



Generational Patterns in Digital Linguistic Styles: A Quantitative Study of Millennials, Gen Z, and Gen Alpha

Maria Angela Z. Macomis^{1*}, Aviel I. Alayon², Justine Mae M. Bihasa³, Colleen Kate G. Pasion⁴

^{1,2,3,4} Bataan Peninsula State University (BPSU), Balanga City, Bataan, Philippines

ARTICLE HISTORY

Submitted: March 3, 2026

Revised: April 30, 2026

Accepted: May 5, 2026

Published: May 30, 2026

KEYWORDS

Generational Patterns;
Digital Linguistic Styles;
Millennials;
Gen Z;
Gen Alpha

ABSTRACT

Background: The rapid evolution of digital technology has transformed communication and shaped linguistic practices across generations, yet localised empirical evidence remains limited. **Objective:** This study aims to examine how communication-related variables influence the digital language practices of Millennials, Generation Z, and Generation Alpha. **Method:** A quantitative descriptive-comparative and correlational design was employed, involving 75 respondents. Data were collected through a structured survey and analysed using descriptive statistics, one-way ANOVA, and Pearson correlation. **Results:** The findings revealed high levels of symbolic-paralinguistic use, alongside moderate levels of lexical innovation and multimodal integration. Significant generational differences were identified in lexical innovation and overall digital language practices, with Generation Alpha demonstrating higher levels. Furthermore, a moderate positive relationship was found between communication-related variables and digital language practices, with communication goals emerging as the strongest predictor, while digital literacy showed minimal influence. **Conclusion:** The study concludes that digital language practices are driven more by communicative intent and interaction patterns than by technical skills. **Contribution:** This research contributes to the fields of digital communication and linguistics by providing localised, cross-generational empirical evidence and highlighting the importance of social and functional factors in shaping evolving digital language use.

1. INTRODUCTION

The rapid advancement of digital technologies has fundamentally transformed communication, reshaping how language is created, interpreted, and shared. Digital platforms such as social media, messaging applications, and multimedia tools function as multimodal environments where users combine text, emojis, images, audio, and video to construct meaning. Scholars argue that digital communication is not merely technologically mediated interaction but a dynamic linguistic system shaped by users' digital literacy, frequency of engagement, and communicative intentions (Androutsopoulos, 2015). Recent studies further emphasize that digital literacy enables users to strategically navigate multimodal resources, thereby influencing the complexity and flexibility of online expression (Zhang & Yang, 2025).

* **Corresponding Author:** Maria Angela Z. Macomis, mazmacomis@bpsu.edu.ph

Bataan Peninsula State University (BPSU), Balanga City, Bataan, Philippines

Address: MGGJ+Q7C, Capitol Dr, City of Balanga, 2100 Bataan, Philippines

How to Cite this Article:

Macomis, M. A. Z., Alayon, A. I., Bihasa, J. M. M., Pasion, C. K. G. (2026). Generational Patterns in Digital Linguistic Styles: A Quantitative Study of Millennials, Gen Z, and Gen Alpha. *Journal of Gender and Millennium Development Studies*, 3(1), 32-51. <https://doi.org/10.64420/jgmnds.v3i1.515>



Copyright © 2026 by the Author(s). This work is licensed under a Creative Commons Attribution-ShareAlike 4.0 International (CC BY-SA 4.0) License (<https://creativecommons.org/licenses/by-sa/4.0/>)

Within this evolving landscape, generational differences play a crucial role in shaping digital language practices. Millennials, who experienced the transition from analog to digital communication, tend to exhibit adaptive yet relatively structured online styles influenced by early internet norms (García-Chitiva, 2024). In contrast, Generation Z, having grown up within social media ecosystems, demonstrates higher levels of lexical innovation, participation in meme culture, and fluid code switching practices (McCulloch, 2019). Meanwhile, Generation Alpha, immersed in algorithm driven and video centric platforms from early childhood, shows an even stronger reliance on symbolic paralinguistic features, multimodal integration, and rapid trend adaptation. These distinctions indicate that generational identity, in interaction with technological exposure, contributes to the emergence of distinct linguistic patterns.

From a theoretical perspective, this study is grounded in digital sociolinguistics and computer mediated communication (CMC) frameworks, which conceptualize language as a socially situated practice shaped by technological affordances and user interaction (Kocarslan & Stoycheva, 2025). Digital sociolinguistics emphasizes that linguistic variation in online environments emerges from the interplay between identity, context, and platform specific norms, rather than merely individual preference (Kuchkarova, 2025). Complementing this, CMC theory explains how the features of digital platforms, such as asynchronicity, multimodality, and reduced social cues, influence how users construct and interpret messages (Manganari, 2021). Within this framework, generational identity is understood as a socio-cultural positioning that reflects differential exposure to technological environments, while communication related variables such as digital literacy, interaction frequency, and communicative goals function as mediating factors that shape linguistic choices (Zubareva, 2020). Thus, digital language practices, including lexical innovation, symbolic paralinguistic expression, and multimodal integration, are not treated as isolated behaviors but as outcomes of dynamic interactions between users' generational positioning and communication processes within digitally mediated contexts.

However, generational identity alone does not fully account for variations in digital language use. Communication related variables also play a significant role (Jebejian et al., 2025). The frequency of online interaction increases exposure to emerging linguistic conventions, thereby accelerating lexical innovation and multimodal experimentation (Nightingale, 2016). At the same time, communicative goals such as self presentation, relational maintenance, entertainment, or persuasion systematically shape stylistic choices, levels of formality, and the use of emojis or internet slang. Digital literacy further interacts with these variables by enabling users to intentionally manipulate multimodal elements for rhetorical purposes rather than merely replicating trends (Ayan, 2020).

In the Philippine context, prior studies have examined specific aspects of digital language use among Filipino youth. Studies on generational patterns in digital linguistic styles have also begun to highlight how differences in technological exposure and socialization shape distinct communication practices across age cohorts, although such investigations remain limited and often lack comprehensive empirical comparison (Madsen, 2026; Piccerillo et al., 2025; Putri et al., 2025; Zierock et al., 2019). Dolot & Opina (2021) found that Facebook and messaging interactions frequently combine English and Filipino alongside emoji clusters to convey relational meaning. Similarly, Suizo (2024) reported that Filipino Generation Z users demonstrate fluid translanguaging practices that reflect both cultural identity and digital competence. Despite these contributions, most existing studies focus on a single generational group or isolated linguistic features. There remains a lack of comprehensive empirical research that comparatively examines Millennials, Generation Z, and Generation Alpha within a unified analytical framework while simultaneously integrating communication related variables such as digital literacy, interaction frequency, and communicative goals.

This gap underscores the need for a structured quantitative approach that integrates generational profiling with communication related variables. The present study is grounded in the assumption that digital linguistic behavior is shaped by both generational positioning and communication dynamics. Accordingly, it adopts a comparative correlational design that enables the simultaneous examination of group-based differences and variable based relationships. Generational classification provides a contextual lens for identifying stylistic tendencies, while communication related variables explain variation within and across cohorts. This integrated framework ensures alignment between the study's theoretical foundation, research design, and analytical procedures.

Therefore, this study aims to examine how communication related variables influence the digital language practices of Generation Alpha, Generation Z, and Millennial users. Specifically, it seeks to: (1) describe respondents' generational profiles; (2) assess communication related variables in terms of digital literacy, frequency of online interaction, and communicative goals; (3) determine the level of digital language practices across lexical innovation, symbolic paralinguistic use, and multimodal integration; (4) examine differences in digital language practices across generational groups; and (5) analyze the relationship between communication related variables and digital language

practices. Ultimately, this study aims to generate empirical insights and practical implications for understanding evolving digital communication practices across generational cohorts.

2. METHOD

2.1 Research Design

The research employed a quantitative methodology to investigate communication-related variables and digital linguistic styles across different generations. This study utilised a descriptive-comparative and correlational design. The study was descriptive, focusing on respondents' demographic profiles, digital literacy, frequency of online interaction, and communicative goals. Likewise, the research was comparative, comparing the digital language practices of the respondents across generational cohorts in terms of lexical innovation, symbolic-paralinguistic use, and multimodal integration. Furthermore, it was correlational, examining the relationship between communication-related variables and respondents' digital language practices. This method paved the way for obtaining measurable, generalizable data to identify trends and patterns across groups (Jefry, 2024).

2.2 Participant

The respondents in the study were divided into three generation cohorts: Generation Alpha, Generation Z, and Millennials, with a total of 75 individuals currently studying and having studied in the province of Bataan. To achieve an equitable distribution across three discrete age cohorts, the researchers use a nonprobability sampling technique, purposive sampling, which provides a cross-sectional perspective on linguistic evolution. The inclusion criteria involve professionals with advanced studies, such as MAEd or a PhD, whose birth years fall within 1981-1996 and 1997-2012. A total of 50 respondents, 25 from Generation Z and another 25 from Millennials, have successfully met the inclusion criteria. On the other hand, the study also includes 25 respondents from Generation Alpha, whose birth year ranges from 2013-2025 and are currently enrolled in any educational institution in Bataan to complete the three generations and identify the dynamic changes in digital communication, encompassing how the rapid advancement of technologies transformed how people express language across generational cohorts.

To determine the appropriate sample size for the study, a priori power analysis was conducted using G*Power 3.1.9.7. The analysis was specifically customized for bivariate normal model correlation to make sure that the study has sufficient statistical power to locate a relationship between primary variables. Based on a two-tailed test with an alpha (α) level of 0.05 (the standard threshold for statistical significance) and a high statistical power ($1-\beta$) of 0.95, the calculation aimed to detect a moderate-to-strong effect size (correlation ρ) of 0.4. The analysis indicates that a minimum total sample size of 75 respondents is needed to achieve the actual power of 0.951, thereby minimising the risk of Type II error and ensuring the reliability of the findings.

2.3 Data Collection

The research instrument utilised in this study was an adopted structured survey questionnaire intended to evaluate digital language use and communication-related factors across various generational groups. The questions used in the study were adapted from existing validated questionnaires and previous related studies to ensure alignment with the research questions and objectives. Items were carefully reviewed and revised to suit the context and population of the present study. Researchers used Cronbach's alpha, a research statistic, to assess the internal consistency (reliability) of a scale or survey, with values ranging from 0 to 1. It evaluates how effectively a series of items measures a single latent concept; a coefficient of 0.70 or above often indicates dependability.

2.4 Data Gathering Procedure

The researchers gathered data through a structured survey questionnaire designed to assess communication-related variables and digital language practices among different generational groups. Before data collection, the researchers secured approval from the school administration through a formal letter of request. Informed consent was obtained from all respondents before participation. For respondents classified as Generation Alpha, parental consent forms were also obtained to ensure ethical compliance, given their minor status. The survey instrument was then distributed online to participants from Generation Alpha, Generation Z, and Millennial groups through accessible digital platforms. Completed responses were reviewed for accuracy and completeness to ensure that the required sample size was met. Finally, the collected data were forwarded to a statistician who conducted the appropriate statistical analyses to address the study's research questions.

2.5 Statistical Treatment

The data gathered using the questionnaire were coded, encoded, and statistically analysed using statistical software called IBM Statistical Package for the Social Sciences (SPSS) Statistics version 23. The data were analysed using various statistical tools, including frequency, percentage, weighted mean, One-Way Analysis of Variance (ANOVA), and Pearson’s Product-Moment Correlation Coefficient. Frequency and percentage distributions were used to present the generational profile of the respondents by cohort. Moreover, the weighted mean was used to assess respondents’ communication-related variables, including digital literacy, frequency of online interaction, and communication goals. Similarly, the weighted mean was employed to evaluate the level of the respondents’ digital language practices in terms of symbolic-paralinguistic use, lexical innovation, and multimodal integration.

Before conducting hypothesis testing, the assumptions for parametric tests were evaluated using the Normality Test (Shapiro-Wilk) and Levene’s Test for Homogeneity of Variances. A One-Way Analysis of Variance (ANOVA) was then performed to determine whether significant differences exist in the respondents’ digital language practices across generational cohorts. Furthermore, a post hoc analysis using the Tukey-Kramer test was conducted to identify which groups differed significantly.

In addition to determining statistical significance, eta-squared values (η^2) were calculated to provide an index of the effect size of the observed differences between groups. For ANOVA, eta squared (η^2) was calculated to determine the proportion of variance in digital language practices attributable to the generational cohort. The interpretation of η^2 followed Cohen’s (1988) guidelines, where values of 0.01 indicated a small effect, 0.06 a moderate effect, and 0.14 represented a large effect. Reporting effect size provides an estimate of practical significance beyond mere statistical significance.

In addition, Pearson’s Product-Moment Correlation Coefficient was used to assess significant relationships between respondents’ communication-related variables and their digital language practices. To further assess the strength and importance of the relationships, the coefficient of determination (r^2) was calculated for each statistically significant correlation. The r^2 index represents the percentage of variance in digital language practices explained by each communication-related variable. To assess the strength of the relationships, the following criteria were used: 0.01-0.19 (negligible), 0.20-0.39 (low), 0.40-0.59 (moderate), 0.60-0.79 (moderately high), and 0.80-1.00 (high). In terms of the effect size, r^2 values of about 0.01 were considered small effects, 0.09 moderate effects, and 0.25 large effects.

Moreover, to investigate communication-related variables as predictors of digital language practices, a multiple linear regression analysis was conducted. In this test, digital language practices were considered the dependent variable, while digital literacy, frequency of online interaction, and communication goals were considered independent variables. The test used the coefficient of determination (R^2) to determine the overall explanatory power of the predictors. It employed beta coefficients (β) to determine the individual contribution of each predictor to the dependent variable. This test helped to determine the overall significance of each communication-related variable in predicting digital language practices, while controlling for the effects of the other variables.

In hypothesis testing, SPSS provides significance or probability values that are then compared with the accepted level of significance, typically 0.05. If the significance or p-value is less than 0.05, the statistical value is considered significant, and therefore, the null hypothesis is rejected. Conversely, if it is not significant, the null hypothesis is not rejected.

3. RESULT AND DISCUSSION

3.1 Result

This section presents an analysis and interpretation of data relevant to assessing how communication-related variables affect the digital language practices of Generation Alpha, Generation Z, and Millennial users.

a. Part I presents the generational profile of the respondents by cohort.

Table 1 presents the generational profile of the respondents by generation cohort.

Table 1. Distribution of Respondents by Generational Cohort

Generational Cohort	Frequency (n)	Percentage (%)
Generation Z (1997–2012)	25	33.33
Millennials / Generation Y (1981–1996)	25	33.33
Generation Alpha (2013–2025)	25	33.33
Total	75	100.00

According to Table 1, the respondents are evenly distributed across the three generational cohorts. Specifically, approximately thirty-three percent (33.33%) of the respondents, or twenty-five (25) individuals, belong to Gen Z (Zoomers, born 1997–2012); approximately thirty-three percent (33.33%), or twenty-five (25) individuals, belong to Gen Y (Millennials, born 1981–1996); and approximately thirty-three percent (33.33%), or twenty-five (25) individuals, belong to Gen Alpha (born 2013–2025). This equal distribution ensures that each generational group is equally represented.

To strengthen the study's comparative nature, respondents were allocated equally. The analysis reduces excessive representation and improves the validity of cross-generational comparisons in digital language practices. Before data collection, parental or guardian consent was obtained for respondents who are Gen Alpha minors. This procedure ensured compliance with ethical research standards for participants under the age of majority and safeguarded the rights and welfare of younger respondents.

This equal allocation strengthens the comparability of groups and enhances the reliability of cross-generational analysis. The delineation of these cohorts is supported by recent generational scholarship, which characterises Millennials and Gen Z based on shared socio-technological experiences and identifies Generation Alpha as the first fully digital-native cohort (Twenge, 2023). Such classifications are widely used in contemporary studies examining behavioural and communication differences across generations.

b. Part II illustrates how the respondents' communication-related variables are described in terms of digital literacy, frequency of online interaction, and communication goals.

Table 2 exhibits how the communication-related variables of the respondents are described in terms of digital literacy.

Table 2. Respondents' Digital Literacy

Indicator	Mean	SD	Interpretation
I can search for information on the Internet (e.g., Google).	3.89	0.31	High
I can search for files on the computer.	3.78	0.42	High
I can assess whether information on the Internet is valid/correct/true.	3.66	0.48	High
I can find various information on a topic on the Internet and compare them.	3.67	0.50	High
I can use various Internet sources, including social media and online newspapers.	3.75	0.43	High
I can communicate with others online (e.g., e-mail, WhatsApp, Skype).	3.82	0.39	High
I can collaborate with others online (e.g., using cloud storage).	3.56	0.60	High
I can use programs to collaborate on documents with others.	3.55	0.65	High
I can coordinate online communication with a group.	3.60	0.64	High
I can coordinate revision of digital content in a group.	3.49	0.65	High
Overall Mean	3.68	0.36	High

Scale of Means: 4.00–3.26 High Level of Digital Literacy Skills; 3.25–2.51 Moderate Level of Digital Literacy Skills; 2.50–1.76 Low Level of Digital Literacy Skills; 1.75–1.00 Very Low Level of Digital Literacy Skills; SD-Standard Deviation

Table 2 shows that the indicator “I can search for information on the Internet (e.g., Google)” received the highest rating (*Mean=3.89; SD=0.31; High Level of Digital Literacy Skills*). On the other hand, the indicator “I can coordinate the revision of digital content in a group (e.g., with apps for appointments and tasks)” (*Mean=3.49; SD=0.65; High Level of Digital Literacy Skills*) gained the lowest rating. Generally, the rating (*Mean=3.68; SD=0.36*) indicates that the respondents have a “*High Level of Digital Literacy Skills*.”

Learners of different ages seek information since, in contemporary education, finding and evaluating information is essential to learning. They depend on the internet to seek information to complete academic and non-academic tasks (Parissi, 2023). This may be attributed to the frequent use of search engines for academic purposes, communication, and group collaboration. On the other hand, even though the highest level is digital content revisions within a group setting, the lowest level is digital content revisions within a group setting. This implies that digital citizens require competencies for optimal team performance (Garcia-Chitiva, 2024). Therefore, the respondents possess a strong foundation in digital literacy, but the dynamics of collaborative communication for knowledge construction must be strengthened.

The high level of digital literacy provides a supportive foundation for respondents' ability to engage with multiple digital modes, as evidenced by the results on multimodal integration. However, the moderate level of multimodal integration indicates that technical literacy does not necessarily lead to advanced multimodal integration.

Furthermore, the results of the inferential analysis suggest that digital literacy has a negligible relationship with digital language practices and does not significantly predict lexical innovation, as indicated by the small coefficient of determination (r^2).

Table 3 presents how the respondents' communication-related variables are described in terms of the frequency of online interaction.

Table 3. Respondents' Frequency of Online Interaction

Indicator	Mean	SD	Interpretation
I chatted with friends via instant messaging.	3.67	0.58	High
I replied to comments made by social networking friends.	3.01	0.87	Moderate
I commented on friends' status updates, logs, and photos.	2.85	0.97	Moderate
I wrote logs/posts.	2.71	0.99	Moderate
I shared/forwarded content.	3.15	0.88	Moderate
I updated my self-status.	2.77	1.03	Moderate
I customized my personal web profile.	2.89	0.95	Moderate
I posted photos/videos on my personal profile.	2.90	1.00	Moderate
I sent messages to friends on message boards.	3.27	0.77	High
I browsed others' logs/photos/statuses/albums.	3.01	0.89	Moderate
Overall Mean	3.02	0.71	Moderate

Scale of Means: 4.00–3.26 High Level of Online Social Networking Interaction; 3.25–2.51 Moderate Level of Online Social Networking Interaction; 2.50–1.76 Low Level of Online Social Networking Interaction; 1.75–1.00 Very Low Level of Online Social Networking Interaction; SD-Standard Deviation

Based on the results in Table 3, the indicator with the highest rating is "I chatted with friends via an instant messaging function." ($Mean=3.67$; $SD=0.58$; *High Level of Online Social Networking Interaction*). Inversely, the indicator with the lowest rating is "I wrote logs/posts." ($Mean=2.71$; $SD=0.99$; *Moderate Level of Online Social Networking Interaction*). In total, the respondents have a "*Moderate Level of Online Social Networking Interaction*," as denoted by the rating ($Mean=3.02$; $SD=0.71$).

The results show that respondents value in-the-moment interactions more than content creation in online interactions. Users' participation in online social networking depends on language support for real-time interaction (Yang et al., 2025). Therefore, the respondents choose platform interactions mostly for casual discussions and for sustaining personal connections rather than for generative use. Enhancing active and responsible content creation may raise overall levels of online social interaction, even as some interactive behaviours, such as chatting, are widely practised.

These interaction patterns could foster lexical innovation, as common real-time communication enables the uptake and spread of new digital expressions. The results show a difference between passive participation (e.g., browsing) and active participation, with higher levels of participation in interactive but less creative activities. Moreover, these patterns support the correlational findings, in which online social networking interaction is a strong predictor of symbolic use, thereby confirming the importance of communicative participation in digital language. Table 4 presents how the respondents' communication-related variables are described in terms of communication goals.

Table 4. Respondents' Communication Goals in Social Networking Sites

Indicator	Mean	SD	Interpretation
I use SNS for sharing ideas, disseminating information, and creating awareness.	3.37	0.57	High
I use SNS to find information about topics that interest me.	3.45	0.50	High
I use SNS to check recent news feeds.	3.36	0.65	High
I use SNS for relaxation.	3.47	0.58	High
I use SNS for posting pictures and videos.	3.33	0.73	High
I use SNS to play games.	3.18	0.84	Moderate
I use SNS to stay in contact with family members.	3.59	0.55	High
I use SNS for reinforcing existing people-oriented relationships.	3.27	0.67	High
I use SNS to search for new groups with similar hobbies.	3.22	0.75	Moderate
I use SNS for networking.	3.12	0.74	Moderate
Overall Mean	3.34	0.45	High

Scale of Means: 4.00–3.26 High Level of Communication; 3.25–2.51 Moderate Level of Communication; 2.50–1.76 Low Level of Communication; 1.75–1.00 Very Low Level of Communication; SD-Standard Deviation

In line with the results in Table 4, the highest-rated indicator is “I use SNS to stay in contact with family members.” (*Mean=3.59; SD=0.55; High Level of Communication*). In contrast, the lowest-rated indicator is “I use SNS for networking.” (*Mean=3.12; SD=0.74; Moderate Level of Communication*). Overall, the rating (*Mean=3.34; SD=0.45*) indicates that respondents have a “*High Level of Communication*.”

Despite the variation in specific uses, the overall mean score indicates a high level of communication through social media spaces. This suggests that respondents effectively use SNS for personal reasons. Since maintaining close interpersonal contact with family, involving a combination of text, images, video calls, etc., emerged as the highest predictor, the results highlight relational communication as the key predictor of multimodal integration. This pattern reveals a Filipino collectivist cultural context wherein strong relational harmony is given significance. However, the lower networking rating presents an opportunity to maximise SNS for career development, collaboration, and professional relationship-building.

Table 5. Summary of Respondents’ Communication-Related Variables

Variable	Mean	SD	Interpretation
Digital Literacy	3.68	0.36	High
Frequency of Online Interaction	3.02	0.71	Moderate
Communication Goals	3.34	0.45	High
Overall Mean	3.35	0.41	High

Scale of Means: 4.00–3.26 High Level; 3.25–2.51 Moderate Level; 2.50–1.76 Low Level; 1.75–1.00 Very Low Level; SD-Standard Deviation

Table 5 portrays all indicators of the communication-related variables of the respondents. Among these, the indicator with the highest rating is “Digital Literacy” (*Mean=3.68; SD=0.36; High Level*), followed by “Communication Goals” (*Mean=3.34; SD=0.45; High Level*). However, the indicator getting the lowest rating is “Frequency of Online Interaction” (*Mean=3.02; SD=0.71; Moderate Level*). Taken altogether, the respondents exhibit a “*High Level*” across various communication-related variables, as recommended by the rating (*Mean=3.35; SD=0.41*).

The respondents can assert their online presence by demonstrating competence in communication-related variables, particularly digital literacy and clear communication goals. These technologies are considered enhancements to traditional environments because they facilitate online communication and networking (Jay et al., 2019), which shows that they possess the necessary skills and purposeful intent when using digital platforms. Subsequently, the moderate ratings for social interaction frequency indicate that not all respondents’ levels of involvement in digital platforms are consistently high. Hence, it is significant to point out that the communicative competence of respondents, or their ability and knowledge to communicate effectively in digital spaces, is distinct from their engagement, or the frequency of their actual participation in these spaces. This reveals a pattern of satisfaction in being communicators and consumers of media rather than being creators.

- c. Part III demonstrates the respondents’ level of digital language practices in terms of lexical innovation, symbolic-paralinguistic use, and multimodal integration.

Table 6 describes respondents’ levels of digital language practices regarding lexical innovation.

Table 6. Respondents’ Lexical Innovation in Digital Communication

Indicator	Mean	SD	Interpretation
I use newly coined words or slang that are popular on social media platforms.	3.05	0.93	Moderate
I adopt internet slang even before it becomes widely used.	2.92	1.05	Moderate
I create or modify words to express ideas more creatively online.	2.71	0.95	Moderate
I use abbreviations or acronyms (e.g., LOL, TBH, IMO) in digital communication.	2.95	0.76	Moderate
I blend words or shorten terms when chatting online (e.g., hangry, vacay).	3.00	0.87	Moderate
I use platform-specific terms (e.g., story, streak, repost, dupe).	2.89	0.84	Moderate
I reuse existing words with new meanings commonly understood online.	2.74	0.94	Moderate
I easily understand newly invented words used by others online.	2.96	0.81	Moderate
I change my vocabulary depending on online trends.	2.77	0.96	Moderate
I intentionally use trendy words to sound relatable or updated online.	2.92	0.98	Moderate
Overall Mean	2.89	0.77	Moderate

Note. Scale: 3.26–4.00 = High; 2.51–3.25 = Moderate; 1.76–2.50 = Low; 1.00–1.75 = Very Low.

Scale of Means: 4.00–3.26 High Lexical Innovation; 3.25–2.51 Moderate Lexical Innovation; 2.50–1.76 Low Lexical Innovation; 1.75–1.00 Very Low Lexical Innovation; SD-Standard Deviation

According to Table 6, the indicator “I use newly coined words or slang that are popular on social media platforms” obtained the highest rating ($Mean=3.05$; $SD=0.93$; *Moderate Lexical Innovation*). Conversely, the indicator “I create or modify words to express ideas more creatively online.” ($Mean=2.71$; $SD=0.95$; *Moderate Lexical Innovation*) acquired the lowest rating. In all, the rating ($Mean=2.89$; $SD=0.77$) indicates that the respondents exhibit “*Moderate Lexical Innovation*.”

The results show a moderate level of lexical innovation and a tendency to adhere to current trends in digital language, with respondents more likely to use well-known social media slang than to create new terms. This is consistent with the findings of Tagliamonte & Denis (2022), who found that digital communication promotes systematic lexical innovation through slang, blended forms, and abbreviations rather than continuous word generation. The lexical practices of Generation Alpha may be influenced by Bataan sociocultural factors such as social pressure and multilingualism. However, their higher lexical innovation scores may also result from their early and continuous exposure to digital platforms. Overall, the results suggest that Generation Alpha's lexical innovation is primarily adaptive rather than generative.

The following tables demonstrate the respondents' level of digital language practices in terms of symbolic-paralinguistic use. Table 7 shows the respondents' levels of digital language practices, specifically symbolic-paralinguistic use, including emoji use.

Table 7. Respondents' Symbolic-Paralinguistic Use: Emoji Use

Indicator	Mean	SD	Interpretation
I frequently use emojis in text messaging.	3.44	0.71	High
I use emojis to express emotions or emotional tone in text messages.	3.51	0.60	High
I use emojis when texting family members (e.g., parents or siblings).	3.34	0.71	High
I use emojis when texting friends.	3.56	0.62	High
I use emojis when texting a romantic partner or romantic interest.	3.33	0.87	High
Overall Mean	3.44	0.58	High

Scale of Means: 4.00–3.26 High Symbolic-Paralinguistic Use; 3.25–2.51 Moderate Symbolic-Paralinguistic Use; 2.50–1.76 Low Symbolic-Paralinguistic Use; 1.75–1.00 Very Low Symbolic-Paralinguistic Use; SD-Standard Deviation

It can be depicted from Table 7 that the indicator with the highest rating is “I use emojis when texting friends.” ($Mean=3.56$; $SD=0.62$; *High Symbolic-Paralinguistic Use*). On the flip side, the indicator with the lowest rating is “I use emojis when texting a romantic partner or romantic interest.” ($Mean=3.33$; $SD=0.87$; *High Symbolic-Paralinguistic Use*). On the whole, the respondents have a “*High Symbolic-Paralinguistic Use*” in their digital language practices, particularly in emoji use, as marked by the rating ($Mean=3.44$; $SD=0.58$).

The findings indicate that emojis function as tools for emotional support rather than stylistic embellishment. The respondents rely on emojis to compensate for the absence of facial expressions, tone, and gestures in text-based communication. The comfort levels and social norms of peer contacts may explain the higher use among friends than among romantic partners. Overall, the findings demonstrate how important emojis are for conveying feelings and how they are normalised as emotional support markers in everyday conversations. Table 8 displays the level of digital language practices of the respondents in terms of symbolic-paralinguistic use, particularly excessive capitalisation

Table 8. Respondents' Symbolic-Paralinguistic Use: Excessive Capitalization

Indicator	Mean	SD	Interpretation
I frequently use excessive capitalization in text messaging.	3.01	0.77	Moderate
I use excessive capitalization to convey emotions in text messages.	3.27	0.73	High
I use excessive capitalization to emphasize a word or phrase.	3.36	0.61	High
I use excessive capitalization when texting friends or close contacts.	3.21	0.78	Moderate
I use excessive capitalization only when the other person uses it first.	2.88	0.93	Moderate
Overall Mean	3.15	0.57	Moderate

Scale of Means: 4.00–3.26 High Symbolic-Paralinguistic Use; 3.25–2.51 Moderate Symbolic-Paralinguistic Use; 2.50–1.76 Low Symbolic-Paralinguistic Use; 1.75–1.00 Very Low Symbolic-Paralinguistic Use; SD-Standard Deviation

As reported in Table 8, the highest-rated indicator is “I use excessive capitalisation to emphasise a word or phrase.” (*Mean=3.36; SD=0.61; High Symbolic-Paralinguistic Use*). Oppositely, the lowest rated indicator is “I use excessive capitalisation only when the other person uses it first.” (*Mean=2.88; SD=0.93; Moderate Symbolic-Paralinguistic Use*). The rating (*Mean=3.15; SD=0.57*) suggests that respondents have a “*Moderate Symbolic-Paralinguistic Use*” in their digital language practices, particularly in excessive capitalisation.

The results show that respondents used capital letters primarily to highlight words rather than to mimic others' usage, indicating a modest level of symbolic-paralinguistic use of excessive capitalisation. This aligns with Riordan (2020), who clarified that, as in prosodic stress in spoken language, capitalisation in computer-mediated communication functions as an emphasis marker and an emotional intensifier. Overall, the findings imply that respondents selectively use excessive capitalisation to express emotion and emphasise in digital communication.

Table 9 presents the respondents' levels of digital language practices, specifically symbolic-paralinguistic use, including typed laughter.

Table 9. Respondents' Symbolic-Paralinguistic Use: Typed Laughter

Indicator	Mean	SD	Interpretation
I frequently use typed laughter in text messaging.	3.48	0.69	High
I use typed laughter to express emotions or emotional reactions.	3.63	0.51	High
I use typed laughter when texting friends.	3.59	0.57	High
I use typed laughter when texting a romantic partner or romantic interest.	3.27	0.90	High
I use typed laughter primarily when the other person uses it first.	3.22	0.87	Moderate
Overall Mean	3.44	0.55	High

Scale of Means: 4.00–3.26 High Symbolic-Paralinguistic Use; 3.25–2.51 Moderate Symbolic-Paralinguistic Use; 2.50–1.76 Low Symbolic-Paralinguistic Use; 1.75–1.00 Very Low Symbolic-Paralinguistic Use; SD-Standard Deviation

Aligned with the results in Table 9, the indicator attaining the highest rating is “I use typed laughter to express emotions or emotional reactions.” (*Mean=3.63; SD=0.51; High Symbolic-Paralinguistic Use*). On the contrary, the indicator receiving the lowest rating is “I use typed laughter primarily when the other person uses it first.” (*Mean=3.22; SD=0.87; Moderate Symbolic-Paralinguistic Use*). In general, the respondents have a “*High Symbolic-Paralinguistic Use*” in their digital language practices, particularly in typed laughter, as indicated by the rating (*Mean=3.44; SD=0.58*).

A high level of symbolic-paralinguistic usage of written laughter is evident in the findings; respondents frequently use it to convey what they feel or their emotions rather than mimicking others. Mabilangan & Madrunio's (2024) claim supports the findings, stating that textual paralinguage, such as written laughter, which serves as an alternative to nonverbal cues, is intended to build rapport and clarify emotional expression in their digital interactions. Typical laughter also reinforces humour and reduces ambiguity. Thus, the findings show that written laughter is an important way to facilitate social interaction and build emotional expressions among respondents in internet communication. Table 10 describes the respondents' level of digital language practices, focusing on symbolic-paralinguistic use, particularly repeated letters.

Table 10. Respondents' Symbolic-Paralinguistic Use: Repeated Letters

Indicator	Mean	SD	Interpretation
I frequently use repeated letters in text messaging.	3.38	0.83	High
I use repeated letters to convey emotions or emotional tone.	3.45	0.71	High
I use repeated letters when texting friends.	3.40	0.78	High
I use repeated letters when texting a romantic partner or romantic interest.	3.21	0.93	Moderate
I use repeated letters to emphasize a word or phrase.	3.36	0.81	High
Overall Mean	3.36	0.71	High

Scale of Means: 4.00–3.26 High Symbolic-Paralinguistic Use; 3.25–2.51 Moderate Symbolic-Paralinguistic Use; 2.50–1.76 Low Symbolic-Paralinguistic Use; 1.75–1.00 Very Low Symbolic-Paralinguistic Use; SD-Standard Deviation

As reflected in the results in Table 10, the indicator “I use repeated letters to convey emotions or emotional tone” gained the highest rating (*Mean=3.45; SD=0.71; High Symbolic-Paralinguistic Use*). By comparison, the indicator “I use repeated letters when texting a romantic partner or romantic interest” (*Mean=3.21; SD=0.93; Moderate Symbolic-Paralinguistic Use*) got the lowest rating. Overall, the rating (*Mean=3.36; SD=0.71*) suggests that respondents have a “*High Symbolic-Paralinguistic Use*” in their digital language practices, particularly in the use of repeated letters.

Vignovic & Thompson's (2022) study supports the frequent use of repeated letters, describing letter lengthening as an essential orthographic cue for digital communication. Their study indicates that repeating letters replicates vocal intensity and conveys affective warmth, given the lack of non-verbal signals. The findings show that respondents often use repeated letters to highlight phrases and accurately express emotional intent in digital interactions. In addition, repeated letters help convey enthusiasm, excitement, and affection in conversations. Therefore, it functions as an emotional intensifier rather than a decorative linguistic feature. Table 11 presents the respondents' levels of digital language practices, specifically symbolic-paralinguistic use, including excessive punctuation.

Table 11. Respondents' Symbolic-Paralinguistic Use: Excessive Punctuation

Indicator	Mean	SD	Interpretation
I frequently use excessive punctuation in text messaging.	3.15	0.78	Moderate
I use excessive punctuation to express emotions in text messages.	3.40	0.76	High
I use excessive punctuation when texting friends.	3.25	0.78	Moderate
I use excessive punctuation when texting a romantic partner or romantic interest.	3.04	0.95	Moderate
I use excessive punctuation to emphasize a word or convey strong emotion.	3.27	0.73	High
Overall Mean	3.22	0.69	Moderate

Scale of Means: 4.00–3.26 High Symbolic-Paralinguistic Use; 3.25–2.51 Moderate Symbolic-Paralinguistic Use; 2.50–1.76 Low Symbolic-Paralinguistic Use; 1.75–1.00 Very Low Symbolic-Paralinguistic Use; SD-Standard Deviation

In accordance with the results in Table 11, the indicator with the highest rating is "I use excessive punctuation to express emotions in text messages." (Mean=3.40; SD=0.76; High Symbolic-Paralinguistic Use). Contrarily, the indicator with the lowest rating is "I use excessive punctuation when texting a romantic partner or romantic interest." (Mean=3.04; SD=0.95; Moderate Symbolic-Paralinguistic Use). As a whole, the respondents have a "Moderate Symbolic-Paralinguistic Use" in their digital language practices, particularly in excessive punctuation, as noted by the rating (Mean=3.22; SD=0.69).

Punctuation in text messaging functions as a key social cue in conveying emotional depth, and the study by Drouin et al. (2021) supports and argues this point. They describe the frequent use of punctuation as a form of "digital prosody" that enables users to highlight messages and to consider the absence of vocal tone. That supports the study's findings that respondents use excessive punctuation to enhance emotional expression and convey greater strength in their intended message. Table 12 generalizes the level of digital language practices of the respondents in terms of symbolic-paralinguistic use.

Table 12. Summary of Respondents' Symbolic-Paralinguistic Use

Indicator	Mean	SD	Interpretation
Emoji Use	3.44	0.58	High
Excessive Capitalization	3.15	0.57	Moderate
Typed Laughter	3.44	0.55	High
Repeated Letters	3.36	0.71	High
Excessive Punctuation	3.22	0.69	Moderate
Overall Mean	3.32	0.51	High

Scale of Means: 4.00–3.26 High Symbolic-Paralinguistic Use; 3.25–2.51 Moderate Symbolic-Paralinguistic Use; 2.50–1.76 Low Symbolic-Paralinguistic Use; 1.75–1.00 Very Low Symbolic-Paralinguistic Use; SD-Standard Deviation

Table 12 shows all sub-indicators of the symbolic-paralinguistic use. Among these, the indicators "Emoji Use" (Mean=3.44; SD=0.58; High Symbolic-Paralinguistic Use) and "Typed Laughter" (Mean=3.44; SD=0.55; High Symbolic-Paralinguistic Use) have the highest ratings. However, the indicator "Excessive Capitalisation" (Mean=3.22; SD=0.69; Moderate Symbolic-Paralinguistic Use) has the lowest rating. Taken together, the rating (Mean=3.32; SD=0.51) suggests that respondents have a "High Symbolic-Paralinguistic Use" in their digital language practices.

Frequent use of emoji, as Riordan (2020) notes, highlights that emoji act as an important tool for "emotion work" in digital communication. It serves as a functional substitute for non-verbal cues, allowing users to convey nuance and make their emotional intent clearer. It supports the current finding that respondents rely solely on emojis to express their emotions and ensure their text-based interactions convey emotional clarity. Moreover, the moderate correlation with the frequency of online interaction suggests that respondents' participation in online spaces enhances the effectiveness of emoji use. The more they interact, the more they practice using emoji strategically to improve tone, cues, and expression. Table 13 presents the respondents' level of digital language practices in terms of multimodal integration.

Table 13. Respondents’ Multimodal Integration in Digital Communication

Indicator	Mean	SD	Interpretation
I prepare interactive presentations using music, visuals, and animations.	3.12	0.87	Moderate
I organize my thoughts systematically in presentations using visual elements (tables/graphics).	3.16	0.71	Moderate
I use visuals such as graphics, tables, pictures, and photographs in my writing.	3.14	0.80	Moderate
I relate various visual and verbal information across media tools.	3.21	0.78	Moderate
I relate information using visual and auditory elements.	3.23	0.75	Moderate
I express myself more clearly in environments where writing, sound, and images coexist.	3.26	0.65	High
I can determine whether content presented on various media is true.	3.21	0.74	Moderate
I realize how visual, auditory, and written elements influence individuals.	3.30	0.70	High
I interpret information gathered from multiple resources.	3.25	0.70	Moderate
Using various elements (music/images) in presentations makes communication easier.	3.29	0.81	High
Overall Mean	3.22	0.63	Moderate

Scale of Means: 4.00–3.26 High Lexical Innovation; 3.25–2.51 Moderate Lexical Innovation; 2.50–1.76 Low Lexical Innovation; 1.75–1.00 Very Low Lexical Innovation; SD-Standard Deviation

It can be observed from Table 13 that the highest-rated indicator is “I can realise how visual, auditory, and written elements influence individuals.” (*Mean=3.30; SD=0.70; High Multimodal Integration*). On the other hand, the lowest-rated indicator is “I prepare an interactive presentation making use of music, visuals, and animations.” (*Mean=3.12; SD=0.87; Moderate Multimodal Integration*). In combination, the respondents have a “*Moderate Multimodal Integration*,” as implied by the rating (*Mean=3.22; SD=0.63*).

Kurniawan & Puspita (2024) corresponds to the moderate level, it requires the strategic synthesis of visual, verbal and auditory elements that enhances communication and provides clarity. It also emphasizes multimodal literacy in the digital age, Study shows that respondents recognized more how different modes affect perspective and aid in organizing information systematically. These findings support the observation that respondents employ various media tools to express ideas more effectively and interpret information from multiple digital sources. Multimodal integration has not been limited to one age group, but is commonly practiced across generations. Furthermore, the moderate correlation between multimodal integration and communication goals suggests that although respondents have the ability to integrate modalities, their usage depends on their objectives in participation. Hence, it implies that multimodal literacy will be applied effectively if their intentions in communicating are clear.

Table 14. Summary of Respondents’ Digital Language Practices

Dimension	Mean	SD	Interpretation
Lexical Innovation	2.89	0.77	Moderate
Symbolic-Paralinguistic Use	3.32	0.51	High
Multimodal Integration	3.22	0.63	Moderate
Overall Mean	3.15	0.44	Moderate

Scale of Means: 4.00–3.26 High Level; 3.25–2.51 Moderate Level; 2.50–1.76 Low Level; 1.75–1.00 Very Low Level; SD-Standard Deviation

Table 14 presents all indicators of respondents' digital language practices. Among these, the indicator with the highest rating is “Symbolic-Paralinguistic Use” (*Mean=3.32; SD=0.51; High Level*), followed by “Multimodal Integration” (*Mean=3.22; SD=0.63; Moderate Level*). In contrast, the indicator earning the lowest rating is “Lexical Innovation” (*Mean=2.89; SD=0.77; Moderate Level*). Overall, the rating (*Mean=3.15; SD=0.44*) signifies that the respondents demonstrate a “*Moderate Level*” of digital language practices.

The highlight of symbolic-paralinguistic use aligns with the study by Pratama & Awaliyah (2022), which shows that emojis and typed laughter are ways to express emotions in the digital space. Such symbols are easy to navigate and effective to simulate non-verbal warmth. In addition, at moderate levels of multimodal integration and lexical innovation, the study observed that when respondents are active and digitally literate, they tend to classify paralinguistic symbols to ensure social and emotional clarity in their online interactions. It should also be noted that

respondents exhibited moderate levels of lexical innovation, even though they had high digital literacy skills, because they were more focused on functional and personal communication rather than on creating novel expressions.

d. Part IV compares the digital language practices of the respondents across their generational cohort.

Table 15 presents differences in respondents’ digital language practices across generational cohorts.

Table 15. Differences in Digital Language Practices Across Generational Cohorts

Dimension	Cohort	n	Mean	SD	F	p	Decision
Lexical Innovation	Gen Z	25	2.55	0.52	57.38	< .001	Significant
	Millennials	25	2.42	0.66			
	Gen Alpha	25	3.67	0.35			
Symbolic-Paralinguistic Use	Gen Z	25	3.34	0.34	0.05	.954	Not Significant
	Millennials	25	3.31	0.49			
	Gen Alpha	25	3.31	0.65			
Multimodal Integration	Gen Z	25	3.17	0.60	0.96	.390	Not Significant
	Millennials	25	3.36	0.62			
	Gen Alpha	25	3.12	0.68			
Overall Digital Language Practices	Gen Z	25	2.98	0.35	10.69	< .001	Significant
	Millennials	25	3.02	0.43			
	Gen Alpha	25	3.43	0.38			

** significant at 0.01 alpha level; * significant at 0.05 alpha level; ns-not significant at 0.05 alpha level; Mean ratings in a row not sharing subscripts are significantly different at 0.05 level

In line with the results in Table 15, the results revealed that the digital language practices of Gen Alpha (*Mean*=3.67; *SD*=0.35) were significantly higher than those of Gen Z (*Mean*=2.55; *SD*=0.52) and Gen Y (*Mean*=2.42; *SD*=0.66). In conclusion, the test statistic [*F* (74) =10.69; *p-value*=.000] provides sufficient evidence to conclude that a significant difference exists in respondents’ digital language practices across generational cohorts. Particularly, the digital language practices of Gen Alpha (*Mean*=3.43; *SD*=0.38) were significantly higher than those of Gen Z (*Mean*=2.98; *SD*=0.35) and Gen Y (*Mean*=3.02; *SD*=0.43).

The findings reveal significant generational differences in Lexical Innovation and overall digital language practices, with Generation Alpha demonstrating higher levels than Generation Z and Generation Y. In contrast, no significant differences were observed in Symbolic-Paralinguistic Use and Multimodal Integration. This suggests that younger cohorts exhibit greater creativity and adaptability in developing new lexical forms in digital spaces. In contrast, the use of emojis, symbols, and multimodal elements has become widely normalised across generations. These results align with McCulloch (2020), who explains that younger digital natives actively shape and accelerate linguistic innovation in online communication environments.

e. Part V reveals the relationship between the respondents’ communication-related variables and their digital language practices.

Table 16. Correlation Between Communication-Related Variables and Digital Language Practices

Variables	Digital Literacy	Frequency of Online Interaction	Communication Goals	Overall Communication Variables
Lexical Innovation	-0.07 (ns)	0.03 (ns)	0.25*	0.09 (ns)
Symbolic-Paralinguistic Use	0.23*	0.49**	0.31**	0.47**
Multimodal Integration	0.39**	0.43**	0.48**	0.53**
Overall Digital Language Practices	0.16 (ns)	0.35**	0.42**	0.42**

** significant at 0.01 alpha level; * significant at 0.05 alpha level; ns-not significant at 0.05 alpha level; Strength of Relationship: ±0.80– ±1.0 High Relationship; ±0.60–±0.79; Moderately High Relationship; ±0.40–±0.59 Moderate Relationship; ±0.20–±0.39 Low Relationship; ±0.01–±0.19 Negligible Relationship

In conformity with the results in Table 16, the corresponding significance values for the sub-variables related to the respondents’ Communication-related Variables and their Digital Language Practices are less than the 0.05 alpha level. This indicates that the identified indicators posted a statistically significant relationship.

Specifically, among the sub-variables of Digital Language Practices, "Lexical Innovation" showed a significantly low relationship with "Communication Goals" ($r = 0.25$; $p\text{-value} = .036$). Moreover, the sub-variable "Symbolic-Paralinguistic Use" established a significant and moderate relationship with "Frequency of Online Interaction" ($r=0.49$; $p\text{-value}=0.000$), while a significantly low relationship was observed with "Digital Literacy" ($r=0.23$; $p\text{-value}=0.046$) and "Communication Goals" ($r=0.31$; $p\text{-value}=0.007$). Similarly, the sub-variable "Multimodal Integration" demonstrated significant, moderate relationships with "Frequency of Online Interaction" ($r=0.43$; $p\text{-value}=0.000$) and "Communication Goals" ($r=0.48$; $p\text{-value}=0.000$), while a significantly low relationship was observed with "Digital Literacy" ($r=0.39$; $p\text{-value}=0.000$).

Furthermore, among the Communication-Related Variables, "Digital Literacy" posted significantly low relationships with "Symbolic-Paralinguistic Use" ($r=0.23$; $p\text{-value}=0.046$) and "Multimodal Integration" ($r=0.39$; $p\text{-value}=0.000$). In addition, significant and moderate relationships were found between "Frequency of Online Interaction" and both "Symbolic-Paralinguistic Use" ($r=0.49$; $p\text{-value}=0.000$) and "Multimodal Integration" ($r=0.43$; $p\text{-value}=0.000$). Moreover, "Communication Goals" exhibited a significant and moderate relationship with "Multimodal Integration" ($r=0.48$; $p\text{-value}=0.000$) and a significant but low relationship with "Symbolic-Paralinguistic Use" ($r=0.31$; $p\text{-value}=0.007$).

In summary, the sub-variables of Digital Language Practices, namely "Symbolic-Paralinguistic Use" ($r=0.47$; $p\text{-value}=0.000$) and "Multimodal Integration" ($r=0.53$; $p\text{-value}=0.000$), revealed significant and moderate relationships with Communication-Related Variables. Likewise, among the Communication-Related Variables, "Communication Goals" ($r=0.48$; $p\text{-value}=0.000$) and "Frequency of Online Interaction" ($r=0.35$; $p\text{-value}=0.002$) showed moderate and low relationships, respectively.

Overall, there is sufficient evidence to conclude that a positive, moderately significant relationship exists between the respondents' communication-related variables and their digital language practices, as indicated by the correlation coefficient ($r=0.42$; $p\text{-value}=0.000$).

The results of the correlation analysis in Table 16 show a positive, moderate, and significant relationship between the respondents' communication-related variables and their digital language practices ($r = .42$, $p = .000$), rejecting the null hypothesis. Multimodal Integration ($r = .53$, $p = .000$) and Symbolic-Paralinguistic Use ($r = .47$, $p = .000$) had moderately significant relationships with the communication variables among the specific dimensions of digital language. On the other hand, Lexical Innovation revealed an insignificant relationship ($r = .09$, $p = .456$). Subsequently, Communication Goals emerged as the strongest predictor, with a moderate, significant relationship ($r = .48$, $p = .000$), followed by Frequency of Online Interaction, which showed a low relationship ($r = .35$, $p = .002$) when the communication drivers were examined individually. In particular, Digital Literacy appears to have a negligible relationship with overall practices ($r = .16$, $p = .182$), indicating that a user's technical skill is less influential in deciding their digital linguistic style than their specific social intentions and frequency of online engagement.

The study supports Social Information Processing Theory, which holds that people adjust their language and nonverbal cues to fit digital environments to build and maintain social relationships. The findings are consistent with Tagg (2015) work, which found that digital language use is highly context-dependent and shaped more by communication goals and interaction frequency than by technical skills alone. Tagg explains that as users interact more often online, they move beyond basic literacy and begin using symbols, emojis, and multimodal elements to maintain social presence. Similarly, the present study shows that communication goals and interaction frequency have a stronger influence on innovative digital language practices than digital literacy skills alone.

f. Part VI presents the implications for digital communication practices across generational cohorts.

The findings regarding digital language practices provide a nuanced view of how generational cohorts navigate online spaces. With a large effect size in the Lexical Innovation contrast and non-significant results in symbolic and multimodal use, the study suggests that while specific vocabulary remains a generational marker, the "structural grammar" of the internet has reached a state of universal saturation.

The data suggests that educational institutions must evolve their definition of literacy to include contextual linguistic adaptability. Since Gen Alpha demonstrates significantly higher lexical innovation, the role of the educator shifts from merely correcting "non-standard" language to helping students master code-switching between informal digital innovation and formal academic discourse. Furthermore, the high level of technical literacy (Mean=3.68) across all cohorts did not correlate strongly with the use of expressive paralinguistic features, such as emojis or typed laughter. This implies that social variables and platform immersion, rather than technical aptitude alone, drive digital expression. Consequently, digital literacy programs should be broadened to include social-emotional compe-

tencies, such as interpreting digital tone and managing well-being in text-based environments, to ensure students can transition responsibly across various social and professional contexts.

For developers of digital platforms, these results indicate that symbolic and multimodal features are no longer "youth-specific" but have become standardised requirements for all users. The lack of significant differences in Symbolic-Paralinguistic Use and Multimodal Integration across Gen Y, Gen Z, and Gen Alpha suggests the normalisation of digital symbols. This suggests that platforms should prioritise "linguistically enriched" environments that facilitate emotional interconnectedness rather than just information exchange. As communication goals shift toward relational maintenance, technology should continue to enhance features such as customizable reactions, GIFs, and integrated audiovisual components. These tools allow younger users to continue their role as primary drivers of linguistic evolution while providing older cohorts with the necessary toolkit to maintain deep social connections across a shared digital landscape.

From a research perspective, the statistical results necessitate a cautious approach to interpreting generational change. While there is a strong statistical association between generational membership and lexical innovation, researchers should avoid overstating this as a direct causal link; age is likely a correlate for different levels of immersion in specific digital subcultures (e.g., TikTok or Roblox). The negligible effect sizes for symbolic and multimodal use are particularly significant, as they provide evidence of linguistic levelling. This phenomenon suggests that once-novel digital behaviours eventually lose their status as "slang" and become a universal standard. Future research should therefore shift focus from technical competency to the social drivers of digital practice, investigating the "saturation point" at which youth-initiated innovations become cross-generational norms.

3.2. Discussion

The findings of this study provide important insights into how communication-related variables shape digital language practices across generational cohorts. Overall, the results indicate that respondents possess a high level of digital literacy; however, their digital language practices remain at a moderate level, with symbolic paralinguistic use emerging as the most dominant dimension. This pattern suggests that digital communication is not solely determined by technical competence but is more strongly influenced by how individuals utilize technology to achieve specific communicative purposes.

Despite the high level of digital literacy observed among respondents, the results reveal that this variable has only a negligible relationship with digital language practices. This indicates that technical skills alone do not significantly drive linguistic behaviour in online communication. Rather, digital literacy functions as a foundational competence that enables participation in digital environments but does not necessarily lead to more innovative or expressive language use (Alakrash & Razak, 2021; Cao et al., 2023). This finding reinforces the idea that digital communication extends beyond technical ability and is shaped by how users engage with and interpret communicative contexts.

In contrast, communication goals and frequency of online interaction emerged as more influential factors in shaping digital language practices (Sharma, 2023). The moderate relationships between these variables and both symbolic paralinguistic use and multimodal integration indicate that individuals who engage more frequently in online communication and who possess clearer communicative intentions tend to use expressive and multimodal features more effectively (Ciekanski & Chanier, 2008; Vandergriff, 2013; Zhang et al., 2023). This finding aligns with the assumption that digital language evolves through social interaction, where repeated exposure to online discourse facilitates the adoption of expressive strategies such as emojis, typed laughter, and visual elements.

Examining specific dimensions, the results highlight that symbolic paralinguistic use is the most dominant form of digital language practice across all generations. The widespread use of emojis, repeated letters, and other textual cues suggests that these features have become normalised and essential components of digital communication, functioning as substitutes for nonverbal cues in face-to-face interaction (Bai et al., 2019; Coyle & Carmichael, 2019; Hu et al., 2017). Moreover, the absence of significant differences across generational cohorts indicates that these practices are no longer age-specific but have evolved into universally accepted communication strategies in digital contexts.

On the other hand, lexical innovation showed significant generational differences, with Generation Alpha showing higher levels than Generation Z and Millennials (Roels & Enghels, 2020; Samputra & Alfarizi, 2025). This finding implies that younger users play a more active role in shaping emerging digital vocabularies, likely due to their deeper immersion in rapidly evolving digital platforms. However, the overall moderate level of lexical innovation suggests that most users tend to adopt existing trends rather than create entirely new linguistic forms, indicating that digital language innovation is largely adaptive rather than generative.

The moderate level of multimodal integration suggests that while respondents can combine multiple modes of communication, such as text, visuals, and audio, their use remains dependent on communicative context and purpose. This reinforces the idea that multimodal competence is not solely determined by digital literacy but is influenced by communicative intentions and situational demands. These findings suggest that generational differences are more pronounced in lexical aspects of language, while symbolic and multimodal practices have become standardised across cohorts. This pattern reflects a convergence in digital communication practices, in which features initially associated with younger users gradually become normalised across all generations.

Several theoretical perspectives support these empirical findings. Social Information Processing Theory, developed by Joseph Walther (1992), posits that individuals adapt their communication strategies in computer-mediated environments by maximising available linguistic and symbolic cues (Sumner & Ramirez, 2017; Walther, 2015). In the absence of physical nonverbal signals, users compensate through lexical innovation, emojis, stylistic markers, and other paralinguistic features (Damanhour, 2018). This theory explains why communication goals and frequency of online interaction significantly shape digital language practices, as users refine their expressive strategies over time to achieve relational, social, and informational objectives.

Similarly, Multimodality Theory, advanced by Gunther Kress and Theo van Leeuwen (2006), asserts that meaning making occurs through the integration of multiple semiotic modes, including text, images, symbols, and audio-visual elements (Faigley et al., 2002; Muñoz, 2023). In digital environments, communication is inherently multimodal (Faigley et al., 2002). This perspective supports the finding that, while respondents can integrate multiple modes, the extent of that integration depends on communicative intent rather than technical skill alone.

Generational Cohort Theory, originally introduced by Karl Mannheim (1928) and expanded by Twenge (2017), explains how shared sociohistorical experiences shape communicative behaviours (Jefry, 2024; You et al., 2017). Millennials experienced the transition from analogue to digital communication, Generation Z grew up within social media ecosystems, and Generation Alpha is immersed in algorithm-driven, mobile-first, and video-centric environments (Zierock et al., 2019). These differing technological exposures contribute to variations in lexical innovation while having less impact on already normalised practices such as symbolic and multimodal communication.

These theories suggest that generational identity provides the structural context for digital language tendencies. In contrast, communication-related variables, including digital literacy, frequency of online interaction, and communicative goals, serve as key mechanisms of influence. Specifically, generational cohort explains baseline differences in linguistic innovation, whereas communication goals and interaction frequency account for variations in how individuals express meaning in digital environments. Thus, digital language practices are best understood not as products of age alone, but as outcomes of the dynamic interaction between generational positioning and communicative engagement in digital contexts.

Compared to prior studies, the present findings offer a more comprehensive understanding of digital language practices by integrating generational comparisons with communication related variables within a single analytical framework. Previous research has typically focused on isolated aspects such as code switching, emoji use, or translanguaging, often within a single generational group. In contrast, this study simultaneously examines Millennials, Generation Z, and Generation Alpha while incorporating key variables such as digital literacy, interaction frequency, and communicative goals. This integrative approach enables a more nuanced explanation of how linguistic variation emerges not only across generational cohorts but also within them. As a result, the study extends existing literature by moving beyond descriptive accounts toward a more systematic and relational analysis of digital linguistic behavior, thereby offering a more holistic perspective than prior fragmented approaches.

This study further underscores its novelty by demonstrating that digital language practices should be understood as outcomes of interconnected generational and communication related processes rather than as static or isolated phenomena. By employing a comparative correlational design, the research provides empirical evidence that clarifies both group differences and variable based relationships within a unified model. This dual analytical perspective represents a conceptual advancement by linking macro level generational positioning with micro level communication dynamics. Distinct from previous studies that tend to treat generational differences or communication variables independently, this study positions their interaction as the central explanatory mechanism of digital linguistic variation. Consequently, the study not only refines theoretical discussions in digital sociolinguistics and computer mediated communication but also introduces an integrative analytical framework that can inform future research on evolving language practices in digitally mediated environments.

4. IMPLICATIONS AND CONTRIBUTIONS

4.1 Research Implications

The study's findings imply that digital communication practices across generations are shaped more by communicative intent and interaction patterns than by technical skills alone. This suggests that educators should move beyond teaching basic digital literacy and instead focus on developing students' ability to use language appropriately across contexts, such as balancing informal digital expressions with formal academic communication. Additionally, the strong influence of communication goals indicates that digital platforms and learning environments should be designed to support meaningful interaction, collaboration, and social connection. The normalisation of symbolic and multimodal features across generations also implies that these elements are now essential components of effective communication, requiring both educators and platform developers to integrate them purposefully into instruction and system design.

4.2 Research Contributions

This study contributes to the field of digital linguistics and communication by providing localised empirical evidence on how generational cohorts differ and converge in their digital language practices. It highlights that while lexical innovation remains a distinguishing feature among younger users, symbolic and multimodal communication have become universal across generations. Furthermore, the research advances existing knowledge by demonstrating that communication-related variables, particularly communication goals and frequency of interaction, play a more significant role than digital literacy in shaping online language use. By integrating generational analysis with communication factors, the study offers a more comprehensive framework for understanding the evolution of digital language. It provides a foundation for future research exploring social, cultural, and technological influences on communication.

5. LIMITATIONS AND FUTURE RESEARCH DIRECTIONS

5.1 Research Limitations

This study is subject to several limitations that should be considered when interpreting the findings. First, the use of nonprobability sampling and a relatively small sample size limits the generalizability of the results to broader populations beyond the selected respondents. Second, the study is geographically confined to a single location, which may not fully capture variations in digital language practices influenced by different cultural and technological contexts. Third, the reliance on self-reported data introduces the possibility of response bias and inaccuracies in participants' assessment of their own digital literacy and communication behaviours. Lastly, the cross-sectional design only reflects patterns at a single point in time and does not account for the rapid evolution of digital communication practices.

5.2 Recommendation for Future Research Direction

The findings highlight the need to shift education and technology practices toward developing collaborative digital communication skills rather than focusing solely on technical abilities, emphasising expressive tools like emoticons and fostering intergenerational communication to bridge differences among Millennials, Gen Z, and Gen Alpha. Platform design should prioritise multimodal and audiovisual features to align with evolving user preferences and support community engagement and professional networking. For future research, larger, randomly selected samples, broader cultural coverage, and longitudinal approaches are recommended to enhance generalizability and track changes over time. Exploring additional factors such as platform behaviours, socio-cultural influences, and psychological motivations, alongside qualitative methods, can provide deeper insights into digital language practices.

6. CONCLUSION

This research indicates that communication features play a significant role in the digital language use of Millennials, Generation Z, and Generation Alpha. Although the respondents had high digital literacy skills and clear communication intentions, their overall digital language use was quite conservative, with symbolic paralinguistic features such as emojis, keyboarded laughter, and repeated letters emerging as the most frequent among the generations. The greatest differences among the generations were found in the use of lexical innovation, with Generation Alpha using new digital vocabulary more frequently, suggesting that younger Filipino speakers play a crucial role in shaping the language of online communication. Moreover, communication intentions and the rate of online engage-

ment were better predictors of digital language use than digital literacy, suggesting that social engagement and communication intentions, rather than technical proficiency, are more important in shaping how people communicate online.

This research contributes to the growing body of knowledge in digital linguistics and communication studies by demonstrating that Filipinos' online language use is socially driven, generationally nuanced, and constantly evolving. The findings of this study underscore the importance of understanding digital language as a communicatively meaningful phenomenon and of integrating discussions about context-appropriate digital language use into language teaching for educators; the importance of focusing on communicative competence and appropriate digital engagement practices in addition to technical proficiency for digital literacy programs; and the study offers a local perspective on how social and generational forces shape digital linguistic practices for communication scholars, providing a foundation for future research on contextual and cultural forces shaping online communication.

Acknowledgments

The authors would like to express their sincere appreciation to the co-authors for their collaboration and contributions to this study, namely Maria Angela Z. Macomis, Aviel I. Alayon, Justine Mae M. Bihasa, and Colleen Kate G. Pasion, who actively participated in the development of the research, data collection, analysis, and completion of this work.

Author Contribution Statement

All authors made significant contributions to this study. Maria Angela Z. Macomis: Conceptualization, Methodology, Data Curation, Writing - Original Draft. Aviel I. Alayon: Conceptualization, Formal analysis, Writing - Review & Editing. Justine Mae M. Bihas: Conceptualization, Writing - Review & Editing. Colleen Kate G. Pasion: Conceptualization, Writing - Review & Editing. All authors have read and approved the final version of the manuscript.

Declaration of Generative AI (GenAI) Usage in Scientific Writing

In preparing this study, the authors used artificial intelligence tools to a limited extent to assist with language editing, grammar improvement, and clarity of writing. However, all content, analysis, and interpretations are entirely the responsibility of the authors. All instances of Generative AI usage in this article were conducted by the authors in accordance with the [JGMDS GenAI Tool Usage Policy](#), with the authors assuming full responsibility for the originality, accuracy, and integrity of the work."

Conflict of Interest Statement

The authors declare that there are no conflicts of interest related to the conduct and publication of this study.

REFERENCES

- Alakrash, H., & Razak, N. A. (2021). Technology-Based Language Learning: Investigation of Digital Technology and Digital Literacy. *Sustainability*, 13(21), 12304. <https://doi.org/10.3390/su132112304>
- Androutsopoulos, J. (2015). Networked multilingualism: Some language practices on Facebook and their implications. *International Journal of Bilingualism*, 19(2), 185-205. <https://doi.org/10.1177/1367006913489198>
- Ayan, E. (2020). Descriptive Analysis of Emoticons/Emoji and Persuasive Digital Language Use in WhatsApp Messages. *Open Journal of Modern Linguistics*, 10(4), 375-389. <https://doi.org/10.4236/ojml.2020.104022>
- Bai, Q., Dan, Q., Mu, Z., & Yang, M. (2019). A Systematic Review of Emoji: Current Research and Future Perspectives [Review of A Systematic Review of Emoji: Current Research and Future Perspectives]. *Frontiers in Psychology*, 10. *Frontiers Media*. <https://doi.org/10.3389/fpsyg.2019.02221>
- Cao, J., Bhuvaneswari, G., Arumugam, T., & Aravind, B. R. (2023). The digital edge: examining the relationship between digital competency and language learning outcomes. *Frontiers in Psychology*, 14, 1187909. <https://doi.org/10.3389/fpsyg.2023.1187909>
- Ciekanski, M., & Chanier, T. (2008). Developing online multimodal verbal communication to enhance the writing process in an audio-graphic conferencing environment. *ReCALL*, 20(2), 162. <https://doi.org/10.1017/s0958344008000426>

- Coyle, M. A., & Carmichael, C. L. (2019). Perceived responsiveness in text messaging: The role of emoji use. *Computers in Human Behavior*, 99, 181. <https://doi.org/10.1016/j.chb.2019.05.023>
- Damanhour, M. Y. (2018). Language Use in Computer Mediated-Communication and Users' Social Identity. *English Linguistics Research*, 7(3), 16–16. <https://doi.org/10.5430/elr.v7n3p16>
- Dolot, D., & Opina, A. (2021). Forms and functions of graphicons in Facebook private conversations among young Filipino users. *International Journal of Linguistics, Literature and Translation*, 4(6), 62-73. <https://doi.org/10.32996/ijllt.2021.4.6.8>
- Drouin, M., Reijmers, N., & Miller, D. (2021). Punctuation in Text Messages: Effects of Punctuation Type, Message Context, and Gender. *Computers in Human Behavior Reports*. <https://doi.org/10.1016/j.chbr.2021.100082>
- Faigley, L., Kress, G., & Leeuwen, T. van. (2002). Multimodal Discourse: The Modes and Media of Contemporary Communication. *College Composition and Communication*, 54(2), 318–318. <https://doi.org/10.2307/1512155>
- García-Chitiva, M. d. P. (2024). Profiling digital and collaborative competencies in international online learning (COIL) in higher education (Paper). International Society for Technology, Education, and Science. <https://files.eric.ed.gov/fulltext/ED673147.pdf>
- Hu, T., Guo, H., Sun, H., Nguyen, T. T., & Luo, J. (2017). Spice Up Your Chat: The Intentions and Sentiment Effects of Using Emojis. *Proceedings of the International AAAI Conference on Web and Social Media*, 11(1), 102. <https://doi.org/10.1609/icwsm.v11i1.14869>
- Jay, M., Lim, M., Hossein, K., White, T., Naqvi, S. R., Chien, K., & Haffie, T. (2019). “Best of both worlds”: A students-as-partners near-peer moderation program improves student engagement in a course Facebook group. *International Journal for Students as Partners*, 3(1). <https://files.eric.ed.gov/fulltext/EJ1468547.pdf>
- Jebejian, A., Spathopoulou, F., & Pitychoutis, K. M. (2025). Generational, Educational, and Gender Influences on Code-Switching in Kuwait's Armenian Community. *Theory and Practice in Language Studies*, 15(9), 2813–2824. <https://doi.org/10.17507/tpls.1509.03>
- Jefry, B. (2024). Communicative language preferences in Gen Xs, Millennials and Gen Zs for workplace communication. *SALTeL Journal (Southeast Asia Language Teaching and Learning)*, 7(1), 41–56. <https://doi.org/10.35307/saltel.v7i1.134>
- Jefry, B. (2024). Communicative Language Preferences in Gen Xs, Millennials and Gen Zs for Workplace Communication. *SALTeL Journal (Southeast Asia Language Teaching and Learning)*, 7(1), 41–56. <https://doi.org/10.35307/saltel.v7i1.134>
- Kocarlan, H., & Stoycheva, B. (2025). The effect of digital literacy on online purchase intention: The mediating role of social media use. *Journal of Theoretical and Applied Electronic Commerce Research*, 20(4), 355. <https://doi.org/10.3390/jtaer20040355>
- Kuchkarova, M. D. (2025). Sociolinguistic interpretation of youth jargon. In *Global Horizons in Philology and Pedagogy: Experiences of Turkic Nations (Conference Proceedings)*. World of Science Journals. <https://www.wosjournals.com/index.php/ruconf/article/view/3667/4139>
- Kurniawan, A., & Puspita, D. (2024). Multimodal Literacy in Digital Communication: Students' Ability to Integrate Visual and Verbal Elements. *Journal of English Education and Linguistics Studies*. Ajeng Puspita_The Implementation of Mobile-Assisted Language Learning in Teaching English at SMK TI Bina Citra Informatika Purwokerto.pdf
- Mabilangan, R. A., & Madrunio, M. R. (2024). Textual Paralanguage in Social Media Communication: Functions and Patterns of Use. *International Journal of Research and Innovation in Social Science (IJRISS)*. <https://dx.doi.org/10.47772/IJRISS.2024.8120163>
- Madsen, D. Ø. (2026). Generation alpha speaks in memes: a conceptual framework for platformed language. *Frontiers in Communication*, 11. <https://doi.org/10.3389/fcomm.2026.1695863>
- Manganari, E. (2021). Emoji Use in Computer-Mediated Communication. *The International Technology Management Review*, 10, 1–11. <https://link.springer.com/article/10.2991/itmr.k.210105.001>
- McCulloch, G. (2020). *Because internet: Understanding the new rules of language*. Riverhead Books. <https://tinyurl.com/37vs23fn>
- Muñoz, A. (2023). Multimodal Analysis as a Way to Operationalise Objectivity in Audio Description. *Journal of Audiovisual Translation*, 6(2). <https://doi.org/10.47476/jat.v6i2.2023.251>
- Nightingale, R. (2016). *The effect of out-of-school media contact on language attitudes in multilingual adolescents: a complex psychosociolinguistic system*. <https://doi.org/10.6035/14018.2016.252200>

- Parissi, M., Komis, V., Dumouchel, G., Lavidas, K., & Papadakis, S. (2023). How does students' knowledge about information-seeking improve their behavior in solving information problems? *Educational Process: International Journal*, 12(1), 113–137. <https://files.eric.ed.gov/fulltext/EJ1384866.pdf>
- Piccerillo, L., Tescione, A., Iannaccone, A., & Digennaro, S. (2025). Alpha generation's social media use: sociocultural influences and emotional intelligence. *International Journal of Adolescence and Youth*, 30(1). <https://doi.org/10.1080/02673843.2025.2454992>
- Pratama, H., & Awaliyah, S. (2022). The Evolution of Digital Language: From Textual to Visual Paralanguage in Social Media Interaction. *Journal of Pragmatics and Digital Communication*. <https://doi.org/10.21831/litera.v21i2.48212>
- Putri, B. K. B. P., Soraya, N., & Rosalinah, Y. (2025). Sociolinguistic Perspective on Digital Communication: Understanding Gen Alpha Language Use in Tiktok. *Golden Ratio of Data in Summary*, 5(1), 44–48. <https://doi.org/10.52970/grdis.v5i1.886>
- Riordan, M. A. (2020). Emojis as Tools for Emotion Work: Communicating Affect in Text Messages. *Journal of Language and Social Psychology*, 39(3), 315–327. <https://doi.org/10.1177/0261927X20914020>
- Roels, L., & Enghels, R. (2020). Age-based variation and patterns of recent language change: A case-study of morphological and lexical intensifiers in Spanish. *Journal of Pragmatics*, 170, 125. <https://doi.org/10.1016/j.pragma.2020.08.017>
- Samputra, P. L., & Alfarizi, M. (2025). Can advanced society 5.0 technology create economic and social value for millennial and generation Z MSMEs in Surabaya, Indonesia? An economic resilience perspective. *Asia Pacific Management Review*, 30(3), 100355. <https://doi.org/10.1016/j.apmr.2025.100355>
- Sánchez-Caballé, A., Gisbert-Cervera, M., & Esteve-Mon, F. (2020). The digital competence of university students: A systematic literature review. *Computers & Education*, 156, 103940. <https://doi.org/10.1016/j.compedu.2020.103940>
- Schmitz, C. L., & Gabel, S. G. (2023). Women, Human Rights, and Gender Equality. *Journal of Human Rights and Social Work*, 8(4), 359–360. <https://doi.org/10.1007/s41134-023-00288-7>
- Seemiller, C., & Grace, M. (2016). Generation Z goes to college. Jossey Bass. <https://tinyurl.com/cmruw5ac>
- Sharma, M. G., Shivani Arya, N. Janani, Punit Pathak, Aarti. (2023). Language in the Digital Age: Trends and Transformations in Online Communication. <https://doi.org/10.52783/eel.v14i1.994>
- Suizo, Christy. (2024). Gen Z's Language Identity and Contemporary Philosophies in the Digital Era. *Journal of Natural Language and Linguistics*. 2. 13-17. <https://doi.org/10.54536/jnll.v2i1.2396>
- Sumner, E. M., & Ramirez, A. (2017). Social Information Processing Theory and Hyperpersonal Perspective. In *The International Encyclopedia of Media Effects* (pp. 1–11). <https://doi.org/10.1002/9781118783764.wbieme0090>
- Tagg, C. (2015). Exploring digital communication: Language in action. Routledge London. p. 300. <https://doi.org/10.4324/9781315727165>
- Tagliamonte, S. A., & Denis, D (2022). Linguistic Ruin? LOL! Instant Messaging and Teen Language. Cambridge University Press. <https://www.cambridge.org/core/books/linguistic-ruin/>
- Tahir, R., & Arfat, I. (2025). Digital language innovation: An analysis of age based differences. *International Premier Journal of Languages & Literature*, 3(4), 533–545. <https://doi.org/10.5281/zenodo.18074840>
- Twenge, J. M. (2023). Generations: The real differences between Gen Z, Millennials, Gen X, Boomers, and Silents—and what they mean for America's future. Atria Books. <https://tinyurl.com/yhty4vtm>
- Vandergriff, I. (2013). Emotive communication online: A contextual analysis of computer-mediated communication (CMC) cues. *Journal of Pragmatics*, 51, 1. <https://doi.org/10.1016/j.pragma.2013.02.008>
- Vignovic, J. A., & Thompson, L. F. (2022). Computer-Mediated Communication and the Expression of Emotion: The Role of Paralinguistic Cues. *Journal of Business and Psychology / Frontiers in Psychology*. Witchel: Spelling errors in brief computer-mediated.
- Walther, J. B. (2015). Social Information Processing Theory (CMC). In *The International Encyclopedia of Interpersonal Communication* (pp. 1–13). <https://doi.org/10.1002/9781118540190.wbeic192>
- Yang, Y., Tan, Z., & Yang, X. (2025). Fleeing TikTok to Rednote: Leveraging generative technologies to support cross-language communication for TikTok refugees on Chinese social networking platforms. *Turkish Online Journal of Educational Technology – TOJET*, 24(2), 16–25. <https://files.eric.ed.gov/fulltext/EJ1478362.pdf>
- You, Q., García-García, D., Paluri, M., Luo, J., & Joo, J. (2017). Cultural Diffusion and Trends in Facebook Photographs. *Proceedings of the International AAAI Conference on Web and Social Media*, 11(1), 347–356. <https://doi.org/10.1609/icwsm.v11i1.14902>

Zhang, L. J., Fathi, J., & Naderi, M. M. (2023). A cross-lagged panel analysis of self-efficacy, teacher grit, teaching enjoyment, and work engagement among foreign language teachers. *Journal of Multilingual and Multicultural Development*, 46(7), 1714. <https://doi.org/10.1080/01434632.2023.2248064>

Zhang, Z., & Yang, R. (2025). Personalised Language Learning Through Technology: Examining How Digital Literacy Shapes Proficiency and Communication Strategiess. *Journal of Computer Assisted Learning*, 41(4), e70069. <https://doi.org/10.1111/jcal.70069>

Zierock, B., Schulze, J., & Angar, S. (2019). From Gen Z to Generation Alpha: Navigating the Evolution of Communication in a Digital Age. *SCIREA Journal of Education*. <https://doi.org/10.54647/education880581>

Zierock, B., Schulze, J., & Angar, S. (2019). From Gen Z to Generation Alpha: Navigating the Evolution of Communication in a Digital Age. *SCIREA Journal of Education*. <https://doi.org/10.54647/education880581>

Zubareva, S. (2020). Socio-cultural Identity of the Digital Generation in the 21st Century: Cultural and Philosophical Analysis. In: Anikina, Z. (eds) *Integrating Engineering Education and Humanities for Global Intercultural Perspectives*. IEEHGIP 2022. Lecture Notes in Networks and Systems, vol 131. Springer, Cham. https://doi.org/10.1007/978-3-030-47415-7_103

Article Information

Copyright holder: © Macomis, M. A. Z., Alayon, A. I., Bihasa, et al., (2026)	Disclaimer/Publisher’s Note: The statements, opinions and data contained in all publications are solely those of the individual author(s) and contributor(s) and not of AEDUCIA and/or the editor(s). AEDUCIA and/or the editor(s) disclaim responsibility for any injury to people or property resulting from any ideas, methods, instructions or products referred to in the content.
First Publication Right: Journal of Gender and Millennium Development Studies	
Article info: DOI: https://doi.org/10.64420/jgmnds.v3i1.515	
Word Count: 12049	This Article is licensed under: CC-BY-SA 4.0