

# Can Emojis and Stickers Substitute for Words? Their Relationship to Students' Writing Proficiency

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**Abstract**— This study examines the relationship between students' use of stickers and emojis in digital communication and their academic writing abilities, with a focus on age and gender. Not much is known in spite of stickers and emoticons being frequently used in online discourses on how they spill over to professional writing. The method used in the study is quantitative descriptive-correlational and comprised 69 randomly chosen students in the West Visayas State University-Himamaylan City Campus. Participants completed a writing task that was rated with the use of an analytical rubric, as well as answering a validated questionnaire about stickers and emojis they use. According to the received results, students of different ages and genders also use stickers and emojis widely to express emotions, make messages easier and maintain a light tone. The majority of the pupils, irrespective of age and gender, had excellent academic writing skills. It is interesting to mention that youngsters who identify themselves as gender fluid excelled in tests of writing abilities. ANOVA test, however, showed no apparent differences in gender and age on the stickers and emojis used. In addition, no correlation was found between writing ability and the use of both stickers and emojis, as seen by Pearson's correlation. The results indicate that the frequent use of digital resources does not impact students' academic writing. The study, however, does demonstrate the importance of teaching children how to switch from informal to formal usage of language. The study, however, does demonstrate the importance of teaching children how to switch from informal to formal language usage. This study contributes to the growing area of research on language development and digital communication while giving educators a roadmap for creating a balanced approach to literacy in the digital world.

**Keywords**— emojis, stickers, writing proficiency, ANOVA test, teaching.

## INTRODUCTION

Visual communication is now a central part of how students express themselves online, with emojis and stickers frequently replacing words in casual conversations. Stickers are bigger, frequently animated graphics used in messaging apps, whereas emojis are tiny pictographs that symbolize feelings or objects. These visual aids are useful for conveying whole concepts without the need of words; they are not just ornamental. Emojis can stand alone in digital messages and frequently take the place of words when expressing emotions, according to Riordan (2017). In a similar vein, Kaye, Malone, and Wall (2016) noted that stickers are frequently used to convey comprehensive responses like amusement or agreement. Teenagers find stickers and emoticons to be more expressive than words in peer relationships, according to Ge and Herring (2018).

Although the emotional and social purposes of emojis and stickers in digital communication have been studied, little is known about how they affect students' language expression. Most existing studies examine how these visuals complement the text, but few investigate whether they substitute written words and influence how students express themselves linguistically. Since

students rely heavily on digital platforms during a key stage of language development, this area of inquiry is especially relevant.

Therefore, the purpose of this study is to investigate if students' use of stickers and emojis may be related to their ability to write academically. It looks into whether regular usage of these visual aids in daily conversations affects how students organize their ideas, pick words, and convey concepts in assignments involving formal writing. This review attempts to draw attention to potential links between academic language development and digital expression practices by examining previous research and finding trends among studies. The results could assist teachers better understand how pupils' writing abilities may be impacted by digital communication trends and how to encourage balanced language development in the digital age.

## REVIEW OF RELATED LITERATURE

Stickers and emojis are becoming essential parts of digital communication, especially in casual, real-time interactions. The Japanese terms *e* (which means "picture") and *moji* (which means "character") are the roots of the name "emoji," which was initially made

famous by Japanese mobile phone developers in the late 1990s. Emojis are standardized graphical icons that graphically represent concepts, emotions, and things, as opposed to emoticons, which employ keyboard characters to indicate face expressions (e.g., :-)). Conversely, stickers are bigger, frequently animated pictures or artwork that are used in messaging apps to more effectively express emphasis or emotion. Emojis and stickers are both part of the larger field of visual semiotics, which is a communication study that looks at the meaning that visuals convey. The function of these visual components in digital communication has been the subject of several research. For example, Yang et al. (2023) emphasized the significance of cultural context by highlighting the ways in which people from diverse cultural backgrounds understand emotions through stickers. Similar to this, Onuoha (2024) emphasizes the usefulness of stickers and GIFs for communication on apps like WhatsApp, where their uses go beyond aesthetics. Adding to this, Tang and Hew (2018) categorize stickers and emojis as useful visual signals that improve emotional expression, define tone, and even replace entire sentences. In casual, real-time communication, these visual clues are crucial. Though these studies support the practical usefulness of these tools, few have specifically looked at how much emojis and stickers replace words in more formal written forms, especially in academic settings. When words alone are insufficient, these visual aids assist people in expressing their emotions or giving a message more depth. These results imply that stickers and emojis are more than just decorative elements; they may also be used to express sarcasm, soften words, substitute gestures, and even function as complete responses.

The impact of emojis and stickers on writing proficiency is complex. Emojis, on the one hand, promote engagement among heterogeneous university students and facilitate translingual activities, according to Liang (2022). In a similar vein, Ghobadi and Taki (2017) showed how Telegram stickers can help EFL learners expand their vocabulary, and Ochulor et al. (2023) promoted the use of these visual aids in English training to improve communication. Together, these studies demonstrate the educational benefits of stickers and emojis, especially for vocabulary and language acquisition. Al Qunayeer and RahmtAllah (2020) found that the use of emojis in female students' writing enhanced coherence, which supports the idea that these visual aids could help writing organization as well as understanding. On the other hand, conflicting research

by Ahmad and Jarin (2024) warns that too much exposure to social media language can result in casual writing habits that have a detrimental effect on academic achievement. This discrepancy highlights the contradictory nature of emoji use in the classroom: although they can encourage participation and language development, they may also make it more difficult for pupils to adhere to formal writing norms.

Research also shows that emoji usage varies by gender and culture. Gender-based variations in interpretation were noted by Sadia and Hussain (2023), suggesting that emoji meanings are not uniformly understood. Similarly, when it came to better writing coherence, Al Qunayeer and RahmtAllah (2020) discovered that female students seemed to gain more from using emojis. These results imply that gender influences not just how emojis are perceived but also how they could affect the results of written communication. Cultural influences are also quite important. For instance, Sun et al. (2022) noted that individualistic and collectivist cultures have different emoji preferences, while Du (2024) and Amalina (2020) both emphasized that emoji meanings can change significantly between cultures, even when the same symbol is employed. All of these research suggest that for examining emoji usage, culturally and demographically relevant methods are required. Few studies have examined how these demographic characteristics, notably gender and age, may affect the association between emoji use and academic writing proficiency, despite the rising corpus of research in this area.

Scholars contend that because students regularly alternate between academic writing and digital chat, these communication modalities might occasionally overlap, impacting formal writing's tone, organization, and even syntax. Informal language usage may spread into academic settings as a result of the increased use of stickers and emojis in informal digital communication. According to Ahmad and Jarin (2024), university students' use of social media promotes a casual writing style, which may inadvertently show up in academic work as abbreviated words, improper punctuation, or the inappropriate use of emojis. Kazmi, Mehmood, and Khan (2019) have noted that students who use language in "emojisfication" a lot tend to value speed and passion over clarity and grammatical precision. The ability of students to modify their language according to context and audience is called into question by this blurring of boundaries. If students are not cognizant of the various

registers needed in academic settings, emojis and stickers may impede the development of formal writing abilities even though they provide efficiency and emotional nuance in everyday communication. In higher education, when students are required to communicate ideas clearly, coherently, and professionally, this issue is particularly pertinent.

Although the use of emojis and stickers in digital communication has been well studied worldwide, research on Filipino students offers important insights into their particular experiences. Emojis are essential for conveying emotions and promoting casual interactions, according to research by Aranas et al. (2023) on the topic of emojis as a communication tool among college students in a state-run school. Similar to this, Magno (2023) investigated how young Filipino college students used "reacji," or emoji replies on Messenger, to effectively communicate responses and control dialog dynamics. Additionally, Tabernero (2023) created an emoji-based module to improve senior high school students' writing abilities, indicating that including emoticons into instructional materials can help students who struggle with English writing competency. These studies highlight the widespread usage of stickers and emojis in Filipino classrooms, suggesting that they may have an effect on students' academic writing and language expression. Despite the paucity of research on the direct impact of these visual components on academic writing, what is known suggests that among Filipino learners, digital communication practices and formal language proficiency are significantly correlated.

According to Vygotsky's sociocultural theory, humans acquire language and cognitive abilities most effectively through social contact and the use of communication aids. Emojis and stickers are examples of such tools, according to Celik (2020), which help pupils learn how to communicate feelings or ideas when they don't have the right words. To express sadness or anger, a student who finds it difficult to find the perfect word can, for instance, use the crying face emoji. Emojis also assist people control how other people see them online, particularly when attempting to convey a distinct tone or intention, according to Tang and Hew (2019). Even in the absence of lengthy explanations, these visual components aid in comprehending. Additionally, according to Setyawan and Musthafa (2024), emojis and stickers merit greater consideration in formal language studies, specifically in relation to their effects on tone, word choice, and grammar. All of these arguments lend

credence to the notion that emojis are useful communication tools rather than merely entertaining decorations. Few research, particularly in academic settings, have examined the true relationship between these beliefs and students' writing skills. By putting these concepts into practice, researchers and educators can gain a deeper understanding of how students' language development and academic writing abilities are influenced by digital communication.

When considered collectively, the research supports the idea that stickers and emojis are useful tools for communication that impact language learning, user engagement, and emotional expression. Notwithstanding these efforts, there are still significant knowledge gaps about the relationship between these visual components and academic writing ability. First, the way that emoji usage differs by age and gender in connection to writing performance has not been fully explored in previous research. Second, little research has been done on how much emoticons and stickers can replace real written language in academic settings. Finally, no research to date has empirically tested the relationship between emoji or sticker usage and writing proficiency using statistical methods. To address these gaps, the present study explores how students' use of emojis and stickers affects their academic writing proficiency, with particular attention to demographic variables such as gender and age.

## RESEARCH QUESTIONS

1. What is the extent of students' use of emojis and stickers in written communications when they are grouped according to age and gender?
2. What is the academic writing proficiency level of students when they grouped according to age and gender?
3. Are there significant differences in the extent of students' use of emojis and stickers in written communication when they are grouped according to age and gender?
4. Is there a significant relationship between the students' extent of emoji and sticker usage and their academic writing proficiency?

## RESEARCH METHODOLOGY

### Research Design

This study used a quantitative descriptive-correlational research approach to investigate the connection between students' academic writing skills and their use of stickers and emojis in digital communication. Its specific



objectives were to: (1) ascertain the degree of emoji and sticker usage among students when categorized by age and gender; (2) evaluate students' academic writing proficiency levels across age and gender groups; (3) identify noteworthy variations in emoji and sticker usage across demographic variables; and (4) investigate the connection between emoji and sticker usage and academic writing proficiency.

This design was appropriate as it allowed for the measurement of variables through statistical analysis and the examination of relationships and differences between them without manipulation.

## Respondents

The respondents of this study were 69 randomly selected students enrolled at West Visayas State University-Himamaylan City Campus. They were chosen by accident random selection, with an emphasis on people who often use stickers and emoticons on Facebook Messenger and actively participate in digital communication.

This sample strategy made sure that the participants were appropriate for the study's goal, which was to investigate the degree of emoji and sticker usage and how it relates to students' academic writing skills. All respondents voluntarily participated by completing a structured questionnaire designed to measure their usage patterns, perceptions, and writing self-assessments.

## Instrument

The instrument used in this study was a validated, researcher-made questionnaire designed to collect data on students' use of emojis and stickers in digital communication and their possible relationship to writing proficiency.

Using a four-point Likert scale, it assessed the degree of emoji and sticker use and had tasks that collected background data. Participants finished a brief paragraph-writing exercise to gauge their writing ability. To ensure uniform and impartial grading, their written work was assessed using a five-criteria analytical rubric. The instrument was reviewed by field experts to confirm its clarity, relevance, and alignment with the study's objectives.

## Data Analysis

To determine the students' extent of emojis and stickers' use in written communications and their writing proficiency when grouped according to age and gender, Means and Standard deviations were used. Descriptive statistics are widely accepted for summarizing data patterns in educational and social research (Johnson & Christensen, 2020).

To determine the significant differences in the extent of emojis and stickers' use in written communications and their writing proficiency when grouped according to age and gender, One Way ANOVA and Pearson's  $r$  were used.

## RESULTS AND DISCUSSION

**Table 1.** Extent of students' use of emojis and stickers in written communications when they are grouped according to age and gender

Variable	N	Mean	SD	Descriptive interpretation
<b>Age</b>				
18.00	5	2.64	0.10	High Extent
19.00	12	2.90	0.50	High Extent
20.00	12	2.94	0.50	High Extent
21.00	23	2.94	0.59	High Extent
22.00	12	3.14	0.45	High Extent
23.00	2	3.00	0.38	High Extent
24.00	3	2.89	0.19	High Extent
<b>Gender</b>				
Masculine	9	2.73	0.58	High Extent
Feminine	46	2.98	0.49	High Extent
LGBTQA+	11	2.90	0.45	High Extent
Genderfluid	2	2.97	0.50	High Extent
Prefer not to say	1	3.8	0.00	Very High Extent

Note: 3.25-4.00 "Very High extent"; 2.50-3.24 "High extent"; 1.74-2.49 "Low extent"; 1.00-1.74 "Very low extent"

The table revealed the extent of students' in using of emojis and stickers in written communications when they are grouped according to age and gender. In terms of age, students aged 22 obtained a highest mean of 3.14, followed by aged 23 obtained 3.00, both age 20 and 21 obtained 2.94, age 19 obtained 2.90, age 24 obtained 2.89, age 18 obtained 2.64, respectively. These results mostly fall under the high level extent of students' in using of emojis and stickers in written communications. This means that students strongly prefer using emojis and stickers as integral components of their digital communication habits. This preference is most evident in casual and personal conversations, where these visual elements serve as efficient tools for conveying emotions, reactions, and common expressions. Participants specifically mentioned utilizing emojis to convey emotions without inputting long passages of text and to substitute phrases like "okay." Additionally, they

said that they frequently use stickers to save the work of writing thorough comments, respond fast, or keep conversations light. Additionally, emoticons were particularly popular in group discussions and with close friends, where speed and informality are emphasized. Students said that using emojis made them feel understood, indicating that these symbols are effective at expressing emotional nuance in ways that words can't do. This demonstrates how digital language is changing and how meaning is created using both visual and verbal clues.

Meanwhile, when grouped according to gender, genderfluid students achieved the highest mean of 3.80 which interpreted as very high extent. Feminine students obtained the mean of 2.98, genderfluid at 2.97, LGBTQ+ at 2.90 students and masculine at 2.73 which all of these interpreted a high extent.

**Table 2.** Academic writing proficiency level of students when they grouped according to age and gender

Variable	N	Mean	SD	Descriptive interpretation
<b>Age</b>				
18.00	5	16.2	2.17	Very High Level
19.00	12	15.58	2.61	Very High Level
20.00	12	14.67	2.15	High Level
21.00	23	15.13	2.90	Very High Level
22.00	12	16	2.63	Very High Level
23.00	2	12	1.41	High Level
24.00	3	17	1.73	Very High Level
<b>Gender</b>				
Masculine	9	16.44	3.4	Very High Level
Feminine	46	15.24	2.52	Very High Level
LGBTQA+	11	14.73	2.24	High Level
Genderfluid	2	17.00	2.83	Very High Level
Prefer not to say	1	14.00	0.00	High Level

Note: 15.01-20.00 "Very High Level"; 10.01-15.00 "High Level"; 5.01-10.00 "Low level"; 0.00-5.00 "Very low level"

The table reveals the academic writing proficiency levels of students when grouped according to age and gender, as measured through a rubric-based assessment. Students who were 18 years old received a mean score of 16.20, while those who were 19 years old received 15.58, 20 years old received 14.67, 21 years old received 15.13, and 22 years old received 16.00. Strong foundational writing skills in the early years of tertiary education are indicated by these findings, which primarily fall into the very high level category of writing proficiency. Students aged 20 showed a modest decline in performance, with a mean score of 14.67, which is considered high level and may indicate a developmental or academic change at this time.

Meanwhile, when grouped according to gender, genderfluid students achieved the highest mean score of 17.00, followed by masculine students at 16.44, and feminine students at 15.24. All of these falls under the very high level of proficiency, highlighting that students across various gender identities generally demonstrate strong academic writing skills. Students identifying as LGBTQA+ obtained a mean of 14.73, while the single student who preferred not to disclose their gender scored 14.00; both fall within the high level category. These findings suggest that genderfluid students may exhibit particularly expressive and adaptive communication styles, although it is important to note the limited sample size for this group.

**Table 3.** Significant differences in the extent of students' use of emojis and stickers in written communication when they are grouped according to age and gender.

Variable	Sum of Squares	Mean Square	F	P-value	Descriptive interpretation
<b>Age</b>	.972	.162	.638	.700	Not Significant
<b>Between Groups</b>					
<b>Within Groups</b>	15.753	.254			
<b>Total</b>	16.725				
<b>Gender</b>	1.216	.304	1.254	.297	Not Significant
<b>Between Groups</b>					
<b>Within Groups</b>	15.509	.242			
<b>Total</b>	16.725				

Note: \* $p < 0.05$  "Significant"

The results showed that there was no significant difference on the extent of students' use of emojis and stickers in written communication when they are grouped according to age and gender with p-value of 0.700 in terms of age and 0.297 in gender. This indicates that students of all ages and genders communicate using stickers and emoticons in remarkably comparable ways. There is no discernible difference in how frequently or why they employ these visual components in digital chats, regardless of their age—17 or 22—whether they are masculine, feminine, or genderfluid. Emojis are

typically used by students to convey their emotions, reply rapidly in group conversations, or substitute for brief words and pleasantries like "okay." Additionally, stickers are a popular choice, particularly when they don't feel like typing or want to maintain a lighthearted conversational tone. These habits seem to hold true whether they're chatting with close friends or just trying to get their message across quickly and clearly and since age and gender didn't affect their responses much, it tells us that these tools are becoming a shared language among students, no matter who they are.

**Table 4.** Is there a significant relationship between the students' extent of emoji and sticker usage and their academic writing proficiency

Variable	N	Correlation Coefficient	Sig. (2-tailed)	Descriptive interpretation
Extent of Emoji and Sticker Usage vs Academic Writing Proficiency	69	-.143	.24	Not Significant

Note: \* $p < 0.05$  "Significant"

With a p-value of 0.24 and a correlation coefficient of -.143, which indicates a negative connection, the study found no meaningful relationship between students' use of stickers and emojis in digital communication and their academic writing skill. This implies that students who use stickers and emojis a lot tend to do marginally worse on academic writing tests, but the correlation was not statistically significant or strong. Even though students frequently utilize these visual aids to convey their feelings, react fast, or keep a lighthearted tone during discussions, their performance in formal academic writing does not seem to be greatly impacted by this habit.

## Discussions

All of these findings point to the growing multimodality of digital communication, especially among younger, digitally native groups, where stickers and emojis are

becoming essential tools for conveying meaning, tone, and emotion. Teachers and communicators should acknowledge these components as legitimate, culturally relevant parts of contemporary communication, not just as ornamental extras. Emojis and stickers can be included into media literacy, language teaching, and communication tactics in the classroom to improve students' capacity for emotional expression, nuance, and inference—particularly in digital or hybrid situations. Even when students show that they are proficient in academic writing by generating outputs that are generally well-focused, coherent, and supported, concentrated training in cohesiveness, example creation, and transitions is still necessary to help them hone their abilities even more. Teachers may create more inclusive, interesting, and genuine learning experiences that mirror the reality of modern discourse by embracing both traditional and multimodal forms of communication.

## CONCLUSION

This study examined the extent to which students utilize stickers and emojis in digital communication and how this relates to their ability to write academically, taking gender and age differences into account. The results verified that students from all demographic groups use emojis extensively and sticker use, especially among students who identified as genderfluid and those who were 22 years old, who used stickers at the greatest rates. This illustrates how ingrained these visual components are in students' daily communication, acting as effective means of expressing emotions, controlling conversations, and fostering stronger interpersonal relationships.

Students usually showed very high levels of writing competency when it came to academic writing, with genderfluid and masculine students performing particularly well. However, the results also showed tiny differences in writing proficiency between age groups, with students aged 20 showing a slight decline, indicating transitional difficulties that might need further attention.

Notwithstanding the widespread use of stickers and emojis, statistical analysis showed no connection between students' academic writing skills and these visual communication practices. This shows that even while students use stickers and emojis a lot in casual contexts, they can typically tell the difference between academic and informal registers and still write well.

However, the study raises significant issues for educators, especially with regard to the possible long-term impacts of routine visual communication on formal writing habits. Considering how digital literacy is developing, incorporating language register, audience awareness, and suitable communication technologies into writing lessons may assist students in striking a balance between the benefits of visual communication and the requirements of academic writing. Furthermore, the discovered demographic subtleties—such as the expressive versatility of genderfluid students—indicate that more qualitative investigation may be beneficial for future studies in order to gain a better understanding of the relationship among writing proficiency, digital habits, and identity.

## AI ACKNOWLEDGEMENT

The author acknowledges the use of chatGPT, Elicit.com, Quillbot.com and Grammarly. The prompts used include:

Make an example introduction for a quantitative study about the relationship of emojis and stickers on students' language expression, including recent studies and theoretical background.

Find sources that are recent and reliable that are similar to our study.

Cite all sources that are connected to our study.

- How do contextual and cultural variations affect how students interpret stickers and emoticons in digital communication?
- How do stickers and emojis affect students' capacity to distinguish between formal and casual writing in digital contexts?
- How do students' cognitive processing and comprehension during written communication change when visual symbols like stickers and emojis are used?
- How do demographic variables such as gender, age, and language proficiency influence the frequency and purpose of emoji and sticker use among students?
- How are emojis and stickers used as symbolic tools in second language acquisition, and what theoretical frameworks explain their role in language development?

The output from these prompts was used to support the results of the study. While the authors acknowledge the usage of AI, they maintain that they are the sole authors of this article and take full responsibility for its content and conclusions.

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