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Review Paper

Contemporary Issues in Linguistics: A Systematic Literature Review on Emoji and Emoticon

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Abstract

This research aims at reviewing the previous studies on emojis and emoticons in computer-mediated communication to provide information the extent to which they have been studied, as well as proposing a new concept for investigation and how it is implemented in research. To answer the research objectives, the author reviewed articles about emojis and emoticons published from 2012-2021. The data are collected by using an application called *Publish* and Perish, as well as free social networking sites ResearchGate and Academia. The findings of the previous research are then synthesized. The research results show that the differences and similarities of emojis and emoticons, as well as which of them is used more often and why one of them is preferred have been investigated. Both emojis and emoticons are used to express emotion, clarify meaning, substitute texts and punctuations. Then, the use of emojis and emoticons is influenced by social relationships, level of formality and gender, emotional relationships, social media platforms, and linguistic patterns. Despite that, emojis and emoticons are not used correctly in terms of the meaning contained in them and have not been much studied by using linguistic theories. It implies that more research on emojis and emoticons which is paired with linguistic theories is needed. For that reasons we propose that the myth which emerges as the folded hand emoji is used and why the myth emerges are studied in the future research.

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1. Introduction

Currently In today's fast-paced digital landscape, messaging applications such as WhatsApp, WeChat, Facebook Messenger, Telegram, and Snapchat have become indispensable tools for communication, transforming the ways people connect worldwide. These platforms offer users a variety of features, including voice and video calls, text messaging, and group chats, which are central to modern communication. Among these features, emojis, which are visual icons representing facial expressions, gestures, and other symbols, play a significant role in enhancing the clarity and emotional resonance of digital conversations. Their widespread usage in personal and social interactions demonstrates their power to transcend language barriers and enrich online dialogue (Zeidler, 2021; Moschini, 2016).

Emojis, embedded in digital interfaces and smartphone keyboards, are now part of daily digital interactions, from social media posts to private conversations. This increased use of emojis in daily communication reflects a shift in how people express emotions online. Studies have shown that emojis serve as nonverbal cues, offering clarity and emotional depth to otherwise text-based interactions (Annamalai & Salam, 2017). This growth in emoji usage has sparked research across fields such as linguistics, psychology, and communication studies, aiming to understand how these symbols influence human interaction. However, a significant number of studies focus on similar aspects, such as the frequency and purpose of emoji use, which has resulted in overlapping findings and a need for more innovative research approaches (Fischer & Herbert, 2021; Bakir & Haji, 2019).

Various studies have explored how gender influences the frequency and interpretation of emoji use, showing that women often use emojis to reinforce relational bonds, whereas men's usage is more functional and context-specific. For instance, research indicates that women perceive emojis as enhancing friendliness and engagement, while men tend to see them as tools for clarification (Butterworth et al., 2019; Pérez-Sabater, 2019). Additionally, research into the role of emojis as nonverbal communication tools highlights their significance in conveying emotions in digital spaces where traditional nonverbal cues like tone and body language are absent. Emojis provide a way to express feelings and intentions, making them essential for emotional resonance in online interactions (Wall et al., 2016; Riordan, 2017). However, despite the insights offered by these studies, the literature lacks an in-depth exploration of how emojis function across different cultures and social contexts, which limits our understanding of their full communicative potential.

In addition to their functional roles, emojis also present challenges in interpretation. Cultural and contextual differences can result in diverse interpretations of the same emoji, which sometimes leads to misunderstandings in digital conversations. For example, certain emojis may convey different emotions or intentions based on cultural norms, making their interpretation complex (Tran & Matsui, 2023; Shah & Tewari, 2021). Context is also crucial in interpreting emoji meaning, as an emoji's significance may shift depending on its surrounding text and the nature of the conversation. These challenges highlight a gap in the literature on emojis' interpretive challenges and underscore the need for further research within a semiotic and pragmatic framework to better understand the ambiguities associated with emoji use in digital communication (Zeidler, 2021; Sampietro, 2016).

This study addresses these gaps by proposing a novel perspective that considers emojis as tools for nuanced digital communication. Instead of focusing solely on their frequency or surface-level functions, this research explores the cultural meanings and subtle communicative roles associated with emojis, such as the folded hands symbol. This approach emphasizes not only the semiotic and expressive value of emojis but also their potential to create layered meanings in digital conversations, a dimension yet to be fully explored in the existing literature (Moschini, 2016; Annamalai & Salam, 2017).

The aim of this study is to conduct a systematic literature review (SLR) on emojis and emoticons, synthesizing existing research across fields like linguistics and psychology to highlight the current scope and identify gaps within emoji research. By reviewing studies published between 2012 and 2023, this work evaluates the use of emojis in digital communication and proposes future directions that integrate linguistic theories and call for a more interdisciplinary approach (Prada et al., 2018; Qi & Chen, 2021).

The implications of this study extend beyond the academic field, providing insights for communication practitioners and app developers seeking to enhance user experience by leveraging emojis' potential to bridge social and cultural gaps. By identifying the multifaceted roles emojis play in communication, this research underscores the importance of developing linguistic models that accommodate their evolving place in digital discourse, ultimately promoting clarity and understanding in online interactions. This study thus makes a valuable contribution to the existing literature on emojis by examining the interpretive complexities surrounding their use. By doing so, it underscores the need for a more thorough, theory-driven understanding of how emojis function within digital communication. Through this approach, the study not only highlights the nuanced ways emojis convey meaning but also advocates for integrating theoretical frameworks that enhance our comprehension of emojis' roles in online interactions.

2. Method

This This study adopts a qualitative systematic literature review (SLR) approach to synthesize the research on the use of emojis and emoticons in computer-mediated communication. The data were drawn from academic articles published between 2013 and 2023 that focus specifically on emojis and emoticons within the field of linguistics. Articles were sourced using the Publish or Perish software, with selected databases including Scopus, Google Scholar, CrossRef, and Web of Science. These databases were chosen due to their broad coverage of high-quality, peer-reviewed literature. Only articles relevant to the domain of linguistics were included, narrowing the dataset to 22 articles for detailed analysis.

In this study, the researchers aimed to analyze the objectives, methods, and research findings of the selected articles. By synthesizing these elements, the research assesses the extent to which emojis and emoticons have been studied in linguistics, identifying gaps in the literature and proposing a novel concept that has not yet been explored. This research is intended to provide a valuable resource for future studies, particularly for those interested in the intersection of linguistics and digital communication technologies.

2.1 Search Strategy

To achieve a thorough and systematic approach to the literature review, a carefully designed search strategy was implemented. This study adhered to the guidelines of the Preferred Reporting Items for Systematic Reviews and Meta-Analyses (PRISMA) framework, which emphasizes transparency, replicability, and methodological rigor throughout the research process. By following PRISMA, this systematic literature review (SLR) ensured that each stage of the study, from identifying relevant literature to including selected studies, was meticulously documented, which strengthens the reliability and reproducibility of the findings.

In order to capture a broad spectrum of interdisciplinary research related to the study of emojis and emoticons in linguistics, four major databases were selected: Scopus, Google Scholar, CrossRef, and Web of Science. These databases were chosen for their expansive scope and strong reputation in providing access to high-quality, peer-reviewed content. Scopus and Web of Science primarily offered insights from journals with a focus on linguistics and social sciences, while Google Scholar and CrossRef enabled access to a wider range of open-access and cross-disciplinary studies. The search covered studies published between 2013 and 2023, ensuring an extensive and up-to-date overview of the research landscape on emojis and emoticons.

To facilitate efficient organization and accurate citation of the collected data, Zotero, a reference management tool, was employed. Zotero's structured organizational features allowed articles to be categorized based on thematic relevance, methodology, and publication year, which significantly minimized the risk of data loss or citation errors throughout the review process. By utilizing Zotero's tagging and folder functionalities, this study maintained a high level of control over the extensive volume of references, thereby enhancing both the accuracy and coherence of the analysis in the final report.

2.2 Study Selection

A two-step selection process was implemented to ensure that only highly relevant studies were included. The first step involved conducting a comprehensive keyword search using various combinations of terms such as "emoji," "emoticon," and "linguistic issues." Additional synonyms and related expressions, including "symbol with emotion," "language studies," and "linguistic aspects," were incorporated to capture a wide range of articles addressing the research topic. Table 1 presents an overview of the primary keywords and their synonyms used throughout the search process to ensure coverage across different terminology.

In the second step, clear inclusion and exclusion criteria were applied to refine the selection and focus on studies relevant to the linguistic aspects of emojis and emoticons. As outlined in Table 3, only articles directly addressing emojis and emoticons within a linguistic framework were retained. Studies from unrelated disciplines or those emphasizing non-linguistic aspects of emojis, such as technological or business-oriented analyses, were excluded from the review. To maintain a focus on the latest insights in the field, the selection was further limited to studies published within the past five years, ensuring that only contemporary research contributed to the analysis.

2.2.1 Study Inclusion and Exclusion criteria

To ensure the relevance of the articles searched to the research domain and alignment with the objectives, inclusion and exclusion criteria were carefully applied, as depicted in Table 1.

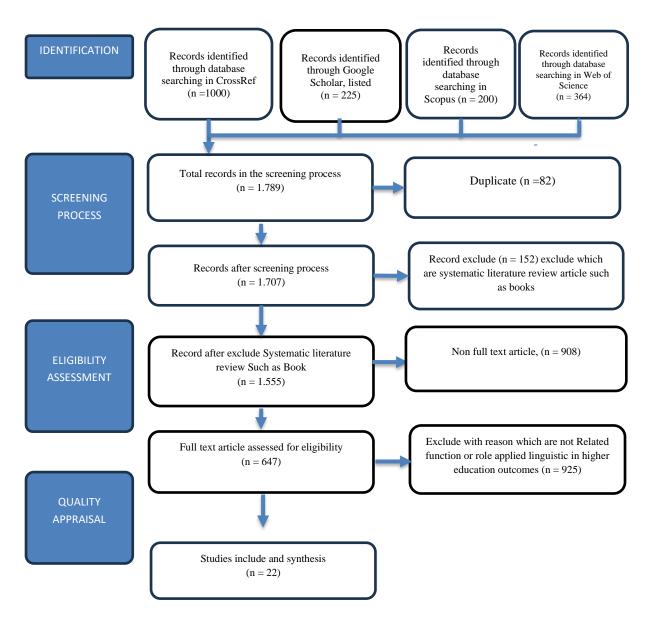


Diagram. 1 The Flow Diagram from Identification Process to Quality Appraisal

The diagram flow presented below illustrates the article selection process. In the first search, 2.189 articles were found taken from the Scopus, Wos, Crossref, and Google Scholar database. Next, a filtering procedure was performed using Zotero to exclude some data such as duplicate data totaling 52. Therefore, the results after being filtered get the results 1.707 data. Not only the duplicate filter process, the excluding of systematic literature reviews such as 152 books and 908 full text articles was also carried out by getting result 1.555 data.

In addition, the abstract, year of publication, and relevance to the topic were meticulously reviewed to enforce the inclusion and exclusion criteria effectively. From this process, 647 full-text articles were evaluated to determine their eligibility for inclusion. Meanwhile, 926 articles were excluded because they did not directly pertain to the research topic, ensuring the selection remained focused and relevant. Consequently, a thorough examination proceeded with a final selection of 22 articles, deemed suitable for in-depth analysis.

2.3 Data Extraction

A standardized data extraction form was developed to ensure consistency and completeness in capturing relevant information from each study. The following data points were extracted:

- SLR Information: Author(s), year of publication, title, journal/book, and publication type.
- Study Characteristics: Research methodology, sample size, study setting (e.g., country, educational institution), and theoretical framework.
- Key Findings: Main outcomes related to the application of emoji and emoticon in current issues
- Challenges and Gaps Identified: Any reported challenges or gaps in the implementation of the use of emoji and emoticon in linguistic context.

2.4 Quality Assessment

The quality of the selected studies was assessed using established criteria to ensure that only high-quality research was included in the final analysis. Studies were evaluated based on:

- Relevance to the research question
- Methodological rigor, including design, sampling methods, and data collection techniques
- Clarity of reporting (i.e., clear presentation of objectives, methods, results, and conclusions)
- Validity and reliability, with particular attention to bias reduction and reproducibility of results

Only those studies that met these quality standards were included in the synthesis, ensuring that the findings and conclusions drawn from this review are based on robust and reliable research.

3. Result and Discussion

The systematic review highlights three primary thematic areas: (1) Gender and the Use of Emojis and Emoticons, (2) Emojis and Emoticons as Nonverbal Communication Tools, and (3) The Challenges of Semantic Interpretation in Emoji and Emoticon Use. Each of these themes addresses key contemporary linguistic issues that arise with the integration of technology in digital communication. The following sections explore these themes in-depth, backed by extensive research and analysis from the literature.

Table 1. Numbers of the selected article

| No | Author(s) | Title | Journal |
|-----|---|---|---|
| [1] | Tossell, C. C., Kortum, P., Shepard, C., Barg-Walkow, L. H., Rahmati, A., & Zhong, L. (2012). | A longitudinal study of emoticon uses in text messaging from smartphones. | Computers in Human Behavior |
| [2] | Teh, P. L., Rayson, P., Pak, I., Piao, S., & Yeng, S. M. (2016) | Reversing the polarity with emoticons. | Natural Language Processing and Information Systems |
| [3] | Wall, H. J., Kaye, L. K., & Malone, S. A. (2016). | An exploration of psychological factors on emoticon usage and implications for judgement accuracy. | Computers in Human Behavior |
| [4] | Moschini, I. (2016) | The "face with tears of joy" emoji: A socio-semiotic and multimodal insight into a Japan-America mash-up. | Hermes - Journal of Language and Communication in Business |
| [5] | Annamalai, S., & Salam, S (2017) | Undergraduates' interpretation on WhatsApp smiley emoji. | Jurnal Komunikasi: Malaysian Journal of Communication |
| [6] | Riordan, M. A. (2017) | Emojis as tools for emotion work: Communicating affect in text messages. | Journal of Language and Social Psychology |

| No | Author(s) | Title | Journal | | | | | |
|------|---|---|--|--|--|--|--|--|
| [7] | Chairunnisa, S., & Benedictus, A. (2017) | Analysis of emoji and emoticon usage in interpersonal communication of Blackberry messenger and WhatsApp application user. | International Journal of Social Sciences and Management | | | | | |
| [8] | Rodrigues, D., Prada, M., Gaspar, R., Garrido, M. V., & Lopes, D. (2018) | Lisbon emoji and emoticon database (LEED): Norms for emoji and emoticons in seven evaluative dimensions. | Behavior Research Methods | | | | | |
| [9] | Hamid, A. (2018) | Justification of emoticons as verbal vs nonverbal communication tools. | IOSR Journal of Humanities and Social Science | | | | | |
| [10] | Hsieh, S. H., & Tseng, T. H. (2017). | Playfulness in mobile instant messaging: Examining the influence of emoticons and text messaging on social interaction. | Computers in Human Behavior | | | | | |
| [11] | Li, L., & Yang, (2018) | Pragmatic functions of emoji in internet-based communication. | Asian-Pacific Journal of Second and Foreign Language Education | | | | | |
| [12] | Butterworth, S. E., Giuliano, T. A., White, J., Cantu, L., & Fraser, K. C, (2019) | Sender gender influences emoji interpretation in text messages. | Frontiers in Psychology | | | | | |
| [13] | Pérez-Sabater, C. (2019) | Emoticons in relational writing practices on WhatsApp: Some reflections on gender | Analyzing Digital Discourse | | | | | |
| [14] | Bakir, S. N., & Haji, H. H. (2019) | The use of emoticons among university students: A pragmatic study. | Journal of Humanity Sciences | | | | | |
| [15] | Gesselman, A. N., Ta, V. P., & Garcia, J. R. (2019) | Worth a thousand interpersonal words: Emoji as affective signals for relationship- oriented digital communication. | PLOS ONE | | | | | |
| [16] | Jeon, H. J. (2020) | The mechanism of empathy and relationship commitment through emojis: Path to perspective taking, inner imitation, emotional empathy, and relationship commitment. | SAGE Open | | | | | |
| [17] | Fischer, B., & Herbert, C. (2021) | Emoji as affective symbols: Affective judgments of emoji, emoticons, and human faces varying in emotional content. | Frontiers in Psychology | | | | | |
| [18] | Qi, S., & Chen, X (2021) | Mobile mediated communication: Emoji usage and play frame | Advances in Social Science, Education and Humanities Research | | | | | |
| [19] | Shah, R., & Tewari, R. (2021) | Mapping emoji usage among youth. | Journal of Creative Communications | | | | | |
| [20] | Kutsuzawa, G., Umemura, H., Eto, K., & Kobayashi, Y. (2021) | Emoji emotional states: Classification on the valence and arousal axes. | Research Square | | | | | |
| [21] | Zeidler, G. (2021) | Emoji as evidence in trial. | Journal of Student Research | | | | | |
| [22] | Tran, V., & Matsui, T. (2023) | COVID-19 case prediction using emotion trends via Twitter emoji analysis: A case study in Japan. | Frontiers in Public Health | | | | | |

The main data in this study comprise a collection of 22 academic articles published from 2012 to 2023, each focusing on various aspects of emoji and emoticon use in digital communication. These articles are sourced from reputable journals across linguistics, psychology, and social sciences, with an emphasis on understanding emojis as part of computer-mediated communication.

| | | Source | | | | | | | | | | | | | | | | | | | | |
|----------|---|--------|---|---|----------|----------|----------|----------|---|----|----|----------|----|----|----|----|----|----|----------|----------|----------|----|
| Themes | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 | 11 | 12 | 13 | 14 | 15 | 16 | 17 | 18 | 19 | 20 | 21 | 22 |
| Themes 1 | ✓ | | | | | ✓ | | ✓ | | | | ✓ | ✓ | ✓ | | ✓ | ✓ | | | | | ✓ |
| Theme 2 | | ✓ | ✓ | ✓ | | | | ✓ | ✓ | ✓ | ✓ | | | | ✓ | | | ✓ | | | | |
| Theme 3 | | | | | ✓ | √ | √ | √ | | | | √ | | | | | | | √ | √ | √ | |

Table 2. Article thematic tracking: Themes and Source

The data are categorized into three thematic areas: (1) Gender and the Use of Emojis and Emoticons, (2) Emojis and Emoticons as Nonverbal Communication Tools, and (3) The Challenges of Semantic Interpretation in Emojis and Emoticons Use. Each article provides unique insights into how emojis and emoticons function within different contexts, influenced by factors such as cultural background, emotional expression, and relational dynamics. This data collection serves as the foundation for analyzing the linguistic and communicative impact of emojis and emoticons in digital interactions.

3.1 Gender and the Use of Emojis and Emoticons

Gender plays a pivotal role in how emojis and emoticons are utilized in digital communication, with numerous studies indicating significant differences between men and women in both frequency and purpose. Tossell et al. (2012) found that women tend to use more emoticons in their text messages, while men, although using emoticons less frequently, often employ a wider variety of them. This suggests that women might prioritize emotional expressiveness and relational bonding in their communication, while men might focus on efficiency, experimenting with diverse emoticons as needed. Furthermore, Rodrigues et al. (2017) corroborated this finding by demonstrating that women evaluated emojis as more familiar, clear, and meaningful compared to men, indicating a deeper engagement with these digital symbols. This gendered difference in emoji usage is further supported by (Butterworth et al., 2019), who noted that affectionate emojis are perceived as more appropriate and likable when sent by women, reinforcing the notion that gender influences the interpretation of emotional cues in digital communication.

Moreover, the emotional expressiveness of emojis serves as a crucial tool for enhancing social connections. Riordan (2017) posits that emojis facilitate effective emotion work, allowing users to engage in playful and artistic communication that can strengthen social relationships. This aligns with (Jeon, 2020), who found that emojis enhance empathy and relationship commitment through their ability to facilitate perspective-taking and emotional recognition. The intersection of gender and emotional expressiveness through emojis suggests that women may leverage these tools more effectively to foster relational intimacy, while men may utilize them to convey a broader range of emotional states, albeit less frequently. In addition to the frequency of use, the interpretation of emojis also varies by gender. Studies have shown that men and women may interpret the same emoji differently, which can lead to misunderstandings in communication. For instance, Tran and Matsui (2023) highlighted that certain emojis, such as the "praying hands," can be misinterpreted, leading to confusion about the sender's intended emotional expression. This underscores the complexity of emoji communication, where gender differences in interpretation can further complicate interactions. Additionally, Fischer & Herbert (2021) found that emojis are often recognized more clearly than facial expressions, suggesting that they serve as a more effective means of conveying emotions across genders.

Pérez-Sabater (2019) further reinforces these gendered patterns through her analysis of WhatsApp interactions, revealing that women use emoticons more frequently to maintain emotional ties with their close friends. In contrast, men avoid using what they perceive as excessive emoticons, especially in contexts where emotional restraint is considered more appropriate. This difference aligns with gendered linguistic

practices, where women are often seen as communicative nurturers, while men adopt a more task-oriented approach to messaging.

Bakir and Haji's (2019) pragmatic study on university students added another layer to this understanding by revealing that women not only use emojis more frequently but also hold more positive attitudes toward their use. Women see emojis as essential tools for expressing emotional nuances, particularly in maintaining social relationships, while men are more reserved in using them, often viewing emojis as supplementary rather than necessary in communication. This gender-based divide in how emojis and emoticons are used reflects broader linguistic trends, where women's communication often emphasizes emotional engagement and relational dynamics, while men's communication tends toward functional and minimalistic exchanges.

3.2 Emojis and Emoticons as Nonverbal Communication Tools

Emojis and emoticons have emerged as vital tools for nonverbal communication in digital contexts, filling in the emotional and social cues that are typically present in face-to-face interactions but absent in text-based exchanges. Hamid (2018) emphasizes that emoticons function as nonverbal communication tools by conveying emotional signals that add depth to otherwise sterile text. Emojis, by extension, have taken on a similar role, allowing users to express emotions and social cues more clearly through digital mediums. This is particularly important as the absence of nonverbal cues in written communication can lead to misunderstandings and misinterpretations of intent (Qi & Chen, 2021). Further, Teh et al. (2016) examined the use of emojis across various messaging platforms such as WhatsApp, Facebook, and Twitter, noting that emojis humanize digital conversations by allowing users to add emotional layers to their text. This study underscores the growing importance of emojis in bridging the gap between spoken language, which is rich in nonverbal cues like tone and facial expressions, and written language, which lacks these elements. The findings of Qi and Chen (2021) support this notion, revealing that 17.24% of messages contained at least one emoji, with the "mono-emoji + word" pattern being the most prevalent. This indicates that users are increasingly relying on emojis to enhance the emotional resonance of their messages, thereby facilitating clearer communication (Qi & Chen, 2021).

Moreover, the role of emojis as nonverbal cues is further substantiated by (Hsieh et al., 2017; Teh, et al., 2016; Wall et al., 2016), who found that emojis can help clarify a message's meaning, thereby reducing misunderstandings in instant messaging. This aligns with the findings of (Gesselman et al., 2019), who argue that emojis serve as affective signals that enhance relationship-oriented digital communication. The ability of emojis to convey emotional nuances is critical in maintaining interpersonal relationships in a digital landscape where traditional nonverbal cues are absent (Gesselman et al., 2019). The psychological implications of emoji usage are also noteworthy. Li & Yang (2018) found that the prevalence of positive emojis can significantly influence the interpretation of online messages, enhancing the perceived positivity of the communication. This is echoed by (Wall et al., 2016), who highlight the context-specific nature of emoticon usage, suggesting that the emotional tone of a message can be modified through the strategic use of emojis. Such findings illustrate the complex interplay between digital communication and emotional expression, emphasizing the need for a nuanced understanding of how emojis function in various contexts (Li & Yang, 2018; Wall et al., 2016).

Furthermore, Moschini (2016), in her study on the "Face with Tears of Joy" emoji, provides a sociosemiotic insight into how emojis add multiple layers of meaning to digital communication. Emojis serve as visual, emotional, and cultural symbols that enrich the text by adding nonverbal cues, making conversations more interactive and expressive. This is further supported by Rodrigues et al. (2018), who found that compared to emoticons, emojis are perceived as more aesthetically pleasing and effective in conveying emotions. Users reported that emojis, with their visual complexity, are more meaningful in digital conversations, allowing for a richer, more nuanced communication experience.

Emojis play a crucial role in digital communication, allowing for the expression of emotions and subtleties that text alone cannot fully convey. Acting as digital equivalents of facial expressions, gestures, and tone, they enrich online interactions by adding layers of meaning and emotional context to written messages. However, as the prevalence of emojis continues to grow, their effectiveness increasingly hinges on a shared understanding between users and the specific contexts in which they are employed. This reliance on mutual interpretation introduces a new set of challenges, underscoring the complexities of ensuring that emojis are decoded as intended across diverse digital exchanges.

3.3 The Challenges of Semantic Interpretation in Emojis and Emoticons Use

Despite their growing popularity and utility, emojis and emoticons present challenges in terms of semantic interpretation. The meaning of an emoji or emoticon is often context-dependent, and its interpretation can vary widely depending on the user's cultural background, the context of the conversation, and the relationship between the communicators. Annamalai & Salam (2017) highlighted this issue in their study of WhatsApp Smiley emojis among undergraduates. Their research found that while students could generally understand the denotative (literal) meaning of emojis, the connotative (contextual) meanings often varied, leading to misunderstandings in communication. This demonstrates that while emojis can enhance communication, they can also introduce ambiguity if the sender and receiver do not share the same understanding of the symbol.

Furthermore, Riordan (2017) emphasizes that emojis serve as tools for emotion work, allowing users to convey affective states that may not be explicitly stated in text. This interplay between text and emoji can lead to increased social connectedness, but it also raises the potential for misinterpretation when the emotional context is not shared. Shah and Tewari (2021) expanded on this by examining how social relationships, formality, and platforms influence emoji use and interpretation. Their findings suggest that the same emoji can have multiple interpretations based on these variables. For instance, a simple smiley face emoji might convey warmth and friendliness in a casual conversation but could be interpreted as passive-aggressive or sarcastic in a professional setting. This variability highlights the complexity of using emojis effectively in digital communication and underscores the importance of context in emoji interpretation. Additionally, Butterworth et al. (2019) found that sender gender can influence emoji interpretation, indicating that the same emoji may evoke different responses based on the perceived gender of the sender. This further complicates the landscape of emoji communication, as users must navigate not only their own interpretations but also those of their interlocutors.

Moreover, the emotional valence of emojis plays a significant role in their interpretation. Kutsuzawa et al. Kutsuzawa et al. (2021) classified various emojis along the axes of valence and arousal, revealing that certain emojis are consistently associated with negative sentiments. This classification can help explain why some emojis might be misinterpreted in different contexts. For example, a crying face emoji may be perceived as a sign of sadness in one context but could be interpreted as a humorous exaggeration in another. The ambiguity surrounding emoji communication is significantly heightened by the fact that emojis can be rendered differently across various platforms. This phenomenon has been documented in several studies, which highlight that the same emoji may evoke different interpretations depending on the device or application used to view it.

Moreover, the context in which emojis are used plays a crucial role in their interpretation. Research indicates that emojis require contextual cues to be accurately understood, as they often function as complements to textual messages (Zeidler, 2021). For example, the same emoji can convey different sentiments based on the surrounding text or the overall conversation context (Rodrigues et al., 2018). This is particularly relevant in interpresonal communication, where the emotional weight of an emoji can be amplified or diminished by the accompanying words. The complexity of emoji interpretation is further compounded by individual differences in emotional perception and cultural backgrounds, which can lead to divergent understandings of the same emoji across different users (Chairunnisa & Benedictus, 2017).

Thus, the ambiguity inherent in emoji communication is not merely a product of their design but is also influenced by the contextual and interpersonal dynamics at play. In addition to contextual factors, the emotional connotations associated with specific emojis can vary widely among users. For instance, while a smiling face emoji is typically perceived as a positive gesture, its interpretation can shift dramatically depending on the relationship between the communicators and the context of the interaction (Yang, 2023). This variability underscores the importance of emoji literacy, as users must navigate these emotional subtleties to avoid misinterpretation (Udoudom, 2024). Furthermore, studies have shown that age and gender can influence how emojis are interpreted, with younger users often employing emojis for tone modification and emotional expression in ways that differ from older generations (Herring & Dainas, 2020). This generational gap in emoji usage and interpretation highlights the evolving nature of digital communication and the need for users to be aware of these differences to enhance clarity in their interactions.

The issue of misinterpretation is further complicated by the fact that not all emojis carry the same meaning across cultures. Li and Wu (2021), in their study on Weibo, found that businesses often use emojis

to create a personified and relatable brand image. However, the success of this strategy hinges on the audience's interpretation of the emoji, which can vary greatly across cultural and linguistic contexts. In one culture, an emoji may represent joy, while in another, it could be interpreted as mockery or sarcasm, leading to potential miscommunication in cross-cultural digital interactions. Moreover, Sampietro (2016) identified another layer of complexity by analyzing the use of emojis as punctuation marks. Emojis at the end of sentences, much like traditional punctuation, serve to enhance or clarify the emotional tone of the message. However, unlike traditional punctuation, which has standardized meanings, emojis carry emotional and connotative weight that varies depending on the sender's and receiver's cultural and social backgrounds. This adds another dimension to the challenges of semantic interpretation, as even the simplest emojis can carry multiple meanings depending on the context. Rzepka et al. (2018) also examined the role of emoticons in conveying emotions in complex sentence structures, noting that they significantly improve the accuracy of emotional interpretation, especially in sentences involving negation or emotional contrast. However, the study also revealed that these symbols are most effective when the sender and receiver share a similar understanding of the emoticons' meaning, which is not always the case in broader, more diverse communication networks.

Overall, the challenges of interpreting emojis and emoticons highlight a key issue in digital communication: while these symbols can enhance communication by adding nonverbal cues, they can also lead to confusion and miscommunication if the meanings are not clearly understood by all parties involved. This underscores the importance of studying emojis and emoticons within a linguistic framework, particularly from a semiotic perspective, to better understand how these symbols function across different cultural and social contexts.

5. Conclusion

This systematic literature review (SLR) has identified key contemporary linguistic issues relating to the use of emojis and emoticons in digital communication. The review highlighted three major thematic areas: (1) Gender and the Use of Emojis and Emoticons, (2) Emojis and Emoticons as Nonverbal Communication Tools, and (3) The Challenges of Semantic Interpretation in Emoji and Emoticon Use. These themes underscore the increasing relevance of emojis and emoticons as integral components of communication, driven by the evolution of technology and the rise of computer-mediated interactions. The findings reveal that emojis and emoticons are used not only to express emotions but also to clarify meaning, substitute text and punctuation, and reinforce nonverbal cues. Their usage is heavily influenced by social dynamics such as gender, formality levels, and platform-specific communication patterns. Despite their widespread use, emojis and emoticons are often misunderstood due to varying semantic interpretations across users and contexts, making communication challenging. The review also highlights a key gap in research: the limited use of linguistic theories in studying these symbols, missing an opportunity to gain deeper insights into their role as semiotic tools in digital communication. The novelty of this study lies in its interdisciplinary approach, merging linguistic theories with technological advancements, highlighting the need for semiotic and pragmatic frameworks in future research. This helps scholars better understand emojis as complex nonverbal tools in diverse sociocultural contexts. Additionally, this study suggests further exploration of cultural and emotional nuances in emoji usage, particularly myths around symbols like the folded hand emoji, and how their meanings evolve across communities and platforms.

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References

Alshenqeeti, H. (2016). Are emojis creating a new or old visual language for new generations? A sociosemiotic study. *Advances in Language and Literary Studies*, 7(6), 56-69. https://doi.org/10.7575/aiac.alls.v.7n.6p.56

- Annamalai, S., & Salam, S. (2017). Undergraduates' interpretation on WhatsApp smiley emoji. *Jurnal Komunikasi: Malaysian Journal of Communication, 33*(4), 89-103. https://doi.org/10.17576/JKMJC-2017-3304-06
- Bakir, S. N., & Haji, H. H. (2019). The use of emoticons among university students: A pragmatic study. *Journal of Humanity Sciences*, 23(1), 278-290.
- Butterworth, S., Giuliano, T., White, J., Cantu, L., & Fraser, K. (2019). Sender gender influences emoji interpretation in text messages. *Frontiers in Psychology*, 10, 784. https://doi.org/10.3389/fpsyg.2019.00784
- Chairunnisa, S., & Benedictus, A. (2017). Analysis of emoji and emoticon usage in interpersonal communication of blackberry messenger and WhatsApp application users. *International Journal of Social Sciences and Management*, 4(2), 120-126. https://doi.org/10.3126/ijssm.v4i2.17173
- Feng, Z. (2019). Positive or negative: Emoji usage in online social media. *Advances in Social Science, Education and Humanities Research*, 334, 512-516.
- Fischer, B., & Herbert, C. (2021). Emoji as affective symbols: Affective judgments of emoji, emoticons, and human faces varying in emotional content. *Frontiers in Psychology*, *12*, 645173. https://doi.org/10.3389/fpsyg.2021.645173
- Gesselman, A. N., Ta, V. P., & Garcia, J. R. (2019). Worth a thousand interpersonal words: Emoji as affective signals for relationship-oriented digital communication. *PLOS ONE, 14*(8), e0221297. https://doi.org/10.1371/journal.pone.0221297
- Goyal, R., & Tiwari, S. (2017). Emotion recognition: A literature survey. *International Journal for Technological Research in Engineering*, 4(9), 3562-3575.
- Hamid, A. (2018). Justification of emoticons as verbal vs nonverbal communication tools. *IOSR Journal of Humanities and Social Science*, 23(4), 54-58.
- Herring, S., & Dainas, A. (2020). Gender and age influences on interpretation of emoji functions. *ACM Transactions on Social Computing*, 3(2), 1-26. https://doi.org/10.1145/3375629
- Hsieh, S. H., & Tseng, T. H. (2017). Playfulness in mobile instant messaging: Examining the influence of emoticons and text messaging on social interaction. *Computers in Human Behavior*, 69, 405-414.
- Jeon, H. (2020). The mechanism of empathy and relationship commitment through emojis: Path to perspective taking, inner imitation, emotional empathy, and relationship commitment. *SAGE Open,* 10(4). 1-11. https://doi.org/10.1177/2158244020969675
- Kutsuzawa, G., Umemura, H., Eto, K., & Kobayashi, Y. (2021). Emoji emotional states: Classification on the valence and arousal axes. *Research Square*. https://doi.org/10.21203/rs.3.rs-701032/v1
- Li, L., & Yang, Y. (2018). Pragmatic functions of emoji in internet-based communication: A corpus-based study. *Asian-Pacific Journal of Second and Foreign Language Education*, 3(1), 5-20. https://doi.org/10.1186/s40862-018-0057-z
- Li, Z., & Wu, J. (2021). Research on the communication effect of emoji derived from hot topics on social media. *Advances in Social Science, Education and Humanities Research*, 588, 240-245.
- Moschini, I. (2016). The "face with tears of joy" emoji: A socio-semiotic and multimodal insight into a Japan-America mash-up. *Hermes Journal of Language and Communication in Business*, 55, 11-25.
- Pérez-Sabater, C. (2019). Emoticons in relational writing practices on WhatsApp: Some reflections on gender. In P. Bou-Franch & P. Garcés-Conejos Blitvich (Eds.), *Analyzing Digital Discourse* (pp. 145-165). Palgrave Macmillan. https://doi.org/10.1007/978-3-319-92663-6_6
- Prada, M., Rodrigues, D., Gaspar, R., & Garrido, M. (2018). Motives, frequency, and attitudes toward emoji and emoticon use. *Telematics and Informatics*, 35(4), 56-67. https://doi.org/10.1016/j.tele.2018.06.005

- Qi, S., & Chen, X. (2021). Mobile mediated communication: Emoji usage and play frame. *Advances in Social Science, Education and Humanities Research, 588*, 296-300. https://doi.org/10.2991/assehr.k.210407.035
- Riordan, M. A. (2017). Emojis as tools for emotion work: Communicating affect in text messages. *Journal of Language and Social Psychology*, 36(5), 549-567. https://doi.org/10.1177/0261927X17704238
- Rodrigues, D., Prada, M., Gaspar, R., & Garrido, M. (2017). Lisbon emoji and emoticon database (LEED): Norms for emoji and emoticons in seven evaluative dimensions. *Behavior Research Methods*, *50*(1), 392-405. https://doi.org/10.3758/s13428-017-0878-6
- Rzepka, R., Araki, K., & Xiang, M. (2018). From words to emotions: Deep emotion recognition in text and its wider implications. *International Journal of Computational Linguistics Research*, *9*(1), 46-58.
- Sampietro, A. (2016). Exploring the punctuating effect of emoji in Spanish WhatsApp chats. *Lenguas Modernas*, 47, 91-113.
- Shah, M., & Tewari, S. (2021). Mapping emoji usage among youth. *SAGE Open, 16*(1), 113-125. https://doi.org/10.1177/09732586211020455
- Teh, P. L., Rayson, P., Pak, I., & Piao, S. (2016). Reversing the polarity with emoticons. In E. Métais, F. Meziane, M. Saraee, V. Sugumaran, & S. Vadera (Eds.), *Natural Language Processing and Information Systems* (pp. 428-437). Springer. https://doi.org/10.1007/978-3-319-41754-7_48
- Tossell, C. C., Kortum, P., Shepard, C., Barg-Walkow, L. H., Rahmati, A., & Zhong, L. (2012). A longitudinal study of emoticon use in text messaging from smartphones. *Computers in Human Behavior*, 28(2), 659-663.
- Tran, V., & Matsui, T. (2023). COVID-19 case prediction using emotion trends via Twitter emoji analysis:

 A case study in Japan. *Frontiers in Public Health*, 11, 1079315. https://doi.org/10.3389/fpubh.2023.1079315
- Udoudom, U. (2024). Emojis and miscommunication in text-based interactions among Nigerian youths. *Journal of Informatics and Web Engineering, 3*(1), 226-240. https://doi.org/10.33093/jiwe.2024.3.1.15
- Wall, H., Kaye, L., & Hulme, C. (2016). An exploration of psychological factors on emoticon usage and implications for judgement accuracy. *Computers in Human Behavior*, 62, 70-78. https://doi.org/10.1016/j.chb.2016.03.040
- Yang, K. (2023). Your smiling face is impolite to me: A study of the smiling face emoji in Chinese computer-mediated communication. *Social Science Computer Review*, 42(4), 947-960. https://doi.org/10.1177/08944393231219481
- Zeidler, G. (2021). Emojis as evidence in trial. *Journal of Student Research*, 10(1), 1-11. https://doi.org/10.47611/jsrhs.v10i1.1373