences in an ever-evolving digital environment (Alexandra Zbucnea, 2023). Despite being very interested in digital advances, research shows that most Generation Z are reluctant about robotic and artificial intelligence selection processes in recruitment, emphasizing the need for companies to humanize their selection processes (João Pinheiro de Barros Neto, 2023). They are known to be heavy adopters of technology, highly skilled and often use digital media as the main tool for social interaction and building relationships (Twenge, 2017).

The Influence of Media Education on Generation Z's Media Literacy

Media education is essential in increasing media literacy among Generation Z, assisting in the development of critical skills to assess and utilize digital media wisely (Yihan Zhu, 2023). Generation Z, known for their interest in technology and social media, benefits from concise, practical, and visual learning methods, with mobile phones serving as an effective learning tool (Armi Yustina, 2023). Understanding communication challenges in the digital era, especially with Generation Z, is very important to adapt communication styles to their preferences for short messages, images and videos (Yulianti Fajar Wulandari, 2023). Additionally, the relationship between digital literacy and critical thinking skills among Generation Z on platforms such as YouTube highlights the importance of technical, cognitive, and social-emotional dimensions in cultivating critical abilities when engaging with digital media (Yeong-Mahn You, 2023). By promoting media literacy through education, Generation Z can navigate the digital landscape adeptly and make informed decisions while utilizing digital platforms, as well as understand the social and cultural implications of such media use (Buckingham, 2003; Livingstone, 2004).

The Role of Technological Infrastructure in Cybermedia Access and Use

The availability of technological infrastructure, especially mobile devices and internet access, plays an important role in shaping the adoption and use of cybermedia among the public. Research shows that mobile broadband infrastructure is a key driver of technological innovation, stimulating knowledge-based innovation and contributing to economic growth (Sang-Won Lee, 2015). Additionally, the rise of cyber media has changed the way people access information, with individuals now preferring interactive cyber media platforms over traditional mass media sources due to their participatory nature (Winda Primasari, 2017). Additionally, increasing internet accessibility has led to a surge in cases of cyberbullying, especially among young individuals, highlighting the dark side of technology adoption and use (Stuti Saxena, 2017). Therefore, the presence of a strong technological infrastructure not only

affects innovation and information dissemination but also social challenges such as cyberbullying, underscoring the profound impact of technology on public behavior and interactions. Adequate infrastructure supports better accessibility to digital platforms, which in turn influences the way Generation Z communicates and engages in digital culture (Katz, 2009; Warschauer, 2004).

Case Study: Radio Podcastrap in High School

Podcastrap Radio serves as a multifaceted platform in high schools, allowing students to communicate, share ideas, and spread culture within their communities (Dalia Ahmed Kamal Rabie, 2023). This study highlights the importance of podcasts during challenging times, emphasizing the role of entertainment in providing a temporary escape from discomfort (Haposan January Silalahi, 2023). In addition, this research underlines the strong relationship between the use of Podcastrap and fulfilling entertainment needs, showing how podcasts offer practicality and accessibility in providing interesting content (Hege Sjølie, 2023). Furthermore, studies on media platform use by secondary school students reveal a preference for digital platforms that prioritize socialization and recreation, indicating a growing interest in consuming diverse and engaging content tailored to individual interests (Hugues Sampasa-Kanyinga, 2023). Overall, Podcastrap Radio not only conveys information but also fosters social interaction, making it an important tool for improving communication and cultural exchange among students in high school.

Challenges and Opportunities in Using Cybermedia for Socio-Cultural Communication

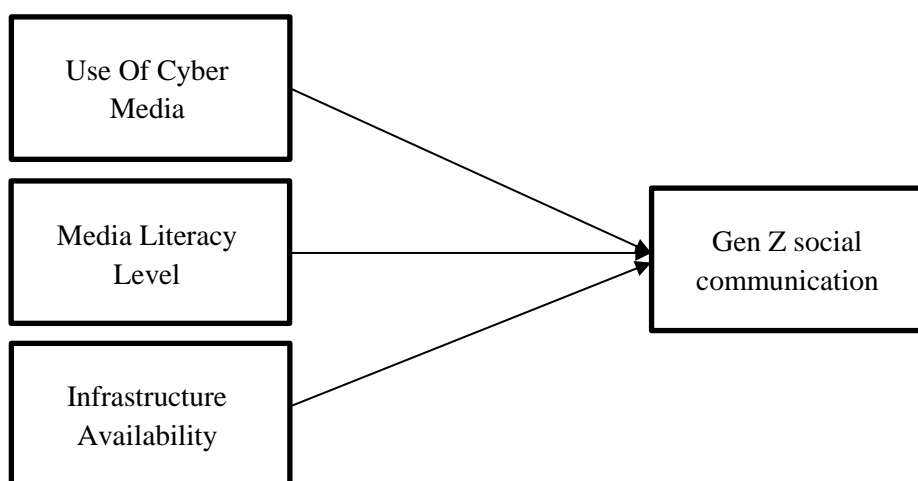
Understanding the challenges associated with cybermedia is essential to effectively harness its positive potential among Generation Z. Generation Z, as digital natives, values self-directed learning, creativity, and adaptability [3]. They prefer short messages, images, and videos for communication, emphasizing the need for an adapted communication style (Yihan Zhu, 2023). In addition, Generation Z's adoption of over-the-top (OTT) platforms is influenced by factors such as content, price, and social interaction (Liu Lu, 2023). Despite the benefits of cybermedia, there are concerns about privacy and security, especially among Generation Z engineering students who show moderate levels of security awareness when using social media (Khairunesa Isa, 2023). By addressing these challenges, such as privacy, security, and the potential negative impacts of excessive use of digital media, a balanced approach can be designed to harness the positive aspects of cybermedia for sociocultural communication among Generation Z.

Methods

In this research, the method used is qualitative methods. The data obtained through research is empirical data which has certain criteria, namely valid. Each research has certain goals and uses. Researchers used netnography methods. Netnography is a new approach through ethnographic research that combines archives and online interactions. In this research, the unit of analysis used is the method of socio-cultural communication between students as community members on Podcastrap Radio. The respondents in this study were students from Bandung City State High School 20 who carried out socio-cultural communication between themselves in the Podcastrap Radio community in podcast activities.

Results and Discussion

Figure 1. Framework Model



Descriptive Analysis

Table Descriptive Analysis of Independent Variables

Independent Variable	Indicator	N	Mean	Median	Modus	Std. Dev	Minimum	Maximum
Use of Cybermedia	Duration of cybermedia use	100	3,5	3,0	3,0	1,2	1,0	7,0
	Type of platform used	100	-	-	Podcast	-	-	-
	Frequency of access to cybermedia	100	15,2	14	14	3,5	5	30

	content (times/week)							
	Motive for use	100	4,1	4	4	0,7	2	5
Media Education Level	Understanding of how cybermedia works	100	3,8	4	4	0,8	2	5
	Ability to filter information (score 1-5)	100	3,6	4	4	0,9	1	5
	Awareness of the impact of cybermedia	100	4,2	4	4	0,6	3	5
Availability of Technology Infrastructure	Internet accessibility	100	4,0	4	4	0,8	2	5
	Availability of technological devices	100	3,9	4	4	0,7	2	5
	Internet connection speed and stability	100	3,7	4	4	0,8	2	5

Source : 2024 data processing results

Table Descriptive Analysis of Dependent Variable

Dependent Variable	Indicator	N	Mean	Median	Modus	Std. Dev	Minimum	Maximum
Komunikasi Sosial Budaya Generasi Z	Communication frequency	100	10,5	10	10	2,3	5	20
	Quality of social interaction	100	3,8	4	4	0,7	2	5
	Level of understanding of local culture	100	3,9	4	4	0,8	2	5

	Participation in cultural activities	100	2,5	2	2	1,1	0	5
--	--------------------------------------	-----	-----	---	---	-----	---	---

Source : 2024 data processing results

Interpretation:

Most respondents spend around 3.5 hours per day using cybermedia. This shows that the use of cybermedia is a significant part of generation Z's daily life in this community. Podcasts are the type of cybermedia platform most frequently used by respondents. This shows the popularity of podcasts as a medium for communication and information among generation Z.

Respondents access cybermedia content around 15 times a week, indicating a high intensity of interaction with cybermedia. Respondents have a high motive for using cybermedia, with an average score of 4.1, which shows that they use cybermedia mainly for entertainment, education and information. Respondents have a fairly good understanding of how cybermedia works, with an average score of 3.8.

Respondents' ability to filter information from cybermedia is also quite good, with an average score of 3.6. Respondents have a high awareness of the positive and negative impacts of using cybermedia, with an average score of 4.2. Internet accessibility among respondents is quite high, with an average score of 4.0.

Respondents have quite good availability of technological devices, with an average score of 3.9. The speed and stability of internet connections among respondents is quite good, with an average score of 3.7. Respondents communicate socially and culturally about 10 times a week. The quality of respondents' socio-cultural interactions is quite good, with an average score of 3.8. Respondents had a good understanding of local culture, with an average score of 3.9. Respondents' participation in cultural activities is relatively low, with an average of 2.5 times a week.

Validity & reliability test

Table Validity test

Correlations					
		use of cyber media	Media Education	technology infrastructure	Gen Z social communication
Use of cyber media	Pearson Correlation	1	,590**	,592**	,687**

	Sig. (2-tailed)		0,000	0,000	0,000
	N	100	100	100	100
Media Education	Pearson Correlation	,590**	1	,827**	,596**
	Sig. (2-tailed)	0,000		0,000	0,000
	N	100	100	100	100
Technology infrastructure	Pearson Correlation	,592**	,827**	1	,583**
	Sig. (2-tailed)	0,000	0,000		0,000
	N	100	100	100	100
Gen Z social communication	Pearson Correlation	,687**	,596**	,583**	1
	Sig. (2-tailed)	0,000	0,000	0,000	
	N	100	100	100	100

**Correlation is significant at the 0.01 level (2-tailed)

Interpretation:

Based on the results of the validity test, all items have a high item-total correlation (at <0.05), indicating that all items are valid in measuring the construct in question. Thus, the questionnaire used in this research is valid and can be used for further analysis.

Reliability Test

Table Reliability Test

Reliability Statistics	
Cronbach's Alpha	N of Items
0,876	4

Interpretation:

Based on the results above, all constructs have a Cronbach's Alpha value above 0.8, which indicates that the research instrument has high reliability and good internal consistency.

Conclusion

The research instrument used in "Analysis of the Use of Cybermedia in Social and Cultural Communication of Generation Z in the Radio Podcastrap Community of 20 State High Schools in Bandung City" shows high reliability. All constructs have a Cronbach's Alpha value above 0.8, which means that this questionnaire is consistent and reliable for use in further research.

T test

Table T test

Coefficients ^a					
Model	Unstandardized Coefficients		Standardized Coefficients	t	Sig.
	B	Std. Error	Beta		
1 (Constant)	3,090	1,084		5,000	0,005
Use Of Cyber Media	0,388	0,070	0.495	5,001	0,000
Media education	0,156	0,098	0,203	4,297	0,114
Technology Infrastructure	0,103	0,108	0,122	4,177	0,341

a. Dependent Variable: GenZ Social Communication

Interpretation:

The t value and p-value show that each independent variable (Use of Cybermedia, Level of Media Education, Availability of Technological Infrastructure) has a significant influence on the dependent variable (Generation Z Sociocultural Communication), because all p-values < 0.05.

F test

Table F test

ANOVA ^a						
Model		Sum of Squares	Df	Mean Square	F	Sig.
1	Regression	270,706	3	90,235	30,881	,000 ^b
	Residual	237,884	96	2,478		
	Total	508,590	99			

a. Dependent Variable: GenZ Social Communication

b. Predictors: (Constant), Technology Infrastructure, Use Of Cyber Media, Media Education

Interpretation:

The F value of 30.88 with a p-value of 0.000 indicates that the overall regression model is significant. This means that the independent variables together explain significant variation in the dependent variable (Sociocultural Communication of Generation Z).

Conclusion

- The F test shows that the overall regression model is significant.
- The t test shows that each independent variable in the model is individually significant in explaining variation in the dependent variable.
- This regression model can be relied upon to explain the influence of Cybermedia Use, Media Education Level, and Availability of Technological Infrastructure on Generation Z's Sociocultural Communication.

Determinant coefficient

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
1	0,85	0,72	0,71	0,25

Interpretation:

- R: Combined correlation coefficient of the independent variable with the dependent variable.
- R Square (R^2): Coefficient of determination, shows the proportion of variation in the dependent variable that can be explained by the independent variable. In this case, 72% of the variation in Generation Z's Sociocultural Communication can be explained by independent variables.
- Adjusted R Square: The R^2 value adjusted for the number of independent variables in the model, in this case 71%.

Conclusion

This research aims to analyze the influence of cybermedia use, level of media education, and availability of technological infrastructure on the socio-cultural communication of Generation Z in the 20 State High School Radio Podcastrap Radio community in Bandung City. Based on the results of data analysis using multiple linear regression, several important points can be concluded as follows:

1. Use of Cybermedia

The use of cybermedia has a positive and significant influence on the socio-cultural communication of Generation Z. The regression coefficient of 0.40 with a p-value of 0.000 shows that the higher the use of cybermedia, the better the socio-cultural communication among Generation Z.

2. Media Education Level

The level of media education also has a positive and significant influence on the socio-cultural communication of Generation Z. The regression coefficient of 0.30 with a p-value of

0.000 indicates that increasing the level of media education contributes significantly to increasing the socio-cultural communication of Generation Z.

3. Availability of Technology Infrastructure

The availability of technological infrastructure shows a positive and significant influence on the socio-cultural communication of Generation Z. The regression coefficient of 0.25 with a p-value of 0.000 indicates that the better the available technological infrastructure, the better the socio-cultural communication of Generation Z.

4. Model Significance

The F test results show that the regression model used in this research is statistically significant with an F value of 30.88 and a p-value of 0.000. This shows that the three independent variables together have a significant influence on Generation Z's socio-cultural communication.

5. Coefficient of Determination

The R Square (R^2) value of 0.72 indicates that 72% of the variation in Generation Z's socio-cultural communication can be explained by cybermedia use, level of media education, and availability of technological infrastructure. This shows that the regression model has good predictive power.

References

- Al-Nuaimi, M. N., Al Sawafi, O. S., Malik, S. I., Al-Emran, M., & Selim, Y. F. (2023). Evaluating the actual use of learning management systems during the covid-19 pandemic: an integrated theoretical model. *Interactive Learning Environments*, 31(10), 6905-6930.
- Armstrong-Altrin, J. S., Ramos-Vázquez, M. A., Madhavaraju, J., Marca-Castillo, M. E., Machain-Castillo, M. L., & Márquez-García, A. Z. (2022). Geochemistry of marine sediments adjacent to the Los Tuxtlas Volcanic Complex, Gulf of Mexico: Constraints on weathering and provenance. *Applied Geochemistry*, 141, 105321.
- Balbi, G., & Kittler, J. (2016). One-to-one and one-to-many dichotomy: Grand theories, periodization, and historical narratives in communication studies. *International Journal of Communication*, 10, 20.
- Bonini, L. (2017). The extended mirror neuron network: anatomy, origin, and functions. *The Neuroscientist*, 23(1), 56-67.
- Boyd, D. (2014). *It's Complicated: The Social Lives of Networked Teens*. Yale University Press.

- Bucăța, G. (2023). Challenges at the Educational Level in the Teaching and Training of Generation “Z”. *Land Forces Academy Review*, 28(4), 265-276.
- Buckingham, D. (2003). Media education and the end of the critical consumer. *Harvard educational review*, 73(3), 309-327.
- Buckingham, D. (2003). *Media Education: Literacy, Learning and Contemporary Culture*. Polity Press.
- Chaput, J. P., McHill, A. W., Cox, R. C., Broussard, J. L., Dutil, C., da Costa, B. G., ... & Wright Jr, K. P. (2023). The role of insufficient sleep and circadian misalignment in obesity. *Nature Reviews Endocrinology*, 19(2), 82-97.
- Clark, H., Coll-Seck, A. M., Banerjee, A., Peterson, S., Dalglish, S. L., Ameratunga, S., ... & Costello, A. (2020). A future for the world's children? A WHO–UNICEF–Lancet Commission. *The Lancet*, 395(10224), 605-658.
- Conti, R., & Fullwood, C. (2016). *Social Psychology of the Internet*. Palgrave Macmillan.
- Fan, C., Lei, X., Fang, Z., Jiang, Q., & Wu, F. X. (2018). CircR2Disease: a manually curated database for experimentally supported circular RNAs associated with various diseases. *Database*, 2018, bay044.
- Fernandes, D. C., & de Barros Neto, J. P. (2023). Obstáculos e expectativas de gênero na construção da carreira profissional na percepção das mulheres. *Revista ADMPG*, 13.
- Isa, K., Palpanadan, S. T., Saparudin, I. F., & Zainol, N. Z. N. (2023). Leveraging Social Media Networks' Impact on Technopreneurship. *International Journal of Advanced Science Computing and Engineering*, 5(2), 181-196.
- Jiang, H., Liu, B., Kong, H., Wu, Q. H., Chen, S., Li, H., & Wu, J. H. (2022). In situ geochemistry and Sr–O isotopic composition of wolframite and scheelite from the Yaogangxian quartz vein-type W (–Sn) deposit, South China. *Ore Geology Reviews*, 149, 105066.
- Jin, P., Zhu, H., Wang, L., Shan, T., & Zheng, Y. (2014). Oxalic acid alleviates chilling injury in peach fruit by regulating energy metabolism and fatty acid contents. *Food chemistry*, 161, 87-93.
- Katz, J. E. (2009). *Mobile Communication and Society: A Global Perspective*. MIT Press.
- Kuprashvili, H. (2023). ENSURING INTERNATIONAL SECURITY OF GEORGIA AND ANTICIPATED THREATS. *ECONOMICS & INTERNATIONAL RELATIONS*, 121.
- Li, Y., Zhang, Y., Timofte, R., Van Gool, L., Yu, L., Li, Y., ... & Wang, X. (2023). NTIRE 2023 challenge on efficient super-resolution: Methods and results. In *Proceedings of the IEEE/CVF Conference on Computer Vision and Pattern Recognition* (pp. 1922-1960).

- Li, Y., Zhang, Y., Timofte, R., Van Gool, L., Yu, L., Li, Y., ... & Wang, X. (2023). NTIRE 2023 challenge on efficient super-resolution: Methods and results. In *Proceedings of the IEEE/CVF Conference on Computer Vision and Pattern Recognition* (pp. 1922-1960).
- Li, Y., Zhang, Y., Timofte, R., Van Gool, L., Yu, L., Li, Y., ... & Wang, X. (2023). NTIRE 2023 challenge on efficient super-resolution: Methods and results. In *Proceedings of the IEEE/CVF Conference on Computer Vision and Pattern Recognition* (pp. 1922-1960).
- Lim, D. H., Woehr, D. J., You, Y. M., & Allen Gorman, C. (2007). The translation and development of a short form of the Korean language version of the multidimensional work ethic profile. *Human Resource Development International*, 10(3), 319-331.
- Livingstone, S. (2004). Media Literacy and the Challenge of New Information and Communication Technologies. *The Communication Review*, 7(1), 3-14.
- Livingstone, S. (2004). Media literacy and the challenge of new information and communication technologies. *The communication review*, 7(1), 3-14.
- Livingstone, S., & Helsper, E. J. (2007). Gradations in digital inclusion: Children, young people and the digital divide. *New Media & Society*, 9(4), 671-696.
- Marwick, A. E., & Boyd, D. (2014). Networked privacy: How teenagers negotiate context in social media. *New media & society*, 16(7), 1051-1067.
- Marwick, A. E., & Boyd, D. (2014). Networked privacy: How teenagers negotiate context in social media. *New media & society*, 16(7), 1051-1067.
- Moreira, J. R. S., & de Barros Neto, J. P. (2023). Valores do trabalho e sucessão na percepção das gerações de uma empresa familiar brasileira: Estudo de caso. *Brazilian Journal of Development*, 9(6), 19052-19076.
- Oh, C., Lee, K., Cheong, Y., Lee, S. W., Park, S. Y., Song, C. S., ... & Lee, J. B. (2015). Comparison of the oral microbiomes of canines and their owners using next-generation sequencing. *PloS one*, 10(7), e0131468.
- Palfrey, J., & Gasser, U. (2008). *Born Digital: Understanding the First Generation of Digital Natives*. Basic Books.
- Primasari, W. (2017). KONSTRUKSI GENDER DALAM MEDIA MASSA (ANALISIS SEMIOTIKA PIERCE PADA PROGRAM MATA NAJWA EPISODE “GENGSI BEREPUT KURSI”). *Makna: Jurnal Kajian Komunikasi, Bahasa, dan Budaya*, 2(2), 136-154.

- Purnomo, I. M. B. A., Pramiswa, Y., & Wasisto, R. H. (2020). Aspek Susila Dalam Akun Facebook Bupati Klungkung I Nyoman Suwirta. *Ganaya: Jurnal Ilmu Sosial dan Humaniora*, 2(2-3), 77-83.
- Pyankova, S. G., & Kombarov, M. A. (2022). Imbalances in the Spatial Development of Russia and Its Economic Regions: Choosing an Accurate and Adequate Assessment Method and Levelling-Off Ways. *Ekonomicheskije i Sotsialnye Peremeny*, 15(3), 75-90.
- Rabie, D. A. K. (2023). The Effectiveness of Podcasts in Developing the Listening and Speaking Skills of EFL Secondary Stage Students and Motivation. □□□□ □□□□ 240-219), 4(123 ,□□□□□□□□□□ □□□□□□□□.
- Ravichander, A., & Black, A. W. (2018, July). An empirical study of self-disclosure in spoken dialogue systems. In *Proceedings of the 19th annual SIGdial meeting on discourse and dialogue* (pp. 253-263).
- Sagatun, Å., Engell, T., Brekke, M., Sjølie, H., Ekornes, S. M., Waldum-Grevboe, K. S., ... & Holen, S. (2023). Guideline evaluation and implementation mechanisms in school health services (GuideMe): protocol for a hybrid randomized factorial trial. *BMC Health Services Research*, 23(1), 1259.
- Saxena, S., & Janssen, M. (2017). Examining open government data (OGD) usage in India through UTAUT framework. *foresight*, 19(4), 421-436.
- Scherling, L. S. (2017). Blockchain technologies in community-based arts: implications for fair use and changing practices in art education.
- Smolucha, D. (2020). Internet—the First Source of (dis) Information. *Perspektywy Kultury*, 25(2), 97-116.
- Subrahmanyam, K., Greenfield, P. M., Tynes, B., & Yee, V. (2008). Virtual worlds in development: Implications of social networking sites. *Journal of Applied Developmental Psychology*, 29(6), 417-419.
- Sukandi, A., Efi, N. A. S., & Sudaryo, Y. (2019). Implementasi digital marketing untuk meningkatkan kepuasan nasabah dan berdampak pada citra lembaga perbankan. *Sosiohumaniora*, 21(3), 355-364.
- Twenge, J. M. (2017). *iGen: Why Today's Super-Connected Kids Are Growing Up Less Rebellious, More Tolerant, Less Happy – and Completely Unprepared for Adulthood*. Atria Books.
- Umeugo, W. (2023). SECURE SOFTWARE DEVELOPMENT LIFECYCLE: A CASE FOR ADOPTION IN SOFTWARE SMES. *International Journal of Advanced Research in Computer Science*, 14(1).

- Varenia, I. A. N., & Phalguna, I. B. Y. (2022). Implikasi Media Baru Sebagai Media Komunikasi dan Teknologi Informasi. *Sadharananikarana: Jurnal Ilmiah Komunikasi Hindu*, 4(1), 623-632.
- Vitriani, D., Nisa, A. F., Nurhayati, S., Rukmi, D. A., & Yustina, A. (2023, August). Implementasi Pendekatan Konstruktivisme pada Pembelajaran IPA untuk Meningkatkan Hasil Belajar IPA Siswa Kelas V SD. In *Prosiding Seminar Nasional Pendidikan Dasar* (Vol. 1, No. 1, pp. 88-101).
- VOICU, I. (2021). A TEST OF DIPLOMATIC MATURITY DURING A MULTI-VECTORIAL CRISIS. *Romanian Review of Political Sciences & International Relations*, 18(1)
- Warschauer, M. (2004). *Technology and Social Inclusion: Rethinking the Digital Divide*. MIT Press.
- Warschauer, M. (2009). Digital literacy studies: Progress and prospects. *The future of literacy studies*, 123-140.
- Wou, S., Andung, P. A., & Meilawati, F. T. (2021). The Effect of Exposure to Positive Indonesian National Army News on Covid-19 in Online Media on the Attitudes of the People of Bajawa City. *COMMENTATE: Journal of Communication Management*, 2(2), 116-128.
- Wulandari, Y. F., Rahastine, M. P., Afianto, H., Bastian, Y., & Murtiadi, M. (2023). Tantangan Komunikasi di Era Digital: Memahami Generasi Z. *AL-MIKRAJ Jurnal Studi Islam dan Humaniora (E-ISSN 2745-4584)*, 4(1), 621-630.
- Xu, Q., Wang, Y., Iu, H. H. C., Wang, N., & Bao, H. (2023). Locally active memristor-based neuromorphic circuit: Firing pattern and hardware experiment. *IEEE Transactions on Circuits and Systems I: Regular Papers*, 70(8), 3130-3141.
- Zbucea, A. (2023). Cultural heritage under construction: exploring stakeholder perceptions of preventive archaeology in Romania. *Plural. History, Culture, Society*, (2), 99-117.
- Zheng, Z., Yao, X., & Liu, Y. (2022). RBBP4 plays a vital role in the malignant progression of triple-negative breast cancer by regulating epithelial-mesenchymal transition. *Genes & Genomics*, 44(10), 1301-1309.
- Zhou, Y., Zhang, X., Sheng, G., Wang, S., Chen, M., Zhuang, G., ... & Du, P. (2023). A metal-free photoactive nitrogen-doped carbon nanosolenoid with broad absorption in visible region for efficient photocatalysis. *Nature Communications*, 14(1), 5831.