

# EMOJI USE IN ONLINE COMMUNICATION: A SOCIOLINGUISTIC INVESTIGATION OF LANGUAGE PROFICIENCY, COMMUNICATION EFFICIENCY, AND SOCIAL FACTORS AMONG GCUF STUDENTS

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## ABSTRACT

The rapid expansion of digital communication technologies has transformed contemporary language practices, leading to the widespread integration of emojis into online interaction. As visual symbols capable of conveying emotions, attitudes, and contextual meanings, emojis have become an important component of computer-mediated communication. Despite the growing body of research on emoji use, limited attention has been given to the relationship between emoji usage, language proficiency, communication efficiency, and social factors within the Pakistani university context. This study investigates the sociolinguistic dimensions of emoji use among students at Government College University Faisalabad (GCUF), with particular emphasis on writing confidence, communication efficiency, gender, educational level, and social media engagement. Employing a quantitative research design, the study utilized a cross-sectional survey approach to collect data from 73 students enrolled at Government College University Faisalabad through convenience sampling. Data were gathered using a structured 30-item questionnaire consisting of demographic questions, emoji usage patterns, communication preferences, and Likert-scale statements measuring attitudes toward emoji use. The collected data were coded and analyzed using the Statistical Package for Social Sciences (SPSS). Descriptive statistics, including frequencies, percentages, means, and standard deviations, were used to identify patterns of emoji usage, while inferential statistical techniques such as Pearson correlation, independent-samples t-tests, one-way ANOVA, and chi-square analysis were employed to test the study's hypotheses. The findings revealed that emojis play a significant role in contemporary online communication and are primarily used to enhance emotional expression, communication clarity, and conversational efficiency. The results indicated a significant positive relationship between social media usage and emoji frequency, suggesting that increased digital engagement contributes to greater reliance on emoji-based communication. Gender differences were also observed, with female students reporting significantly higher emoji usage than male students. In contrast, writing confidence and educational level were not found to have a statistically significant influence on emoji use. Furthermore, participants generally perceived emojis as complementary communicative tools that support and enrich written language rather than replace it entirely. The study contributes to the growing field of digital sociolinguistics by providing empirical evidence from a Pakistani university context, an area that remains underrepresented in existing scholarship. The findings highlight the evolving role of multimodal communication in shaping language practices among young adults and demonstrate how social and technological factors influence contemporary communication behavior. The study has implications for sociolinguistic research, digital literacy studies, and computer-mediated communication by enhancing

*understanding of how visual and textual resources interact in online discourse. Future research may extend this investigation to larger and more diverse populations to further explore the sociocultural dynamics of emoji use across different communication settings.*

**Keywords:** *emojis, sociolinguistics, digital communication, computer-mediated communication, language proficiency, communication efficiency, social media, multimodal communication.*

## 1. INTRODUCTION

The emergence of digital communication technologies has fundamentally transformed the nature of human interaction. Over the past two decades, social networking platforms, instant messaging applications, and online communities have become integral components of everyday communication. As a result, communication practices have evolved beyond traditional written language and increasingly incorporate multimodal elements such as images, videos, stickers, GIFs, and emojis. Among these digital resources, emojis have become one of the most frequently used features in online communication, influencing how individuals express emotions, convey meanings, and manage interpersonal relationships in virtual environments.

Emojis are pictographic symbols that represent emotions, objects, activities, and ideas. Originally developed to enrich text-based communication, emojis have gradually become a universal component of digital discourse. Their popularity can be attributed to their ability to compensate for the absence of non-verbal cues such as facial expressions, gestures, and vocal intonation in computer-mediated communication. In face-to-face interactions, these non-verbal elements play a crucial role in conveying attitudes, emotions, and communicative intentions. However, in online communication, where such cues are often absent, emojis serve as alternative resources that help users express affective meanings and clarify messages.

The increasing use of emojis has attracted considerable scholarly attention across multiple disciplines, including linguistics, sociology, psychology, communication studies, and human-computer interaction. Researchers have examined emojis from various perspectives, including their communicative functions, pragmatic roles, cultural interpretations, gender differences, and psychological implications. Despite these efforts, ongoing debates remain regarding the extent to

which emojis function as substitutes for language or merely serve as supplementary communicative devices. Some scholars argue that emojis represent a new form of visual language capable of conveying complex meanings independently of text, whereas others maintain that emojis primarily enhance written communication rather than replace it.

From a sociolinguistic perspective, emoji use provides a valuable lens through which to examine language variation and communication practices in digital contexts. Sociolinguistics investigates the relationship between language and society, emphasizing how social variables influence linguistic behavior. Traditional sociolinguistic research has explored factors such as age, gender, education, and social class in relation to language use. In contemporary digital environments, these variables continue to shape communicative practices, including the use of emojis. Consequently, understanding emoji use requires consideration of both linguistic and social dimensions.

One important issue concerns the relationship between language proficiency and emoji use. The growing prevalence of emojis has led some researchers to question whether individuals rely on visual symbols to compensate for limitations in written communication. It is often assumed that users with lower writing confidence may employ emojis more frequently to simplify communication or reduce the cognitive effort associated with composing written messages. Conversely, individuals with higher levels of linguistic competence may use emojis strategically to complement textual information rather than replace it. Examining this relationship is essential for understanding whether emojis contribute to language simplification or function primarily as supportive communicative tools.

Another significant aspect of emoji use relates to communication efficiency. Digital

communication is often characterized by speed, brevity, and immediacy. In such environments, users frequently seek efficient methods of conveying information and emotions while minimizing typing effort. Emojis offer a convenient means of communicating affective and contextual information through a single visual symbol. For example, a smiling face emoji may communicate friendliness, approval, or gratitude without requiring additional textual explanation. As a result, emojis may facilitate faster and more efficient communication, particularly in informal online interactions.

Social factors also play an important role in shaping emoji practices. Previous studies have identified gender differences in emoji use, with female users often reporting higher frequencies of emoji usage than male users. Similarly, patterns of emoji use may vary according to educational background, communication context, and levels of social media engagement. Individuals who spend substantial amounts of time on social networking platforms are likely to develop greater familiarity with emoji conventions and may consequently incorporate emojis more frequently into their online interactions. These observations suggest that emoji use is not merely a linguistic phenomenon but also a socially conditioned communicative practice.

The growing significance of emojis in contemporary communication has important implications for language studies. As digital communication increasingly influences everyday linguistic behavior, understanding how emojis function within online discourse becomes essential for explaining broader processes of language change and adaptation. Emojis challenge traditional distinctions between verbal and non-verbal communication by combining visual and textual elements within a single communicative framework. Their widespread adoption raises important questions regarding the future development of digital language practices and the evolving relationship between language, technology, and society.

Within the Pakistani context, research on emoji use remains relatively limited, particularly from a sociolinguistic perspective. Most existing studies have been conducted in Western, East Asian, or

Middle Eastern contexts, leaving significant gaps in understanding how Pakistani university students employ emojis in their daily communication. Given the rapid growth of social media usage among young adults in Pakistan, investigating emoji practices among university students represents an important contribution to the field of digital sociolinguistics. University students constitute an especially relevant population because they are among the most active users of digital communication technologies and frequently engage in online interactions for academic, social, and professional purposes.

Accordingly, the present study examines emoji use among students at Government College University Faisalabad (GCUF). The study seeks to investigate whether emojis function primarily as substitutes for written language or as tools that enhance communication efficiency and clarity. Furthermore, it explores the influence of writing confidence, gender, education level, and social media usage on emoji practices. By addressing these issues, the study aims to contribute to contemporary discussions regarding digital communication, language variation, and sociolinguistic behavior in technologically mediated environments.

## 2. Literature Review

### 2.1 The Evolution of Multimodal Communication in Digital Contexts

The rapid advancement of digital technologies has transformed communication practices worldwide, leading to the emergence of multimodal forms of interaction that combine textual, visual, and symbolic elements. Traditional communication relied primarily on spoken and written language; however, the development of computer-mediated communication (CMC) has introduced new semiotic resources that enable users to convey meanings beyond conventional linguistic structures. Among these resources, emojis have become one of the most prominent and widely adopted features of online communication.

The theoretical foundations of multimodal communication can be traced to research examining the interaction between verbal and visual modes of meaning-making. Early studies emphasized that human communication is

inherently multimodal and involves the integration of linguistic and non-linguistic cues. Madden and Therriault (2009) demonstrated that language comprehension is influenced by perceptual simulations, suggesting that visual representations contribute significantly to meaning construction. Their findings highlighted the cognitive relationship between linguistic expressions and visual imagery, providing an important foundation for later research on emojis and digital symbols.

Building upon this perspective, Cohn (2016) proposed a multimodal parallel architecture framework that explains how verbal and visual systems interact during communication. According to this framework, communication involves multiple cognitive structures that operate simultaneously and contribute to the interpretation of meaning. Cohn argued that visual elements are not merely decorative additions to language but function as meaningful communicative resources with their own structural and semantic properties. This perspective is particularly relevant to emoji use because emojis combine visual representation with linguistic communication, creating hybrid forms of meaning-making within digital discourse.

The increasing integration of visual symbols into everyday communication has challenged traditional assumptions regarding the boundaries of language. As online interactions continue to evolve, researchers have increasingly examined whether emojis should be regarded as supplementary communicative devices or as emerging forms of visual language. Understanding this debate requires consideration of both cognitive and sociolinguistic perspectives on communication.

## 2.2 The Emergence of Emoji Research

The widespread adoption of smartphones and social media platforms accelerated the use of emojis across diverse communicative contexts. During the late 2010s, researchers began investigating the motivations, functions, and implications of emoji use in digital communication.

Zhou et al. (2017) explored communication practices among Chinese WeChat users and

found that emojis and stickers had become central components of online interaction. Their qualitative investigation revealed that participants frequently relied on emojis to express emotions, maintain interpersonal relationships, and reduce dependence on textual communication. The study suggested that visual communication was becoming increasingly integrated into everyday digital interactions, reflecting broader changes in communication norms.

Similarly, Chen et al. (2018) examined gender-based patterns of emoji use through a large-scale analysis of smartphone users. Their findings demonstrated significant differences between male and female users in both the frequency and types of emojis employed. Female participants generally used emojis more frequently and displayed greater diversity in emoji selection. The researchers concluded that emoji usage patterns were sufficiently distinctive to predict users' gender with considerable accuracy. These findings highlighted the importance of social variables in shaping digital communication practices.

During the same period, Li and Yang (2018) conducted a corpus-based study examining the pragmatic functions of emojis in internet-based communication. Their analysis identified seven primary communicative functions, including emotional expression, humor, irony, interaction management, and modification of illocutionary force. Importantly, the study demonstrated that emojis frequently served interactional purposes rather than functioning solely as emotional markers. Positive emojis were found to dominate online communication, indicating users' preference for maintaining harmonious and supportive communicative environments.

Collectively, these studies established emojis as meaningful communicative resources rather than superficial decorative elements. They demonstrated that emojis contribute to meaning construction, interpersonal relationship management, and discourse organization in digital communication.

## 2.3 Emojis as Pragmatic and Communicative Resources

As emoji research matured, scholars increasingly focused on the pragmatic functions of emojis and

their role in facilitating communication. Pragmatics concerns how language users convey meanings in context, making it a particularly relevant framework for understanding emoji use. Escouflaire (2021) provided one of the most comprehensive analyses of emoji functions in computer-mediated discourse. Through the examination of a multimodal corpus, the study proposed a refined classification consisting of expressive, interpretative, referential, relational, politeness, emphatic, structural, and aesthetic functions. The findings demonstrated that emojis perform multiple communicative roles simultaneously, extending beyond simple emotional expression. By signaling politeness, reinforcing emphasis, and structuring discourse, emojis contribute significantly to communicative effectiveness.

The growing recognition of emojis as pragmatic devices has also prompted researchers to investigate their effects on communication outcomes. Manganari (2021), in a comprehensive review of empirical studies on emoji use, concluded that emojis influence message interpretation, social perception, and interpersonal communication. The review highlighted evidence suggesting that emojis increase message warmth, enhance relational closeness, and improve communication effectiveness in many online contexts.

Further support for this perspective comes from research examining the integration of emojis into textual discourse. Cohn et al. investigated sentence processing involving emoji substitutions and found that emojis could successfully replace words without substantially reducing comprehensibility. Although participants required slightly longer processing times when interpreting visual symbols, overall message understanding remained largely unaffected. These findings suggest that emojis can function as meaningful linguistic substitutes under specific communicative conditions.

Together, these studies indicate that emojis play an important pragmatic role in online communication by facilitating interpretation, enhancing expressiveness, and supporting efficient information exchange.

#### **2.4 Gender Differences and Social Influences on Emoji Use**

One of the most extensively investigated areas of emoji research concerns the influence of social factors, particularly gender. Sociolinguistic theory suggests that linguistic behavior varies according to social identities and group memberships. Researchers have therefore explored whether emoji use exhibits similar patterns of variation.

Wirza et al. (2020) examined emoji use among Indonesian university students and reported differences in emoji selection between male and female participants. Although overall frequency levels were comparable, females tended to employ a wider range of emojis and demonstrated greater sensitivity to emotional expression. The researchers concluded that gender influences how emojis are used rather than simply how often they are employed.

Subsequent studies produced similar findings. Alburaidi (2023) investigated gender differences in emoji use on social media platforms. While the study found limited variation in overall emoji frequency, it reported differences in preferences for specific emoji types. These results suggested that gender-related distinctions may be more evident in communicative style than in usage frequency.

A more comprehensive investigation was conducted by Cavalheiro, Rodrigues, and Prada (2023), who explored individual, relational, and motivational factors influencing emoji use. Their findings revealed that emoji practices are shaped by multiple variables, including age, personality traits, social relationships, and communicative motivations. Participants used emojis more frequently when interacting with close friends and family members, highlighting the relational dimension of digital communication.

The relationship between gender and emoji use was further examined by Kennison et al. (2025), who investigated associations between personality traits and emoji practices. Their findings indicated that women generally reported higher levels of emoji use than men. Additionally, personality characteristics influenced emoji behavior differently across genders. These results reinforce sociolinguistic claims that communication

practices are shaped by both social and psychological factors.

Overall, gender remains one of the most consistent predictors of emoji use, although its effects appear to interact with contextual, relational, and personality-related variables.

## 2.5 Sociolinguistic Perspectives on Emoji Communication

Recent scholarship has increasingly approached emojis from a sociolinguistic perspective, emphasizing their role within broader systems of social meaning and cultural practice. This shift reflects growing recognition that digital communication cannot be fully understood without considering the social contexts in which it occurs.

Telaumbanua et al. (2024) investigated emoji use among university students and found that emojis significantly enhanced emotional expression and communicative clarity. However, interpretations varied across cultural and contextual settings, highlighting the importance of shared communicative conventions. The study emphasized that successful emoji use depends upon users' ability to understand contextual meanings and cultural nuances.

Similarly, Alshaboul (2026) examined the pragmatic and semiotic roles of emojis among Jordanian university students. Employing a mixed-methods approach, the study demonstrated that emojis serve expressive, phatic, and interpersonal functions within digital communication. Gender-related differences were also observed in emoji interpretation and preference. The findings suggested that emoji use reflects broader sociocultural norms and communicative practices. Nisa (2026) further expanded this perspective by investigating the communicative impact of emojis and GIFs in online interaction. The study found that visual symbols significantly improved perceptions of communicative efficiency, politeness, and message intelligibility. These findings support the argument that emojis function as important pragmatic markers that facilitate interpersonal communication and relationship management in digital environments. Collectively, recent sociolinguistic research demonstrates that emoji use extends beyond

linguistic expression to encompass issues of identity, culture, social interaction, and communication efficiency. Emojis have become integral components of contemporary digital discourse, shaping how individuals construct meanings and maintain social relationships online.

## 2.6 Research Gap

Although existing studies have contributed substantially to understanding emoji use, several important gaps remain. First, much of the current literature has been conducted in Western, East Asian, and Middle Eastern contexts, with comparatively limited research focusing on Pakistani university students. Second, previous studies have often examined either the communicative functions of emojis or social variables such as gender, but relatively few investigations have explored the relationship between emoji use, writing confidence, communication efficiency, and social factors within a single framework.

Furthermore, the debate regarding whether emojis function primarily as substitutes for written language or as tools for enhancing communication efficiency remains unresolved. While some studies suggest that emojis can replace textual expressions, others emphasize their supplementary and pragmatic functions. Consequently, further empirical investigation is required to determine how users perceive and utilize emojis in contemporary digital communication.

The present study addresses these gaps by examining emoji use among students at Government College University Faisalabad. It investigates the relationships between language proficiency, writing confidence, communication efficiency, social media engagement, gender, and educational background, thereby contributing to the growing field of digital sociolinguistics.

## 3. Theoretical Framework

The present study is grounded in sociolinguistic and computer-mediated communication (CMC) theories that explain how language adapts to changing technological environments. The increasing integration of emojis into digital communication reflects the dynamic relationship

between language, society, and technology. From a sociolinguistic perspective, linguistic choices are influenced by social variables such as gender, education, social interaction, and communicative context. Consequently, emoji use can be understood as a form of language variation shaped by both individual and social factors.

This study primarily draws upon the pragmatic framework of digital communication proposed by Li and Yang (2018), which conceptualizes emojis as multifunctional communicative resources. According to this framework, emojis perform several pragmatic functions, including emotional expression, interaction management, humor creation, and clarification of communicative intent. Rather than functioning solely as decorative symbols, emojis contribute actively to meaning construction within online discourse.

The study is also informed by multimodal communication theory, particularly Cohn's (2016) multimodal parallel architecture. This theory suggests that verbal and visual systems operate simultaneously during communication and collectively contribute to meaning-making processes. Within digital environments, emojis function as visual components that complement textual language and facilitate message interpretation.

Furthermore, sociolinguistic theories of language variation provide an important foundation for examining the influence of gender, educational background, and social media usage on emoji practices. These theories propose that linguistic behavior varies across social groups and communicative situations. Accordingly, differences in emoji use may reflect broader patterns of social identity and communication preferences.

Taken together, these theoretical perspectives provide a comprehensive framework for investigating the relationship between emoji use, language proficiency, communication efficiency, and social factors among university students.

#### 4. Conceptual Framework

The present study examines emoji use as the dependent variable influenced by multiple linguistic and social factors.

#### Independent Variables

- Writing Confidence
- Communication Efficiency
- Gender
- Education Level
- Time Spent on Social Media
- Preference for Reducing Typing Effort

#### Dependent Variable

- Frequency and Function of Emoji Use in Online Communication

The framework assumes that individuals with different levels of writing confidence, educational backgrounds, social media engagement, and communication preferences may demonstrate different patterns of emoji usage. Furthermore, emojis may serve either as substitutes for written language or as tools that enhance communication efficiency and clarity.

#### 5. Research Questions

The present study seeks to answer the following research questions:

##### RQ1

To what extent is emoji use in online communication related to individuals' language proficiency and their preference for reducing writing effort?

##### RQ2

Are emojis used primarily as substitutes for written language or as tools for enhancing efficiency and clarity in online communication?

##### RQ3

How does writing confidence influence the frequency and function of emoji use among university students?

##### RQ4

What role do social factors such as gender, education level, and social media usage play in shaping emoji practices?

##### RQ5

To what extent do university students perceive emojis as important components of contemporary digital communication?

#### 6. Research Objectives

The study aims to achieve the following objectives:

1. To examine the relationship between writing confidence and emoji use.

2. To investigate whether emojis are used to reduce writing effort in online communication.
3. To analyze the influence of educational level on emoji usage patterns.
4. To explore gender differences in emoji use among university students.
5. To assess the relationship between social media usage and frequency of emoji use.
6. To determine whether emojis function primarily as substitutes for written language or as communicative aids that enhance clarity and efficiency.
7. To contribute to the growing field of digital sociolinguistics by examining emoji use within a Pakistani university context.

### 7. Research Hypotheses

Based on previous research and the objectives of the study, the following hypotheses were formulated:

#### H1

Individuals with lower self-reported writing confidence use emojis more frequently in online communication.

#### H2

Emoji use increases when individuals seek to communicate quickly and reduce typing effort.

#### H3

Educational level has a significant influence on the frequency and function of emoji use.

#### H4

Female students use emojis more frequently than male students in online communication.

#### H5

Students who spend more time on social media use emojis more frequently than students who spend less time on social media.

#### H6

University students perceive emojis as tools that enhance communication efficiency rather than complete substitutes for written language.

## 8. Methodology

### 8.1 Research Design

This study employed a quantitative research design to investigate the sociolinguistic dimensions of emoji use in online communication. Quantitative methodology was selected because it enables systematic collection

and statistical analysis of numerical data, allowing researchers to identify patterns, relationships, and trends among variables. The design was considered appropriate for examining the influence of language proficiency, communication efficiency, and social factors on emoji usage among university students.

The study adopted a cross-sectional survey approach in which data were collected at a single point in time using a structured questionnaire. This approach allowed the researchers to obtain information from multiple participants efficiently while ensuring consistency in data collection procedures.

### 8.2 Research Site

The research was conducted at Government College University Faisalabad (GCUF), Main Campus, Pakistan. GCUF is one of the leading public universities in Punjab and provides an appropriate setting for investigating digital communication practices among young adults due to its diverse student population and widespread use of digital technologies.

### 8.3 Population of the Study

The target population consisted of students enrolled at Government College University Faisalabad. University students were selected because they represent one of the most active groups of social media users and frequently engage in online communication through messaging applications and social networking platforms. Furthermore, students regularly use digital communication for academic, social, and personal purposes, making them an appropriate population for investigating emoji use and communication behavior.

### 8.4 Sample and Sampling Technique

A sample of seventy-five (73) students was selected for participation in the study.

The study employed convenience sampling, a non-probability sampling technique commonly used in sociolinguistic and educational research. Participants were selected based on accessibility, availability, and willingness to participate in the survey.

Although convenience sampling limits the generalizability of findings, it provides an effective means of collecting preliminary data regarding communication practices within a specific population.

### 8.5 Research Instrument

Data were collected through a structured questionnaire consisting of thirty items.

The questionnaire was divided into four sections:

#### Section A: Demographic Information

This section collected information regarding:

- Gender
- Age
- Educational Level
- Daily Social Media Usage
- Preferred Social Media Platforms

#### Section B: Emoji Usage Patterns

This section explored:

- Frequency of emoji use
- Contexts of emoji use
- Reasons for emoji use
- Use of emojis as substitutes for words
- Perceived importance of emojis

#### Section C: Writing Confidence and Communication Preferences

This section consisted of Likert-scale statements designed to measure:

- Writing confidence
- Communication efficiency
- Typing effort reduction
- Emotional expression
- Language substitution
- Gender perceptions
- Educational influence
- Social media influence

Responses were measured on a five-point Likert scale ranging from:

- 1 = Strongly Disagree
- 2 = Disagree
- 3 = Neutral
- 4 = Agree
- 5 = Strongly Agree

#### Section D: Communication Preferences

This section investigated:

- Preference for text versus emojis
- Understanding messages through emojis
- Perceived role of emojis in reducing misunderstandings

### 8.6 Validity of the Instrument

Content validity was established through a comprehensive review of existing literature on emoji use, digital communication, and sociolinguistics. Questionnaire items were developed based on themes identified in previous studies concerning emoji frequency, communication efficiency, language substitution, emotional expression, and social influences.

The instrument was further reviewed to ensure that each item aligned with the research objectives and hypotheses.

### 8.7 Data Collection Procedure

Data were collected through direct distribution of questionnaires to students at Government College University Faisalabad.

Participants were informed about:

- The purpose of the research
- Voluntary participation
- Confidentiality of responses
- Academic use of collected data

After obtaining informed consent, participants completed the questionnaire individually. Completed questionnaires were collected and prepared for statistical analysis.

### 8.8 Ethical Considerations

The study adhered to standard ethical principles for social science research.

The following measures were implemented:

- Participation was voluntary.
- Respondents were informed about the purpose of the study.
- Personal identities were not recorded.
- Confidentiality and anonymity were maintained.
- Data were used solely for academic purposes.

Participants were allowed to withdraw from the study at any stage without any consequences.

### 8.9 Data Analysis Procedure

The collected data were coded and entered into the Statistical Package for Social Sciences (SPSS) for analysis.

The following statistical techniques were planned:

#### Descriptive Statistics

- Frequencies
- Percentages
- Means
- Standard Deviations

#### Inferential Statistics

- Independent Samples t-test (Gender Differences)
- Pearson Correlation Analysis

- Chi-Square Analysis (where applicable)

These statistical procedures were selected to examine relationships between emoji use and the independent variables identified in the study.

### Results and Discussion

The dataset was cleaned before analysis. Duplicate responses were removed and all variables were checked for missing values and coding inconsistencies. Likert-scale variables were coded numerically from 1 to 5 to facilitate statistical testing. Descriptive and inferential statistics were conducted using APA 7th edition reporting standards.

**Table 1**  
**Demographic Characteristics of Participants**

Variable	Frequency
Female	32
Male	41
Undergraduate	49
Graduate	13
Postgraduate	11
Total	73

### Hypotheses Testing

**H1:** Pearson correlation showed no significant relationship between writing confidence and emoji frequency,  $r = 0.06$ ,  $p = 0.588$ . Therefore, H1 was not supported.

**H2:** A weak positive relationship was observed between preference for reducing typing effort and emoji use,  $r = 0.22$ ,  $p = 0.059$ . The relationship approached significance, partially supporting H2.

**H3:** One-way ANOVA indicated that education level did not significantly influence emoji use frequency,  $F = 0.94$ ,  $p = 0.427$ . H3 was rejected.

**H4:** Independent samples t-test revealed that female students used emojis significantly more frequently than male students,  $t = 2.93$ ,  $p = 0.004$ . H4 was supported.

**H5:** A significant positive relationship was found between time spent on social media and emoji frequency,  $r = 0.34$ ,  $p = 0.004$ . H5 was supported.

**H6:** Most respondents believed that emojis support written language rather than replace it completely. Therefore, H6 was supported.

### Results

The findings indicate that emojis play an important role in contemporary online communication among university students. Most participants reported frequent emoji use in personal and group chats. Emotional expression, communication clarity, and conversational comfort emerged as the primary motivations for emoji usage. Female participants demonstrated significantly higher emoji usage than male participants, consistent with prior sociolinguistic research. In addition, students who spent more time on social media tended to use emojis more frequently, suggesting that increased digital engagement strengthens familiarity with emoji practices. However, writing confidence and educational level did not significantly influence emoji usage frequency. Overall, participants viewed emojis as tools that support and enhance written communication rather than complete substitutes for language.

### Discussion

The findings align with previous studies emphasizing the pragmatic and social functions of emojis in digital communication. The significant relationship between social media usage and emoji frequency supports the findings of Cavalheiro, Rodrigues, and Prada (2023), who argued that digital interaction intensity influences emoji behavior. Similarly, the higher emoji use among female participants is consistent with Chen et al. (2018) and Kennison et al. (2025), both of whom identified gender differences in emoji communication practices. The results also support Escoufflaire's (2021) argument that emojis enhance communication efficiency, emotional expression, and relational interaction. Participants generally perceived emojis as supportive communicative tools rather than replacements for written language, which reinforces Li and Yang's (2018) pragmatic framework. The non-significant relationship between writing confidence and emoji use suggests that emojis are not necessarily compensatory devices for weaker language proficiency. Instead, they appear to function as complementary multimodal resources integrated into routine online communication.

### Conclusion

This study examined the sociolinguistic dimensions of emoji use among university students at Government College University Faisalabad. The results demonstrate that emojis are widely used to enhance communication efficiency, emotional expression, and conversational clarity in digital interaction. Gender and social media engagement significantly influenced emoji usage patterns, whereas writing confidence and educational level showed limited effects. Overall, emojis function primarily as supportive communicative resources rather than substitutes for written language.

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