



## ENCODING AND DECODING OF EMOJI ON SOCIAL MEDIA FOR EXPRESSION SHARING AMONG UNIVERSITY STUDENTS IN ANAMBRA STATE

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**ABSTRACT:** *Emojis which are visual symbols deployed in digital communication have become essential tools for expression sharing among young adults, especially university students in Nigeria. This study investigates the encoding and decoding of emojis on social media for expression sharing among university students in Anambra State. Grounded by the symbolic interaction theory, this study was designed as a descriptive survey. With a sample size of 537 students randomly drawn from nine universities in Anambra State, Southeast Nigeria. Findings reveal that 72% of the respondents could decode the common emojis used in shared expressions thus indicating that emojis play a critical role in facilitating emotional expression and social interaction among the respondents on social media. The study recommends that emojis should be part of general communication portfolios not just for students but for the larger society both in formal and informal settings as it helps to reduce verbosity and save time compared to lengthy handwritten texts.*

**KEYWORDS:** Emoji, Encoding, Decoding, Social media, University students.



## INTRODUCTION

It is a fact that communication is one of the most essential qualities possessed by humans which distinguishes them from other kinds of mammals and the major tool embedded in this quality (communication) is the use of language. To enhance meaning-making in human communication, there is absolutely the essence of a decoder to comprehend the language which a sender uses to encode a message, without this pivotal quality in the communication circle, the whole essence of human communication is defeated. With the presence of prevalent computing and technology advancements in the world of communication, computer-mediated communication (CMC) is prevailing each day to a higher level. It has many advantages (Obiora & Uche, 2024), including enhancing the continuity of individual communication (Juhasz & Bradford, 2019), improving the quality of relationships (Pettigrew, 2020), and strengthening emotional communication (Derks et al., 2021). On the other hand, the absence of representational expressions like intonations, gestures, and facial expressions in CMC can alter the smooth flow of communication (Archer & Akert, 2019).

To curtail this challenge, communication scholars like Harris and Riordan (2022), as well as Barbieri et al. (2020), created some non-verbal signs like using capital letters to express shouting, more than one exclamation mark to showcase excitement and some symbols to express facial feelings. Hence, these expressions make up for the absence of non-oral expressions in CMC, which gave rise to the use of emojis as expression symbols for communication. This gave birth to the prevalent use of emojis on social media which have kept evolving over time and are used not just only related to communication but to other aspects of human endeavours like law, business, marketing, and health.

According to Jibril and Abdullah (2023), an emoji is a visual representation of a given phenomenon, idea, emotion, status, ideology or occurrence that is used with words in online communication. They are like pictures, signs and animated characters that can stand alone or combine with texts to create a form of written expression. In recent years, with the presence of emerging computer-enabled communication technologies, emojis and memes have been constantly and widely used on social media for different purposes and interactions and even recommended as a health intervention strategy (Obiora & Adikuru, 2024) on various social media platforms like X, Facebook, WhatsApp, Instagram, YouTube, TikTok, Snapchat, etc.

Hochschild (2021) noted that emojis are commonly used to simplify an emotional expression or to enrich user experience. Being an interesting application of computers, emojis are being preferred by a large number of internet users in various electronic devices or many applications because they have become part of data processing applications which are embedded in smart devices' applications. So, emojis can be said to have become a popular culture in Nigeria, (Obiora & Nwafor, 2022) as they are now often used and shared by a large number of users from different demographic and cultural backgrounds in the world including students in various tertiary institutions.

University students make up a large percentage of youth in Nigeria who have been attributed as major users of social media (Uche & Obiora, 2016). Nigerians have been noted to spend the most time on social media in Africa and have been ranked fifth globally as they spend an average of 3 hours and 23 minutes on social media every day, (Statista, 2024). Since Nigerians spend so much time on social media, there is the possibility of avidly using emojis in their online communication. However, the major problem with the use of emojis by university



students on social media involves their interpretation and meaning-making which can lead to unintentional and profound misunderstandings in expression sharing.

Technically, different online platforms render and present emojis in varieties depending on how each producing company interprets Unicode's designs. This implies that some emojis sent from an Apple device may appear different on Android devices and vice versa, (Mustapha, 2024). The encoder and decoder of the encrypted messages may not have any idea that the message shared between them has been distorted due to the type of device that they are using. So, the encoder may have a specific meaning while sending an emoji but the decoder may receive an altered symbol and hence decode a different meaning at the point of decoding. Emojis also do not have standard grammar and their visual representation makes it nearly impossible to make meanings out of it correctly and well understood by university students. Given these possible misinterpretations or misunderstandings, the researchers examined the encoding and decoding trends in the use of emojis as expression sharing among university students in Anambra State.

This study aims to:

1. ascertain common emojis used by university students in Anambra State on social media
2. determine inherent expressions encoded in the common emojis used by university students in Anambra State
3. determine the level of decoding attained while using emojis to share expressions on social media applications.

## REVIEW OF LITERATURE

### Evolution of Emoji

Emojis emerged from smiley, which first evolved into emoticons, followed by emojis and stickers in recent years. Smiley first appeared in the 1960s and is regarded as the first expression symbol. By the early 1980s, these symbols have become prevalent, becoming permanent features of popular culture (Stark & Crawford, 2022). Emojis first came into use in 1872 and then, only punctuation marks were put into use through the application of those symbols from the keyboard to produce face-like expressions (Wolf, 2020). They are a paralinguistic element often used at the end of a sentence. Before the existence of emojis, users of Instant Messaging (IM) would often use emoticons (Jibril & Abdullah, 2023).

Emojis are classified into three groups depending on the formation which include; graphical icons, static images, and dynamic images (Wolf, 2020). The emergence of online communication has made emojis evolve over time, from small pictures to bigger motionless images which can be in the forms of characters, animals and human beings showcasing varieties of facial expressions (funny facial expressions).



## Emoji as tool for emotions and feeling expressions

In today's digital era, emojis have revolutionized the way we communicate by bridging the gap between written text and emotional expression. These small, colourful icons have become an essential part of our everyday conversations, allowing us to convey sentiments and ideas with a simple click. Wolf (2020) expressed that emojis are more than just cute pictures; they have evolved into a universal language, understood by people of different cultures, languages, and backgrounds. With a wide range of options, from smiling faces to thumbs up, hearts, and even quirky animals, emojis provide a shortcut to convey emotions that words alone often struggle to capture.

In non-verbal communication, where sound and facial expressions are absent, emojis play a crucial role in showing context and emotional depth. An emoji that is well articulated in an expression can change a simple text message into a playful one, or add sincerity to a heartfelt note. Donovan (2022) stressed that the use of emojis in expressions helps to convey the feelings and emotions shared, like expressing joy, sadness, excitement, or even sarcasm in such a way that when words alone are used, they cannot adequately express them. Moreover, emojis have become a common and prominent tool of communication on social media platforms, allowing decoders and encoders to interact and connect more.

In business and marketing sectors, emojis have been used to connect with target clients and customers. Various companies now use emojis in their social media campaigns, advertisements, and even product packaging to evoke specific emotions, establish a relatable tone, and make their content more engaging. Emojis have become a valuable tool in marketing, helping businesses that have adopted social media to communicate their messages effectively and leave a lasting impact on growth, especially during the COVID-19 era, (Obiora & Uche, 2023; Nwodu et al., 2022; Obiora & Kenechukwu, 2021). In the area of social interventions and youth mobilization, they can be used on social media platforms to enhance easy communication (Obiora & Adikuru, 2024; Nwodu et al., 2021; Adikuru & Obiora, 2021). Public relations sector is not left out as part of areas emojis can be relevant (Obiora, 2024). As emojis continue to evolve, technology companies are recognizing the need for diversity and inclusivity. Emojis now feature various skin tones, gender-neutral options, and symbols representing different cultures and disabilities.

Obiora and Adikuru's (2024) study supports that the use of emojis/memes has positive effects both for individuals who use them and for those who receive them. The two main roles of individuals regarding emoji use are: individuals who use emojis (users) and individuals who receive emojis (viewers). There is no doubt that everyone is not well-versed in making meaning of all emojis, hence, it may lead to misunderstanding or misinterpretation. Exact interpretation may pose some difficulties, if the context is not clear. Different factors like differences in devices, culture, technical knowledge differences and visual characteristics can influence emoji interpretation.

In summary, emojis have advanced the manner in which we communicate in this contemporary internet age. These tiny symbols carry immense power, allowing us to express emotions, add context, and build connections in our online conversations. As emojis continue to progress and become adaptive, they will remain an integral part of human communication, helping people to convey the depth of their feelings and experiences beyond the limits of words.



## Review of Empirical Studies

Zhou et al. (2024) assessed ChatGPT's effectiveness in handling previously annotated and downstream tasks to validate the hypothesis that ChatGPT can serve as a viable alternative to human annotators in emoji research and that its ability to explain emoji meanings can enhance clarity and transparency in online communications. Findings indicate that ChatGPT has extensive knowledge of emojis and is good at explaining the meaning of emojis across various application scenarios. However, this current study seeks to see the relationship in meaning-making with the encoder and decoder of emoji users.

Boutet et al. (2021) addressed the impact of emojis on emotion interpretation, social attributions, and information processing. Participants were made to read messages that were typical of social exchanges in instant text messaging (IM) accompanied by emojis that mimic negative, positive and neutral facial expressions. Results revealed that the receiver's mood was perceived to change in line with the emotions represented by the emojis or sentences they received. Moreover, findings revealed that processing speed and understanding of verbal messages were enhanced by the presence of congruent emojis. These findings therefore support the use of emojis, and in particular positive emojis, to improve communication, express feelings, and make a positive impression during socially-driven digital interactions. This study looks at moods in response to emojis shared but the current study tends to look at the interpretation of emojis to decipher if the meanings encoded were the meanings decoded.

Iqbal et al. (2020) researched to examine how emoticon usage leads to the eruption of a new global language preferred by youth. Using a quantitative survey analysis to elicit data from 100 international students of Mediterranean University, North Cyprus, drawn from different departments and the questionnaire as an instrument for data collection. Results indicated that social media provided platforms for the use of emojis that not only make communication easy and more user-friendly but also add to understanding in different age groups. Hence, the relevance of this current study is to explore if these emojis that have made online communication easier and faster on social media actually have the same meanings at both ends of the communication circle.

Uche and Obiora (2016) in a study centered on the *social media typology, usage and effects the use of social media in higher institutions in Nigeria*, made use of the survey methodology and drew a sample size of three hundred and ninety-three (393) undergraduates from the higher institutions in Nigeria. Findings revealed that students in tertiary institutions in Nigeria use Facebook and WhatsApp as the most popular social networks for socializing, entertainment and informational purposes. The factors limiting the use of social media were identified to include: inadequate electricity supply, poverty and inconsistent network signals. Among the recommendations was the need to include social media as one of the courses for general studies. If students in higher institutions in Nigeria use social media regardless of a few challenges, then this study is pertinent to know the most common emojis they use in the course of online communication on social media and establish whether the emojis shared are interpreted in the same meaning as what was sent.





## Theoretical Framework

The study is guided by the theoretical lens of symbolic interaction theory propounded by George Herbert Mead and Charles Horton Cooley in 1934, (LaRossa & Reitzes, 1993). It suggests that people are motivated and stay active when they communicate using symbols. The theory puts more emphasis on the use of symbols as a way of improving the nature and the activeness of communication. In this theory, people are the ones to decide on the type of symbols they would like to use and the ones that they would find easy to interpret as well as use efficiently. The symbols that are created are subject to change depending on the availability of new and comfortable symbols to be used as well as the ease of understanding among the users. In the application of this theory, university students have the freedom to choose whichever emoji to use in sharing their expression with each other during the interaction. Here, users and receivers have the opportunity to create meanings of their own choice while encoding and interpreting the communication symbols. A single symbol can be changed in a short period to mean something else that some users may not be able to understand in totality. Symbolic interaction theory is critical in current communication because it makes it easy for people to get many options to make choices. Most importantly, the symbols of communication inherent in emojis give people a deeper meaning of the feelings of the people in dialogue.








## METHODOLOGY

The research design for this study is a quantitative research method with the use of a survey design. A sample size of 537 undergraduates was randomly drawn from the nine universities situated within Anambra state, which include: Nnamdi Azikiwe University, Awka; Chukwuemeka Odumegwu Ojukwu University, Igbariam; Paul University, Awka; Madonna University, Okija; Tansian University, Umunya; Legacy University, Okija; Peter University, Achina-Onneh; University on the Niger, Umunya; and Shanahan University Onitsha. Google Form links were shared with a representative from each school who shared the same in various undergraduates' WhatsApp groups. In the end, a total number of 537 respondents filled out the online questionnaire. Data were analysed using descriptive statistics tables.

### Data Analysis

The researchers used a Google form survey to elicit data from the students by sharing links with various representative contacts. 537 students responded to the Google form. In order to find the answer to objective one, the following data were analysed:

**Table 1: Common Emojis Most Used by University Students**

Emoji	Frequency	Percentage
	236	43.95
	103	19.18
	34	6.33
	33	6.15
	17	3.17
	17	3.17
	13	2.42



❤️	11	2.05
😄	10	1.86
😂	10	1.86
👉👈	8	1.50
😠	6	1.11
💔	6	1.11
👉	5	0.93
👤	4	0.74
💪	4	0.74
🚶	4	0.74
🔥	3	0.56
💯	3	0.56
✅	3	0.56
👤	2	0.37
❌	2	0.37
😞	1	0.19
🙄	1	0.19
😏	1	0.19
<b>Total</b>	<b>537</b>	<b>100</b>










Source: *Fieldwork 2024*

Table 1 shows the human face emojis as the most common emojis used among undergraduates in Anambra state as those emojis topping the table are all human face emojis while non-human emojis are mostly used by a few students.

**Table 2: Encoded Expressions Inherent in Sent Emojis**

Emoji	Encoded Expression from Sender
😄	I am laughing
😂	I am laughing so loud; I am laughing and rolling on the floor.
😂	I am laughing and teary.
😊	I am smiling
🙏	Please, thank you
👍	Good, great
😭	I am crying
❤️	Love
😘	Blown kisses
😍	I feel loved
👉👈	Pointing up and down
😠	I am angry
💔	I am heartbroken
👉	Exactly, Apt





	Hey God!, I am in trouble.
	I am strong, I am equal to the task.
	I am running away; I am out of here.
	Happy and dancing
	I am sweating
	Excuse me
	Not willing
	Fire, hot
	Very correct, right

Source: *Fieldwork 2024*

Table 2 reveals the various intended expressions of students while they send out the common emoji they use on social media.

**Table 3: Level of Decoded Emojis versus Encoded Expressions Inherent in Sent Emojis**

Emoji	Encoded Expression	Decoded Expression	
	I am laughing	Laughing	1
	I am laughing loud; I am laughing and rolling on the floor	Laughing out loud	1
	I am laughing and teary	Laughing so hard	1
	I am smiling	Smiles	1
	Please, thank you	Amen, begging	0.5
	Good, great	Agreed, good job, keep it up	1
	I am crying	Crying badly	1
	Love	Love	1
	Blown kisses	Kisses	1
	I feel loved	Blind with love	0
	Pointing up and down	Points in a direction	1
	I am angry	Angry	1
	I am heartbroken	Heartbreak	1
	Exactly, Apt	Okay	1
	Hey God!/ I am in trouble	Stretches in tiredness; tired	0
	I am strong, I am equal to the task	Strong	1
	I am running away; I am out of here	Running away	1
	Happy and dancing	Excited	1
	I am sweating	Tired	0
	Excuse me	It is me	0
	Not willing	Rolling eyes	0
	Fire, hot	Hot, Exceedingly good	1
	Very correct; right	Very correct	1

Source: *Fieldwork 2024*





Table 3 indicates a high level of encoding and decoding of shared expressions using emojis among university students. 16.5 out of 23 common emojis among respondents were well decoded, which is about 72%, while just 5.5 which is about 28% were misinterpreted.

## DISCUSSION OF FINDINGS

The study revealed the common emojis university students in Anambra State mostly used. This implies that university students in Anambra State who are part of the youth in Nigeria use emoji frequently since they are categorized as those who frequent social media, (Uche & Obiora, 2016). This confirms the study of Hochschild (2021) who noted that emojis are commonly used to simplify an emotional expression or to enrich user experience and emojis are being preferred by a large number of internet users. Hochschild further stated that emojis became an interesting component of data processing applications they are embedded into many applications developed for smartphones which the majority of the university students use. So, they are now often being used and shared by a large number of users from different demographic and cultural backgrounds in the world including students in various tertiary institutions.

The top 4 most used emojis are human face emoji with sort of smiley faces which expresses emotions. This may imply that university students in Anambra State expressed happy emotions most which may be attributed to the fact that they are mostly in a happy mood while they use emojis. This conforms with the study of Boutet et al. (2021), which revealed that emojis are primarily and mostly used to signal attitudes and emotions.

Furthermore, this study showed the inherent messages encoded by university students when sending emojis which showcase different emotional expressions shared among the university students ranging from laughter, anger, heartbreak, appreciation, sadness, actions, direction, et cetera. This result conforms with the expression of Donovan (2022) who stressed that emojis allow us to express various emotions in a way that words alone cannot achieve. Donovan further expressed that emojis have become prevalent tools of communication on social media platforms, allowing decoders and encoders to interact and connect well. Also, in tandem with Wolf (2020) who acknowledged that emojis are more than just cute pictures; they have evolved into a universal language, understood by people of different cultures, languages, and backgrounds. With a wide range of options, from smiling faces to thumbs up, hearts, and even quirky animals, emojis provide a shortcut to convey emotions that words alone often struggle to capture.

From the study, it is established that there is a significant encoding–decoding as most inherent encoded meanings that were exchanged among the respondents were meaningfully decoded. However, insignificant misinterpretation recorded may be due to what Mustapha (2024) pointed out that different platforms translate and depict emoji differently depending on how each company interprets Unicode's designs. Emojis can look different on various devices, so there is a risk of miscommunication.



## CONCLUSION

Emojis have come to stay. They have become common in the modern communication landscape. In these contemporary times, the encoding and decoding of messages by students continue to evolve. Expressions have increasingly become steeped into short and yet profound language hence, the use of emojis to express joy, sadness, agreement, appreciation, rejection, argument, support, and loss, among others. Even beyond informal and interpersonal communication scenarios, emojis have become the new communication cum language pattern in online environments, especially among young digital natives of different generations such as Generation X, Y, and Z up to Generation Alpha. Only time would tell how long this would last.

## RECOMMENDATIONS

Arising from the findings are the following recommendations:

1. Academia should encourage the use of emojis since most students can correctly decode emojis encoded messages.
2. Emojis are incorporated into daily communication, especially in interpersonal communication among students; thus, instituting ethical use should be paramount to avoid misuse and abuse in their usage.
3. Emojis typologies and use should be part of the non-verbal communication courses taught in tertiary institutions in Nigeria, especially in the faculty of communication and media studies.
4. Emojis should be part of the general communication portfolio not just for students but for the larger society both in formal and informal settings as it helps to curtail the incidence of verbosity and time-wasting long handwriting.

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