

## EMOJIS AS NOVEL WAY TO COMMUNICATE USING WHATSAPP

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### ABSTRACT

This study sought to discover the possible effects of emoji use on WhatsApp communication. Students make use of WhatsApp groups when studying and the correct use of emoji use is thus important in teaching and learning. The rise in emoji use is noticeable in online conversations; emojis are often used in combination with text to communicate emotions and context and has become a universal language in South African informal conversations, especially on social media. Messages are characterised using emojis for that extra impetus or effect, yet they can lead to confusion between the sender and the recipient of the text message. In this mixed-methods study a questionnaire was used to test responses ( $n = 50$ ) to a selection of emojis and twelve (12) participants participated in semi-structured interviews on their perceptions of emoji use. It was found that most of emoji users understood the true meaning of these pictures and agreed with the denotative meaning. However, certain emojis were misinterpreted and emoji education seems necessary to inform Internet users of the emoji meanings.

**KEYWORDS:** Emojis, WhatsApp communication, social media, perceptions.

### INTRODUCTION

Emojis are digital visual drawings that often accompany our daily exchange of WhatsApp texts, emails and even SMS texts; they are a valuable way of communicating and adding different dimensions to the messages. Emojis have altered the way people communicate as these visual presentations have become a popular enhancement of text messages, particularly when simple words in regular conversations tend to be misunderstood (Gibson, Huang & You, 2018:1). Leonardi (2022:22) regards emojis as a universal language and the lingua franca of the digital age. Crombie (2020:1) asserts that tutors cannot ignore emojis as they have become part of lecturer-student communication and the benefits of using these pictographs must rather be explored than avoided.

Even though these colourful additions were only recently transformed into real emojis which may be used by smartphone users, they have become part of general WhatsApp communication. People have become obsessed with emojis and as the ‘face with tears of joy’ emoji was the most used emoji globally in 2015, it became the Oxford Dictionary’s Word of the Year (Leonardi, 2022:40). Shah and Tewari (2021:113) conducted research on the use of emojis in communication and claim that there is a dearth of scientific research on the implications of using emojis. The focus in this study was on the use of emojis in WhatsApp communication and the relevance thereof for teaching and learning. The participants were university students who could reflect on their experience regarding emoji use.

## **RESEARCH QUESTIONS**

The following research questions guided the study:

- What is the effect of emojis on verbal, written WhatsApp communication?
- How correctly are emojis interpreted when comparing interpretations to dictionary definitions?
- Which guidelines can be arrived at to assist WhatsApp users to communicate effectively when using emojis?

## **OBJECTIVES OF THE STUDY**

The objectives of the study were to investigate the effect of emojis on WhatsApp communication, explore how emojis are interpreted and to provide guidelines when using emojis in WhatsApp conversation.

## **LITERATURE REVIEW**

Semiotics is the study of signs and symbols as it involves the use and understanding of how individuals interpret visual cues. De Saussure (1983:4) is known as the father of semiotics by distinguishing between the sign and the signified. Peirce (1931:3) identifies signs or objects that represent something that may be different from the obvious significance or denotation of the sign; for example a fist can be interpreted as aggression or a sign of solidarity in a particular context. He notes that all cognitions have a sensual element that supports interpretation. His approach is phenomenological as he asserts that our awareness of an object invites interpretation, yet he claims that perception is subject to limitations and predictions regarding general events and context beyond visible facts (Radford, n.d). This theory is important since emojis are signs that are interpreted and received by interpreters; these pictograms are thus linked with semiotics. WhatsApp users use signs and symbols increasingly to sidestep text and to share messages using visuals. Emoji-use as novel language, however, has its challenges in that the symbols must be globally understood since there could be miscommunication between persons who interpret visuals differently (Nam, 2017:1, Leonardi, 2022:42). Gibson, Huang and Yu (2018:1) assert that emojis can be linked with the field of semiotics since these signs have many potential meanings, which create a complex domain of interpretation. When emojis have different meanings for the sender and the recipient, WhatsApp users of academic groups may become confused, which can lead to miscommunication and a breakdown in interpersonal connections. Emojis can take up valuable time, and sometimes the focus is on the emojis rather than the main point of the message (Veytia-Bucheli, Galán, & De Ávila, 2020).

## **EMOJIS IN COMMUNICATION**

The first reported use of emojis occurred on discussion forums in the 1980s, where a smiley ‘J’ was incorporated to indicate that the entire message was a joke (Kaye, Malone & Wall, 2017:66). These pictographic signs were first introduced to mobile ‘phone users in Japan in 1999 but were not made available internationally until the computer and smartphone company Apple introduced emojis onto their keyboard in 2011. Its rival company, Samsung, only followed suit two years later.

The word emoji stems from the Japanese language which means “picture character.” It must be noted that emojis and emoticons are two different concepts. Emoticons and emojis are

distinguished in that emoticons are created forming short character strings to portray various facial expressions (for example :) for a smile) whereas emojis are pictures showing facial expressions (for example 😊) (Coburn, 2009:4). The plural for emoji can be ‘emojis’ or just ‘emoji’ as stated by the Cambridge English dictionary (2022); both “emoji” and “emojis” are listed as options.

Shah and Tewari (2021:113) conducted research on the use of emojis in communication and claim that there is a dearth of scientific research on the implications of using emojis. They reveal that social media platforms, linguistic patterning, social relationships, emotional connections, and the level of formality impact emoji usage. According to them social behaviour is influenced and expressed through emoji use to the extent that the use of these pictographs can affect norms in society. Online conversations, mainly WhatsApp conversations, seldom make meaning nowadays without the inclusion of colourful pictographs to cement the statement being made (Duane 2019:1).

Emojis have the potential to develop as a standalone language, causing users to explore new ways of communicating that are effective, can add tone and save time. According to Duane (2019:1), emojis are intended to cross language and technological barriers; anyone, regardless of country of origin, language spoken, or mobile phone used, can understand emojis, but at the same time, misunderstanding is possible. Veytia-Bucheli, Galán, and De Ávila (2020) conducted research on the role of emojis in WhatsApp messages among tertiary students and found that the interpretation of emojis among students can cause confusion and can impact relationships negatively when they are not interpreted in the same way by the parties involved. Students use emojis extensively in their WhatsApp communication when communicating on learning platforms where they discuss learning content.

Emojis are seminal works of a nuanced, rebus-style language, used to inject emotion, creativity, and ambiguity - in other words, 'humanity' - into computer-mediated communications (Kirley, 2018:1). They have long outgrown their simple and shallow function as text decorators; they are iconic, visual representations of an idea, entity, feeling, status, or event that are used in digital messaging and social media alongside or instead of words. They could be referred to as today's hieroglyphics (Evans, 2015:1).

Holtgraves and Robinson (2020:2) examined the effect of face-threatening emojis and indirect replies. They found that emojis can facilitate comprehension of messages. They assert, however, that little is known about the understanding of emojis and the processes involved in digital communication. They are of the view that future research can facilitate the understanding of the boundary conditions for this effect.

These recent innovations and online developments may have equipped users to communicate more effectively, however there are always stumbling blocks in the messaging process, since there are also dialects of emojis. For instance, the image of two hands held together means “praying or hoping”, in the west but it is read as “please or thank you” in Japan (McBain, 2017:38).

Since the language of emojis develops fast, users need to stay abreast with the latest “text-speak” or else the message conveyed could very well prove to be indecipherable or useless. The ambiguity behind the use of less well-known emojis is likely to cause confusion in written communication (Kaye, Malone & Wall, 2017:66; Leonardi, 2022:2). Since emojis have

developed dialects, the recipient of the message accompanied by an emoji might encounter problems when interpreting the context (Kaye, Malone & Wall, 2017:67).

In terms of language development, the overuse of emojis on WhatsApp could lead to a deficit in grammar and loss of semantic knowledge, because words are not used anymore (Evans, 2018:2). The use of emojis heralds an innovative way of communication that requires research to understand the effects on communication and to support users to use them appropriately as part of WhatsApp communication (McBain, 2017:40), particularly when participating in work- or education-related chat groups.

## **WHATSAPP COMMUNICATION**

WhatsApp stems from the English phrase "What's up?" indicating "What is new?" It is now an instant messaging application primarily for smartphone users. It enables users to interact using images, videos, and audio or written messages, by connecting with the Internet or using data through Wi-Fi providers. WhatsApp has emerged as a popular alternative to using the regular short message service, or SMS messaging, for which one needs so-called airtime. This becomes expensive when travelling overseas, since one cannot use freely available Wi-Fi for SMS messages (Barhouni, 2015:222).

The number of WhatsApp users globally exceeded the figure of one billion in February 2016. WhatsApp exerts a compelling influence on users' lives, culture, and society and its impact is considerable (Kumar & Sharma, 2016:53). The fast-growing preference for WhatsApp as a channel of communication between friends and family has been displayed by a survey conducted in India where it was discovered that WhatsApp users in countries like India moved from all Social Networking Sites (SNSs) to embrace WhatsApp as their first choice (Kumar & Sharma, 2016:53).

The story of how WhatsApp came into existence is a financially successful one. WhatsApp, as we know it today, was created by Brian Anton and Jan Koom, who both worked for Yahoo. Major Sequoia, one of Silicon Valley's most popular investor-holding companies, supported this innovation with a \$8 million investment, and the two individuals launched WhatsApp in 2009. Since its inception, the application has been a huge success, assisting users in staying connected and supported (Barhouni, 2015:222).

## **WHATSAPP COMMUNICATION IN EDUCATION**

Veytia-Bucheli, Galán, and De Ávila (2020) assert that emojis as cutting-edge communication tools are present in education, particularly in higher education, due to their widespread use in society. The principle of cooperative learning contributes to the development of various kinds of expression and communication among students in the university setting.

Reem Al-Zou'bi and Fathi Shamma (2021) maintain that emojis are central to the meaning of message reception also in educational settings. Since emojis can express specific meanings beyond written communication, they have now emerged as a language that cuts across cultural boundaries.

However, emojis lack the fundamental language functions that enable profound and intricate human communication due to their lack of norms and restricted expressive connotations. On

the other hand, they can successfully bridge expressive voids, significantly simplify legible language, and provide a new perspective on written discourse. In one study it was found that instructors at tertiary level used emojis in their communication to students (Abdullah, 2019). Li and Yang (2018) found that instructors used the heart emoji in communication with students even though it could have the additional meaning of romance. Another example was the thumbs-up emoji which was used for positivism or to indicate yes or agreement. The winking face was not preferred as it could imply that a lecturer was flirting with a student. The use of emojis in communication and even for educational purposes has recently emerged as a relevant topic of investigation.

## RESEARCH METHODOLOGY

### Design

Researchers employ research design and research methodology to solicit meaning from participants and respondents. Methodology and data are closely interwoven. The methodology to be used to investigate a research problem must consider the nature of the data to be collected to solve the problem (Ivankova, Creswell & Plano Clark, 2020:329). Research design is the framework or blueprint that the researcher uses to seek answers to research questions. It outlines the research product and provides information regarding the paradigm and the type of research (Niewenhuis, 2020:80; Leedy & Ormrod, 2013:94). In this case a mixed-methods exploration was used to determine participants' perceptions of emojis (the qualitative phase that used interviews) and to test the interpretation of emojis (the quantitative phase that used a questionnaire).

The pragmatic research paradigm was chosen for this study. Morgan (2014:1046) holds that a pragmatist research paradigm is best suited for mixed-methods studies since it involves immediate practicality for issues such as research design. Since the goal of this theory was to collect data and therefore to build the analysis as the study progressed, it was imperative to get into the deep reasoning of the respondents' and participants' experiences (through semi-structured interviews) in addition to the overview of their interpretation of a selection of emojis (through a questionnaire). Semi-structured interviews were conducted with 12 participants and 50 questionnaires were completed by respondents.

The study was approved by the Faculty Research Ethics Committee of the Tswane University of Technology, with reference FCRE/APL/STD/2018/09.

### INTERVIEW PARTICIPANTS

A description of the participant characteristics is included in a report on a scientific study involving human subjects to provide readers with details about the quantity and kind of study participants, thereby making it clear to whom the study's conclusions apply. It also aims to cast a light on the limitations of the findings (Enago academy, 2019).

The background of the participants is thus relevant since they provide more details about the ethnicity, gender and education of the participants. In reporting on the data, code names were used to protect the anonymity of participants. For example, the code name *P1M* is short for *Participant 1 Male* and it represents the first participant. There were 12 interview participants who resided in the Soshanguve area. Four of the twelve participants were female and eight were males. All participants were educated and two held a postgraduate degree, six had a degree in language practice and four had a diploma. Apart from P2M, all other participants

were within the age range of 25-35. There were 11 African-language speaking participants, two were Afrikaans speaking and one was English-speaking.

The ethnicity of the multicultural group of 50 respondents who completed the questionnaires was as follows: 1 Tshivenda; 1 isiXhosa; 2 isiNdebele; 2 SeSotho; 3 SiSwati; 4 Setswana; 6 English; 6 Northern Sotho; 11 Xitsonga; and 12 isiZulu. Two respondents chose the option 'Other'. These people live in and around Atteridgeville, Mamelodi; Soshanguve; and Tshwane in Gauteng province. Most of the respondents were aged 25-31 (37 respondents); 35-45 (2 respondents); 21-24 (11 respondents).

## FINDINGS

### Semi-structured interviews

The interviews were semi-structured to allow space for participants to elaborate. These were conducted during the COVID-19 lockdowns via WhatsApp calls. This also ensured that one-on-one responses could be extracted. A voice recorder was used to record the audio from the interviews and this was transcribed afterwards. Purposeful sampling was used (Niewenhuis, 2020:136). The transcriptions were analysed and reduced to themes. Thematic analysis is a qualitative data analysis method that involves reading through a data set (such as transcripts from in depth interviews or focus groups) and identifying patterns in meaning across the data during the semi-structured interviews (Niewenhuis, 2020:137).

The themes that emerged from the semi-structured interviews were:

- Theme 1 Emojis save time;
- Theme 2 Emojis as a new way of communication in education;
- Theme 3 Emojis as a hindrance to communication;
- Theme 4 Emojis and racial stereotypes; and
- Theme 5 The younger generation and emojis.

### Theme 1: Emojis save time

Participants were of the view that using emojis saved time; instead of typing a reaction in words, an emoji could be included in the place of a seemingly long word, or a word not understood by the receiver of the message. Substituting a word for an emoji helps the sender of a message to save time. It contributes to a faster more effective way of communicating and adds emotional support since the emojis carry emotive nuances. P8M had this to say about the use of emojis as a time saver:

*I don't use emojis a lot but when I'm typing long messages, I do choose to use them to save time.*

While the first participant reported that he used emojis to save time by substituting words with an emoji, the second participant used emojis to clarify words which might come across as confusing to the recipients of his WhatsApp messages, which potentially could save him the time he would have to spend explaining his terminology. P2M emphasised that emojis help him avoid misunderstanding which promotes sound communication. He said:

*I find myself caught up in having to clarify simple words for some people so I use emoji to avoid misunderstanding and conflict which can go on for hours and an emoji can reduce tension on more life problems. So, it is always cute to me to use a smiley emoji, or my favourite one is to sparkle. I love that one.*

The participants come from an era of the written form of English and letter writing to communicate their thoughts. They have been fast-forwarded to the millennium of instant messaging. They found a way of minimising time spent on typing full messages, by including emojis to communicate their messages to their recipients in just a fraction of the time. The participants were all educated and indicated that they used emojis on WhatsApp groups when studying. In these two instances P8M saved *immediate time* on typing, while P2M seemed to feel that he can avoid conflict and save *future time* by softening his message when using emojis.

## **Theme 2: Emojis as a new way of communication**

Gilles Doiron (2018:11) states that thoughts and information are communicated mostly through visual means, especially in social network environments. Emojis are becoming more and more common in online communication, and educational communication is not exempt from these types of communication and must adapt to stay relevant.

The participants in this study discovered that emoji use brought a sense of convenience when communicating informally or formally regarding work or personal matters. The readily available emojis on the mobile 'phone keyboard provides the senders of the instant messages with a new way of communicating with their peers at tertiary institutions on WhatsApp, without using words. It affords them the opportunity to substitute words with a befitting emoji. P4M stated that:

*I use emojis sometimes to make my point heard, like I use them to emphasise my point. I would type my message in full and then add an emoji at the end of the message just to actually add a point of emphasis, so that there is no misunderstanding, and it also grabs attention when sharing information also regarding academic topics.*

P2M added that:

*Well sometimes I actually like when I'm trying to tell somebody what I mean, so I put an emoji, just to show what I mean, because sometimes people become confused, so the emoji tells you what they mean, and it helps to emphasise a point. Yes.*

P3M further posited that he uses emojis to describe his feelings which he cannot vocalise, but for which an emoji would convey the intended meaning. He said:

*Well, I use emojis to mostly emphasise how I feel, and just looking at the mostly used emoji that I use to describe how I feel reveals that they help me to put across and emphasise my point. Okay, so that will be to add emphasis to what you are saying.*

In conversations there are moments where messages are sent out and they do not necessarily communicate the intention of the sender. Participants reported that emojis acted as clarification and to emphasise the intended meaning. The participants also resorted to using these pictographs to get their messages across without any misunderstanding (Kaye et al., 2017:66).

Often, there is a time where actual words communicate the message sufficiently, but the emojis are there to subtly express inner thoughts, while being creative or adding that personal touch to text messages. P6M stated:

*I use emojis, because I feel that certain things one can write in a text and one can't really show one's emotions and with emojis, one can do that. So that's why using emojis help one express oneself better without using words.*

P5M resists the use of emojis as a new type of communication and identified the negative aspects of using emojis such as using emojis out of context. He said:

*Emojis don't really say much. It's just an expression of how the person is feeling at the moment. And, communication-wise, it hides the true meaning of communication, especially the written form of conversation. And most people use emoji out of context.*

Mody (2015:1) explored and discovered how emojis enhance online conversations, and how the use of emojis helped participants during their WhatsApp messaging moments. Young people find themselves resorting to emoji use; some add the emoji to smoothen the messages and to add a personal touch. Mody (2015:2) contends that emojis give users what they already have with spoken/sign language, viz.: an emoji that adds tone to a text, which would be possible to detect in a face-to-face conversation. They serve as a facial expression in a text; emojis give senders a way to enrich conversations in the visual medium. The added emojis like the smile from a friend on the other side of the screen, was viewed as a cheeky sign at the end of the message by P9F, but she also regarded emoji use as a sincere form of effort, using an emoji to protect the sender from coming across as a domineering person.

P3M states that:

*Personally, I also use emojis on work-related tasks, at times, like internal structures because of a temporary view. You can give someone a task, and then, it might seem like you know you are commanding them to do something, but we add an emoji, such as a big smiley face and the smiley face, adds a lighter note to it. It helps students to communicate more efficiently.*

Gilles Doiron (2018:12) states that emojis as part of lecturer-student communication is required since it forms part of constructivist teaching and learning. Lecturers need to engage with their students in a user-friendly yet efficient way. Emojis serve this purpose as they enhance communication and help to build relationships.

P9F said:

*I recently completed my diploma in language practice and emoji are often used in WhatsApp groups. They help to alleviate harsh comments and reassure others that you mean well when communicating on work.*

### **Theme 3: Emojis can be a hindrance to communication**

The ambiguous nature of the emoji could lead to confusion and embarrassment because users can look at an emoji and interpret it differently (Mody, 2015:1). The overuse of these pictographs brings about the convenience of substituting actual words with emojis. However, as with constant use and veering off from using full words to communicate messages across WhatsApp, the receiver can misinterpret the message. In addition, it emerged from the



participant responses that overuse of the emoji does and can potentially lead to a decline in correct language, particularly with regards to grammar. P11F is of the opinion that overusing emojis can restrict language development.

P11F said:

*Emojis can hinder language development. Because if one just uses emoji, then that would mean that one is not growing in language use, because for language, one needs vocabulary. Emoji use hinders learning new words.'*

The participants in this study voiced their concerns and shared their experiences as well as the ramifications that surfaced because of the overuse of these pictographs. P1M explained that senders of messages may in the course of time even lose the ability to spell words in full, which is detrimental to a speaker of a language, not only English, but language in general. Besides the decline in using detailed vocabulary, Blogger (2018) has also expressed the concern that, overusing emojis can threaten the written form of English and overusing emojis could unfortunately shrink one's vocabulary. Words are substituted by emojis in text messages. Vocabulary is also in danger of shrinking, as users have seen words such as "laughing out loud" reduced to 'LOL' as acronym, as opposed to writing the full phrase. The English language might not go into attrition, but a smaller vocabulary just might be inevitable.

#### **Theme 4 Emojis and racial awareness**

The choice of skin colour is another phenomenon that has created racial awareness, mainly with recent updates on the emoji keyboard.

In response to the question about whether racial stereotypes are prevalent in WhatsApp discussions, P3M said:

*Yes, I think so; most Black people like using the brown fist for political statements or as a form of encouragement to support their fellow man.*

Trends like *Black Lives Matter* have also brought this to the fore. It goes to show emojis are used by different racial groups, to communicate a different message focusing on a certain colour of the hand or fist. Racial groups have chosen certain emojis as an identity symbol. According to Rahman (2018) as much as the emoji keyboard has evolved in recent years, most notably 2015, minority racial groups felt a sense of representation only when certain emojis were updated and they could pick out emojis as a way of symbolising their identity. Users of African and African-and-American descent have welcomed the new additions, as they had long felt left out, and the updated emojis with variations of skin tones attempt to represent a wide variety of racial groups which seems to be appreciated by various communities.

#### **Theme 5: The younger generation and emoji use**




Rapid emoji use, a recent phenomenon, is a smartphone manner of texting, which could be an urban trend. Participants reported that the younger generation, especially learners at school, are more inclined to be informed about emojis. P8M said:







*I started using my iPhone in Grade 8, and then I was not exposed to cell phones and technology, so you might find that students in private schools had tablets, since preschool. They can use tablets effectively. You know I only came to know the movie Frozen in 2017 and yes, a child from the private school is likely to know and understand emojis more effectively than a child in a government school or even adults. In my experience exposure helps users.'*








## QUANTITATIVE DATA


A questionnaire was designed selecting a few examples of emojis and respondents had to choose the meaning from what was provided in Table 2 to test if the respondents knew the meaning of emojis as indicated in the emojiopedia. Fifteen emojis and responses were included.

**Table 2: Quantitative data on emoji use**

EMOJI	OPTIONS	PERCENTAGES Respondents' emoji interpretations of questionnaire.	CORRECT MEANING ACCORDING TO THE EMOJIPEDIA (Broni, 2022) ( <a href="https://Emojiopedia.org">https://Emojiopedia.org</a> )
1. 	1. The speaker is crying because he/she is emotional and sad. 2. The speaker is excited and looking forward to the holiday. 3. The speaker is laughing hysterically. 4. Other.	1. 4% 2. 84% 3. 6% 4. 6%	<p><i>“Face with tears of joy.</i></p> <p><i>A yellow face with a big grin, uplifted eyebrows, and smiling eyes, each shedding a tear from laughing so hard. Widely used to show something is funny or pleasing.</i></p> <p><i>(Sheds two tears and tears tilt to the right on most platforms. Often conveys hysterical laughter more intense. than a face with tears).”</i></p> <p><i>January 2022, the face with tears of joy returned as the top emoji on the Twitter platform</i></p>
2. 	1. He couldn't be prouder looking at his results yesterday. 2. After such a long a day, the hard work all seemed a worthy exercise. 3. My nerves were on edge, but it is over. 4. Other.	1. 20% 2. 24% 3. 46% 4. 10%	<p><i>“Grinning face with smiling eyes but with a single blue bead of sweat, usually over its left eye.</i></p> <p><i>Intended to depict nerves or discomfort but commonly used to express a close call, as if saying Whew! And wiping sweat from the forehead.”</i></p> <p><i>(This emoji depicts an almost nervous situation, or a sigh of relief).</i></p>
3. 	1. A feeling of general pleasure was conveyed. 2. The amount of indifference she displayed when she saw the group of girls could be detected. 3. The person is bored. 4. Other.	1. 62% 2. 18% 3. 8% 4. 12%	<p><i>“Grinning face.</i></p> <p><i>A yellow face with simple, open eyes and a broad, open smile, showing upper teeth and tongue on some platforms. Often conveys general pleasure and good cheer or humour.”</i></p>

 4.	<p>1. He was accused of having kept the secret. 2. The speaker chose to keep his/her comments to himself/herself about the scandal. 3. The person decided to fix the zipper. 4. Other.</p>	<p>1. 6% 2. 90% 3. 0% 4. 4%</p>	<p><i>“Zipper-mouth face. A yellow face with simple open eyes and a closed zipper for a mouth. Meaning widely varies, but commonly conveys a secret or that someone will keep one (e.g. My lips are sealed). May also be used to tell someone to stop talking) (e.g., Zip it! or shut up now).”</i></p>
 5.	<p>1. That sly smile could only mean trouble. 2. One squinting look and the speaker knew what they were thinking. 3. The outcome was exciting filled with laughter. 4. Other.</p>	<p>1.16% 2. 40% 3. 34% 4. 10%</p>	<p><i>“Grinning squinting face. A yellow face with a broad, open smile and scrunched, X-shaped eyes. Often conveys excitement or hearty laughter.”  Eyes may say Squee! Or Awesome!”</i></p>
 6.	<p>1. The cries could be heard clearly. 2. She laughed until tears rolled down her face. 3. Hearing such cries we had no choice but to rush in there and console her. 4. Other.</p>	<p>1. 18% 2. 10 % 3. 58% 4. 14%</p>	<p><i>“Loudly crying face. A yellow face with an open mouth wailing and streams of heavy tears flowing from closed eyes.  May convey inconsolable grief but also other intense feelings, such as uncontrollable laughter, pride or overwhelming joy.”</i></p>
 7.	<p>1. She stood there feeling happy. 2. She was surprised. 3. She was in shock. 4. Other.</p>	<p>1. 0% 2. 32% 3. 68% 4. 0%</p>	<p><i>“Face with open mouth. A yellow face with small, open eyes and a large, round mouth, slack with surprise or shock, as if saying Wow!  May convey feelings such as awe or disbelief, often milder or more ironic in tone than Face screaming in fear.”</i></p>
 8.	<p>1. They all could not believe the scandal he caused. 2. They were being silly hence the stern warning. 3. The speaker is only kidding. 4. Other</p>	<p>1. 10% 2. 44% 3. 32% 4. 14%</p>	<p><i>“A yellow face with small, open eyes and a big grin, playfully sticking out its tongue.  Can variously convey a sense of fun, excitement, silliness, cuteness, happiness, or jesting, as if saying just kidding.”</i></p>
 9.	<p>1. She decided to make everyone believe she was happy to see them. 2. She was very happy. 3. She feels very excited. 4. Other.</p>	<p>1. 56% 2. 30% 3. 4% 4. 10%</p>	<p><i>“A yellow face with simple, open eyes and a thin, closed smile.  It means slightly happy or this is fine.  Conveys a wide range of positive, happy, and friendly sentiments. Its tone can also be patronizing, passive-aggressive, or ironic, as if saying This is fine when it’s really not.”</i></p>

 10.	1. She comforted the people. 2. She is looking forward to the jazz at the artist festival. 3. She looked really pleased and excited. 4. Other.	1. 8% 2. 40% 3. 46% 4. 6%	<p><b>“A yellow, smiling, hugging face with open hands.</b></p> <p><i>It may be used to offer thanks and support.</i></p> <p><i>Due to its hand gesture, often used to represent <b>jazz hands</b>, indicating such feelings as <b>excitement, enthusiasm</b>, or a sense of flourish or accomplishment.”</i></p>
 11.	1. I’m watching you: do not bully. 2. The Illuminati watches over its followers wherever they may be. 3. I am so looking forward to seeing them. 4. Other.	1. 46% 2. 6% 3. 42% 4. 6%	<p><i>“A single human eye, looking forward. This eye is in a different shape and style to the pair of eyes, which are more rounded, and looking to one side. When used in bubble it represents anti-bullying.”</i></p>
 12.	1. The skies have cleared up after the storm. 2. The country had no choice but to unite and be one rainbow nation. 3. Gay people need to be accepted and respected, as it’s their right/ gay pride. 4. Other.	1. 12% 2. 14% 3. 58% 4. 16%	<p><b>“The colourful arc of a rainbow, as may appear after rain.</b></p> <p><i>Commonly used to express gay pride. Also commonly used to convey various feelings of love and happiness. See also Rainbow flag.” (Used to depict gay pride).</i></p>
 13.	1. I am saying a prayer for you. 2. Thank you. 3. The speaker is delivering a message of hope. 4. Other.	1. 56% 2. 10% 3. 28% 4. 6%	<p><b>“Two hands placed firmly together, meaning please or thank you in Japanese culture. A common alternative use for this emoji is for prayer. Using the same gesture as praying hands.”</b></p>
 14.	1. I see you are going to enjoy a tasty meal. 2. I see you are thinking of enjoyable activities with your partner. 3. I see you are a real fool. 4. Other.	1. 10% 2. 88% 3. 0% 4. 2%	<p><i>“A long bulbous, bright purple eggplant, or aubergine in British English, shown with a leafy stem.</i></p> <p><i>Widely used to represent a penis.”</i></p> <p><i>Due to its phallic use, the hashtag # was banned on Instagram’s search function.</i></p>
 15.	1. Yes, peaches are beautiful. 2. I am looking forward to our meal. 3. I am looking forward to feeling you close. 4. Other.	1. 2% 2. 0% 3. 88% 4. 10%	<p><i>“The fleshy, pinkish-orange fruit of the fuzzy peach, shown with green leaves and sometimes a stem.”</i></p> <p><i>“Thanks to its distinctive cleft, the emoji is most commonly used for “buttocks.” In certain contexts,</i></p>

			<i>the peach emoji may refer to impeachment (misconduct)."</i>
 16.	1. A snap-streak. 2. Everybody was shocked when they saw the damage caused by the fire. 3. She is so attractive and she attracts attention 4. Other	1. 0% 2. 6% 3. 86% 4. 8%	"A flame as produced when something is on fire. May be used to represent various types of bangs, explosions, or crashes. Like fire, commonly used to represent something is excellent or exciting in some way. It can represent: Flame, hot, lit or snap streak. Also used for metaphorical expressions including slang for hot as in attractive or lit to depict excellence." (The various platforms depict it by changing the shape a bit. This emoji is the one depicted by Apple).

### A reflective analysis of quantitative findings

The quantitative data were analysed by counting the votes for the options per emoji given as part of the questionnaire and personal interpretation. The emojis were chosen due to their popularity as indicated in the emojiopedia (Broni, 2022) and to indicate how certain emojis can be misinterpreted. Fifty (50) respondents from different demographics in terms of age, residence, racial and ethnicities and different racial and cultural backgrounds participated in this quantitative research. The table above indicates the number of the respondents and demographics. Fifty (52) questionnaires were emailed to the participants, and 50 were successfully completed. the respondents had to select the closest possible interpretations to the real meaning of the given emoji.

#### Emoji 1: The grinning face

Popular choice: "The speaker is excited and looking forward to the holiday (84%)". The largest number of respondents opted for this explanation of the emoji. The respondents' majority choice was inaccurate, as 84% of them selected "looking forward to the holiday." The respondents confused the excitement about the holiday with the hysterical laughter which is the true meaning as confirmed by the emojiopedia (Broni, 2022).

#### Emoji 2: Grinning face with smiling eyes but with a single blue bead of sweat

The popular choice was, "My nerves were on edge, but it is over," and it received a vote of 46%. This emoji depicts an almost nervous situation, a sigh of relief, which 46% of the respondents interpreted accurately. Interesting were the votes for option 1: "He couldn't be prouder looking at his results yesterday (20%)" and option 2, "After such a long a day, the hard work all seemed a worthy exercise (24%)." It emerged that even though 46% of the respondents opted for the intended meaning as indicated in the emojiopedia (Broni, 2022); there were substantial numbers who interpreted this emoji differently. Various interpretations were thus possible.

### **Emoji 3: Grinning face**

The popular choice was: “A feeling of general pleasure was conveyed (62%).” Sixty-two percent (62%) opted for the intended interpretation; there were however those who indicated boredom (8%) and indifference (18%). Moreover 12% opted for ‘other’ which shows that this emoji can also be interpreted according to personal context and emotional reaction. Akadal and Söyüç (2022:6-7) acknowledge the misinterpretation of emojis especially when used without text despite the perception that emojis are understood universally.

### **Emoji 4: Zipper-mouth face**

The popular choice was: “*The speaker chose to keep her comments to herself about the scandal (90%).*” The emoji refers to a secret which is being kept, as the text suggests that the speaker had chosen to remain silent, which 90% of the respondents chose. This is in line with the interpretation by the emojiopedia. This emoji was thus interpreted as it was intended by the emojiopedia. Still, 6% opted for another answer on the questionnaire that allowed them to say, “*He was accused of having kept the secret.*” Silence and keeping a secret are however very close in meaning. It can thus be deduced that in this instance the interpretation was almost accurate for all. The visual thus communicates the meaning effectively, since 0% interpreted the emoji literally as a zipper of a piece of clothing. The majority of the respondents understood the metaphorical meaning of the zipper as a symbol of keeping quiet about something.

### **Emoji 5: Grinning squinting face**

Option 2, “*One squinting look and the speaker knew what they were thinking,*” received a vote of 40%. The intended outcome was option 2 or 3 in accordance with the emojiopedia (Broni, 2022) explanation. The meanings indicated as options are very close and they are both embraced in the intended meaning, thus the majority of readers interpreted the emoji in accordance with the intended meaning.

### **Emoji 6: Loudly crying face**

Option 3, “*Hearing such cries we had no choice but to rush in there and console her,*” received a vote of 58%. Eighteen percent (18%) of the respondents opted for explanation 1 that incorporated audibility. The emojiopedia (Broni, 2022) admits the double interpretation of the emoji by including both uncontrollable laughter and grief in the intended explanation. The double meaning can however cause misunderstanding between receiver and sender because the receiver could assume that they were being mocked.

### **Emoji 7: Face with open mouth**

Options 2 (32%) and 3 (68%) received the most votes. It proves that the emoji can be interpreted differently as the emotions of shock and surprise are both included in the intended meaning in the emojiopedia. The word shock can be interpreted as an unpleasant feeling whereas surprise can have a more pleasant connotation. Different interpretations are thus possible when reading the emoji.

### **Emoji 8: A yellow face with small, open eyes and a big grin, playfully sticking out its tongue.**

Options 2 (44%) and 3 (32%) received the most votes. The reaction is in line with the emojiopedia explanation (Broni, 2022) including the possible interpretations of silliness or joking around. Disbelief because of scandal was however seen as an option and some respondents voted for option 1 (10%). It is interesting that 14% opted for ‘other’ as choice, which implies that the emoji can be used and interpreted in different ways.

### **Emoji 9: A yellow face with open eyes and closed smile**

Option 1 received a vote of 56% and option 2, 30%. Most of the respondents read the level of intensity correctly. The intended meaning includes happy/ not very happy in accordance with the emojiopedia (Broni, 2022). This emoji requires a moderately happy interpretation. The person's own mood can also cause them to opt for the more intense description. It emerged that discourse is indeed reading the meaning above and beyond the sentence level and interpreting the reader's background and emotional state.

### **Emoji 10: Hugging with open arms**

The intended meaning of jazz was not read in the emoji as proposed by the emojiopedia (Broni, 2022). The emojiopedia brings in the connotation of music. The readers interpreted it rather as option 3, with 46% choosing it as communicating excitement. Excitement is also mentioned in the emojiopedia. There is thus also a possibility of misinterpretation. The 40% vote for 'other' came as quite a surprise as the two intended meanings of the emojiopedia indicate jazz and excitement.

### **Emoji 11: A single human eye**

The human eye that seems to be roving around, could be mistaken for the Illuminati Eye of Providence, or so-called side-eyeing when there is little trust between two people. However, in this case, only 46% of respondents interpreted the emoji as intended by the emojiopedia, which is as a warning of anti-bullying. A substantial number (42%) also interpreted it more literally and linked it with meeting with the interlocutor. The eye was thus also interpreted literally. This bears testimony to the various possibilities of interpreting this emoji. Zheng and Horton (2021:11) contend that receivers of messages focus more on literal interpretation than the figurative meaning which can cause confusion. They assert that emojis are indeed more than whimsical additions to online texts. Emojis add sentiments and emotional support or meaning. This study supports the finding by Zheng and Horton (2021) to some extent, but it also shows that most of the participants detected the figurative meaning too.

### **Emoji 12: The colourful rainbow**

The rainbow or rainbow flag is commonly used to express gay pride. It is also used to convey various feelings of love and happiness according to the emojiopedia (Broni, 2022). Recently the rainbow has turned into the symbol of gay pride and all things concerning sexual orientation. Fifty-eight percent (58%) interpreted the emoji correctly and linked it with gay pride. Few respondents linked it with the political metaphor of the rainbow nation (14%). Only 12% linked it with the symbol of weather conditions.

### **Emoji 13: Two hands placed firmly indicating please or thank you**

The interpretation of the hands in prayer was also quite surprising as Africans differ from Japanese people in their interpretation of this emoji. The emojiopedia mentions that Japanese people see the hands pressed together as 'thank you'. The respondents did not link it to the other option included in the emojiopedia viz.: prayer. They interpreted it as communicating hope. This emoji was thus differently interpreted from the intended emojiopedia meaning. According to McBain (2017:38), the image of two hands held together means "praying or hoping" in the west, but it is read as "please or thank you" in Japan. The dialectal element in emoji interpretation is likely to confuse receivers of WhatsApp messages, as there are more than one interpretation.

### **Emoji 14: The eggplant**

With the emoji speak simple language rules have been altered. Regarding ambiguity, 88% of the respondents proved to be abreast with the appropriate usage of the eggplant emoji, as representing the male reproductive organ. Only 10% indicated the connotation with food. Respondents were thus quite informed about the symbolic meaning of the eggplant.

### **Emoji 15: The peach**

The fleshy pinkish-orange fuzzy peach is shown with green leaves and sometimes a stem. Thanks to its distinctive cleft, the emoji is most commonly used for “buttocks.” The respondents’ interpretation of the peach was also 88% in line with the emojipedia meaning, and it emerged that they knew what a peach symbolises. Respondents did not interpret the peach literally as a fruit. Only 2% regarded it is as fruit to eat.

### **Emoji 16: A flame**

The ever-growing use of emoji use has seen the most standard of signs take on a different meaning; fire no-longer stands for possible danger but has the connotation of a standard of beauty. Eighty-six percent of the respondents interpreted the reference to an attractive person correctly. They understood the figurative meaning. The possibility of a snap streak received 0% of the votes.

## **DISCUSSION**

It emerged from the study that students at university incorporate emojis in their communication whether for academic study group purposes or personal communication. It stands to reason that WhatsApp users and lecturers at university must take cognisance of the true meaning of emojis in accordance with the emojipedia so that they know how to employ emojis meaningfully. Misinterpretation of emojis can lead to serious misunderstanding (in some cases) and to confusion. Emojis are part of regular communication at tertiary institutions and can be successfully implemented. Participants in the study point to the way in which it saves time and softens the message in WhatsApp communication. However, as the results to the questionnaire show, some emojis are not understood in the same way by everybody and should possibly be avoided. In study groups emojis can be used by students to rate experiences and enjoyment of a lesson by selecting their favourite emoji. Using emojis correctly can add much to the enjoyment of learning and teaching even on academic WhatsApp groups.

## **CONCLUSION**

The study revealed that emojis can cause confusion in communication since certain emojis were interpreted literally according to the questionnaire responses. Even though emojis have become a new way of communicating on Internet sites and communication applications, e.g. WhatsApp, it is doubtful that they will substitute the traditional written form of language as they do not always convey the same message to different users. However, it would be naive to ignore the use and presence of emojis in the educational setting. Emojis are here to stay, and tutors may utilise them as pertinent, practical, and intentional complements to lessons by learning to speak emoji in the same contextual manner as their students. Emojis have indeed changed the way WhatsApp messaging is done; they save time and serve as add-ons for clarification, however as far as research has shown, and already existing scholarly works from the literature review, they do not seem to threaten the verbal language.



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