



A Linguistic and Semiotic Study of Emoji Colours in Digital Communication

Mena Ahmed Abdulqahar¹

College of Education, University of Al-Maarif, Ramadi, Iraq

Email: mona.ahmed@uoa.edu.iq

ORCID: <https://orcid.org/0009-0002-8187-5935>

Hazim H. AlDilaimy²

, College of Education, University of Al-Maarif, Ramadi, Iraq

Email: hazimaldilaimy@uoa.edu.iq

ORCID: <https://orcid.org/0009-0006-2001-6319>

Azhar Fadhil Shallal³

Ibn Sina University of Medical and Pharmaceutical Sciences, Baghdad, Ira

Email: Baghdad, Iraq

Email: azhar.fadhil@ibnsina.edu.iq

ORCID: <https://orcid.org/0000-0003-4002-8721>

Abstract in English

In digital communication, symbols are essential style to support the text message with contextual, emotional and subtle distinctions. Various colours play an essential role in conveying the connotative meaning of the text or message in an interaction. The present study explores the significance of emoji colours in media platform interactions by investigating how people perceive and use various colours to transmit certain messages, feelings and individual identity through finding out whether colours affect people's interpretation through different linguistic and social contexts. In order to show the extent of colour perception in various contexts, a questionnaire distributed to Fifteen students has been conducted and their responses collected and analyzed. Gunther Krees and Theo Van Leeuwen. (2002) has been used as the main model for the semiotic analysis. The findings of the study have revealed that emoji colours are not related to stylistic variations. Rather, they are viewed in terms of semantic attributes that may lead to impacts on internet settings.

Paper Info

Keywords

Keywords: Digital Communication, Emoji Colours, Connotative Meaning, Visual Semiotics.

It is hoped that the results outlined in the current study may contribute directly to contextual communications used by participants in spoken and written discourse by manipulating colour emoji to achieve contextual Communication..

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1. Introduction

Emoji used in digital communication always makes it easier to grasp the written message in online communication. Emoji may function as a replacement of non- verbal or paralinguistic features such as gestures or other facial expressions that are not easily used in a written text. Emojis are recently introduced an acceptable option that convey emotions and attitudes of language users in digital communications. Recently, Emoji are widely used in online communication to bridge the gap between spoken and written visual internet Communication.

The desired meaning is basically conveyed by the colour of emojis. Colours can also reflect psychological and cultural implications and ideas that are not conveyed by words. Blue emoji, for example, may denote confidence and the idea of tranquility, whereas the concept of a red colour may denote hatred and anger. However, colours may indicate different interpretations depending on various factors related to culture and personal cognitive factors despite the fact that emoji colour are treated as concepts indicating universal form of communication.

Despite the growing interest in emoji and the role it has in achieving linguistic communication, little has been known about the semantic implications of emoji colours. Most of researcher that have been conducted so far, focus on symbols that conveying specific meanings in certain contexts while the rest of other colour variations have been intentionally or unintentionally ignored semantic variations of emoji colours and their social, cultural and, emotional implications are extensively studied and explored in the current study.

2. Literature Review

The semantic implications of colour emojis have been subject to a lot of research recently. Most of the work has been conducted about the way colour variations determine meaning differences and the way they recognized and comprehended. Sakib, Sarker and Oishe (2024) have investigated the concept of emojis in their online written communications of students of Departments of English in Bangladesh. It has been observed that students of the private colleges in Bangladesh have not treated adequately.

The concept of colour emojis at their Departments of English. In order to arrive at sound conclusions of the study, theories and sociolinguistic concepts of interactions have been

used to show how emojis affect language in terms of cognition and statistic and digital language development.

The present study adopts a multi- modal method that views the concept of emojis and the way they are used in rendering a successful process of human digital Communication. The analytical framework of the study mainly adopts Gunther Kress and Theo van leekwen's (2002) that takes into account their theory based on visual semiotics to establish meaning variations in different communication settings. The model provides an organized approach to visual perception. This approach simplifies the process of understanding how people interpret and comprehend emoji colours in terms of communication messages.

A study on emotional effects of colour on facial recognition was published in *Frontiers in Psychology*. Emojis, that represented the basic emotions of happiness, sadness, anger, surprise, neutrality, were displayed to the participants in a variety of colours. The results indicated that providing angry and sad emojis in warm and cold colours enhanced their affective connotation. This suggests a person's perceived emotion can be altered by colour changes. (Liao, Strobach & Blehm 2022).

The impact of emoji's skin tone modifiers on people's perceptions of themselves has also been studied. According to the findings of a study called "Black or White but never Neutral: how readers perceive identity from yellow or skin-toned emoji", readers use particular ethnic identities to emoji depending on their own skin colour. Remarkably, among White individuals in particular, the default yellow emoji was more strongly linked to a White identity. This suggests that implicit identity cues may be present in even "neutral" coloured emoji. (Miller, Thebault-Spieker, Chang, Johnson, Terveen, & Hecht, 2017).

Subsequent investigation revealed that the colour modifiers of emojis affect their meaning, reflecting specific racial and gender preconceptions. For example, light and dark skin tones are employed differently and more frequently, respectively. The study also found that, especially among Black people who support human rights, the raised fist emoji with deeper skin tones frequently signifies protest. Furthermore, whereas female-modified emoji are linked to makeup or love, male-modified emoji are typically semantically closer to business or technology.

This underscores the semantic ambiguity and potential biases introduced by colour modifiers in emoji. (Barbieri, Kruszewski, Ronzano & Saggion 2016).

These studies collectively suggest that the colour of an emoji significantly influences its semantic interpretation, affecting how emotions, identities, and social cues are perceived in digital communication.

3. Methodology

3.1 Research Design

The current study follows a qualitative method since it is a descriptive one. Sprinthall, Schmutte and Sirois (1991), stated that a study is descriptive when the fundamental purpose of the study is description. Consequently, the purpose of the current study is to describe how emoji colours in digital communication are understood by users.

3.2 Participants

The participants of the current study are 15 Iraqi EFL fourth stage learners of morning studies in the Department of English, College of Education, University of Almaarif. The learners are asked in a form of questionnaire to read the situations and select the colour that they commonly use in digital communication. The setting of the study is University of Almaarif, College of Education, Department of English, during the first semester of the academic year 2024-2025. The reason behind choosing fourth stage students is that they have acquired a suitable social knowledge in digital communication and they are able to select the colour that they usually use.

3.3 Questionnaire

A structured questionnaire was created in accordance with the objective of the study, which is to investigate how people perceive and use various colours to transmit certain messages, feelings and individual identity through finding out whether colours affect people's interpretation through different linguistic and social contexts. In order to examine the participants' selection of emoji colours in many communicative settings, as well as their perceived meanings and emotional connotations with these colours, the questionnaire consisted of both multiple-choice questions, negative-positive use of the selected colour, and open-ended questions.

Fifteen people from a range of age groups, educational backgrounds, and experiences with digital communication were chosen to be the participants. The feedback collected randomly from participants of the questionnaire has revealed many useful viewpoints. All participants show their responses in various degrees of accuracy. Their responses are analysed to show the criteria of colour selection and to find out if there is possibility establishing for conveying various messages in particular contexts. Language users may show how emoji colour selection is recognized due to the digital interaction used by people in online communication.

3.4 Data Collection

In order to find any possible results of the study, one sample of emoji colours has been analysed in a variety of contexts. Thus, the visual model of semiotics introduced by Gunther res and Van Leeuwens (2002) and its modified version has been selected as the model of analysis so as to show the various relationships that exist in

emoji colours. To arrive at this goal, 15 respondents have been given a questionnaire. Their responses have been collected and analysed in terms of variations of digital interaction and the way colours of emoji are represented and recognized. The questionnaire required them to choose colours in a variety of text messages. In an educational setting, the participants were taught on the goals of the study and given precise directions on how to complete the questionnaire. Lastly, the responses were gathered in order to identify common themes throughout all the responses of participants regarding the significance of the various emoji colours as they relate to one another.

3.5 Procedures for Data Collection

Data collecting has expert several stages. First, to govern the probable inferences, commonly used colours of emoji were observed and studied in different digital communication scenarios. Second, by means of Kress and van Leeuwen's (2002) modal for visual semiotics as the analytical framework, the employment of these emoji colours was then examined to expose the meanings that these colours might signify. Third, 15 participants were asked to answer a questionnaire. Fourth, the participants were informed how to respond to the six inquiries in the questionnaire during a classroom conference.

4. Data Analysis

The context of visual semiotics established by Gunther Kress and Theo van Leeuwen concentrated on how colour, association, modality, and semiotic resources are applied to address specific meaning through visual features. According to their theory, emoji colours are not neutral; rather, they have contextually and culturally various meanings that might fluctuate from person to another.

Kress & van Leeuwen (2002) stated that: “Colour is a semiotic mode: it has its own grammar, its own rules of combination, and, crucially, its own meaning potential, which is not fixed but depends on the social and cultural context of its use.”

In digital communication (like emojis), colour choice (e.g., red heart vs. yellow heart) conveys different emotional or relational meanings. Kress & van Leeuwen emphasized that meaning is socially constructed, so individual interpretation of emoji colours can vary depending on culture, personal experiences, or platform conventions. It can be said that emoji colour meanings differ from one person to another.

Accordingly, different meanings of emoji colours revealed such as: representational meaning (what is depicted and how it represents reality), interactive meaning (the relationship between the image and the viewer) and compositional meaning (how elements are arranged to create meaning). The following is an analysis of most participants' answers in the questionnaire:

This questionnaire is designed by MA. Mena Ahmed and MA. Azhar Fadhil for studying purposes. The study entitled *A Semantic Study of Emoji Colors in Digital Communication* aims to find out the use of different colors to reveal their meanings through people's reactions and feelings.

Dear participant,

This questionnaire aims to study how emoji colors are used to express emotions and different situations in digital communication. Please read each scenario and select the emoji color you typically use in that context.

★Section 1: Interaction with Text Messages

The Scenario (Situations)	Colors of Emotions						Categorization of Emotions	
	Positive	Negative						
A family member sends you a cheerful good morning message								
A friend shares the news of winning an award or competition								
You receive an apology message from someone who wronged you								
Someone sends you a motivational message support you in a difficult situation								
Someone asks for your opinion on an embarrassing or sensitive matter								
You receive unexpected news about a friend's wedding								
A friend tells you they feel lonely and need someone to talk to								
A message contains a joke that you don't find funny								
Someone asks for your advice on a personal problem								
You receive a vague and unclear message from someone								

★Section 2: Interaction with Images and Posts

The Scenario (Situations)	Colors of Emotions						Categorization of Emotions	
	Positive	Negative						
A childhood memory photo with an emotional caption								
A picture of a smiling baby								
A photo of a beloved pet (cat, dog, rabbit, etc.)								
A political post expressing an opinion you may not agree with								
A religious post that promotes optimism and peace								
A picture of a celebrity doing charity work								
A satirical post or meme about a trending topic								
A photo with very bright and cheerful colors								
A post containing shocking or unexpected news								
A post calling for a social campaign such as donations or volunteering								

★Section 3: Interaction with Voice Messages and Videos

The Scenario (Situations)	Colors of Emotions						Categorization of Emotions	
	Positive	Negative						
A voice message from an old friend you haven't talked to in a long time								
A short video of someone expressing their sadness								
A voice message from a colleague asking you to complete a difficult task								
A funny video of someone tripping in a harmless way								
A video clip of a wedding or a happy family occasion								
A voice message filled with anger and frustration								
A video showing someone's successful experience and telling their story								
A very long voice message discussing an unimportant topic								
A video featuring a dramatic scene from a famous movie or series								
A voice message that is unclear and difficult to understand								

★Section 4: Interaction with Emojis and Symbols

The Scenario (Situations)	Colors of Emotions						Categorization of Emotions	
	Positive	Negative						
You receive a 😍 (heart eyes) emoji with no accompanying text								
You receive a 😡 (angry face) emoji without any explanation								
You receive a 😂 (laughing with tears) emoji in response to a serious message								
Someone sends you a 👍 (thumbs up) instead of responding to your long message								
You receive a 💔 (broken heart) emoji from someone going through a tough time								
Someone sends you a 😴 (sleeping face) emoji in response to your comment in a conversation								
Someone sends you 🙌 (clapping hands) after you accomplish something								
A family member sends you 😘 (kissing face) after a farewell call								

★Section 5: Open-ended Questions

Do you prefer using emojis of a specific color more than others? Why?

Have your feelings about a message ever changed based on the emoji color used?

Do you think some colors carry different cultural meanings in emojis?

Is there a specific color you never use when sending emojis? Why?

Which color do you think best represents happiness?

What color do you use when you're unsure about your feelings toward a message?

Have you ever misunderstood a message because of the emoji color used?

Do you think the choice of emoji color can affect your relationships with others?

Do you use specific colors to communicate with certain people only?

If you could suggest a new emoji color, what would it be and why?

★Section 6: Choose the best color you think it suits the meaning of each emoji



4.1 Representational Meaning, Choice of Colours as Signs:

Blue = emotional depth: Blue is culturally associated with calmness, trust, and introspection. The participant explicitly links blue to many feelings, reflecting a conceptual representation where blue carries a wide emotional spectrum.

Green = happiness: Green is linked to positive life forces (growth, nature). The participant's mapping of happiness to green fits into a cultural representation of well-being and positivity.

Orange = uncertainty: Orange is often energetic but ambiguous; using it for “unsure” feelings suggests it is perceived as emotionally neutral or transitional.

Red is avoided (this might be due to gender bias): The participant views red as for girls, showing how colours are socially coded (gender associations) rather than neutral.

A yellow smiling face may be considered neutral in Western contexts but overly formal or even insincere in some East Asian contexts.

A black heart emoji might be seen as stylish or gothic to one person, but as negative or unacceptable to another; as one participant said, black is not probable to other people.

Some colours were preferred as emotional sign by the participants who used certain colours to express their feelings and favors while avoiding others e.g., avoid black because it's not accepted to other people. They suggested white as a good new emoji color, associating it with clarity or neutrality.

The participants acknowledged that emoji colours carry different cultural meanings, which aligns with the idea that signs gain meaning from cultural context (i.e. semiotic resources differ across communities). Yet, while the participants accepted the cultural stability of some color meanings (e.g., red as feminine), they also acknowledged cross-cultural variation, indicating that emoji colour semiotics is not universal but contextually constructed.

4.2 Interactive Meaning, Relationship with the Viewer:

The participants reported emotional and relational consequences of emoji colours:

- Changed feelings based on colour.
- Misunderstandings due to cultural variety.
- Influence on relationships.

This shows that emoji colours function as interactive visual resources: the sender and receiver negotiate meaning through shared or differing colour interpretations. They agree that some colours carry different cultural meanings in emoji. This shows awareness that colours are not neutral but culturally coded.

The participants did not customize emoji colours for specific people, suggesting a more generalized interaction model (colour choice is not personalized but context-based). Avoidance of red due to gendered perception implies a social norm that regulates usage (perceived judgment from recipients).

4.3 Compositional Meaning, Colour Selection in Contextual Scenarios:

Positive events e.g., family messages, happy news, were associated with brighter colours and positive categorization—this aligns with common social semiotic coding where bright/warm tones signify positivity.

Negative or ambiguous situations received darker or neutral tones, reinforcing symbolic colour. Negative or confusing messages such as apologies, unclear texts, or shocking posts tend to be linked with blue or neutral colours and negative categorization. For example, sadness or anger tied to muted colours). On the other hand, the participants' refusal to suggest new emoji colours indicates satisfaction with the current semiotic system—existing colours already cover their perceived communicative needs.

4.4 Misunderstandings

Other participants have experienced misunderstanding because of emoji colours. Due to Semiotic ambiguity of some colours, sender and receiver may not share the same semiotic frame of reference. According to Kress & van Leeuwen's visual semiotics, colour functions as a semiotic resource that conveys meaning through cultural, contextual, and interpersonal associations. Unlike text, which often has relatively stable meanings, colours are polysemous, they carry multiple potential meanings that depend on cultural conventions, personal experiences, and situational contexts. For example, red may symbolize love in one context, danger or anger in another, or femininity depending on social perceptions.

When color is misunderstood, perceived emotional meaning may shift. For example, a sender uses a purple heart for creativity, but the receiver interprets it as romantic affection. In addition, relational dynamics can be impacted; the participant in the questionnaire explicitly stated that emoji colour can affect our relationships with others. Misinterpretations of colour choices may lead to perceptions of inappropriate tone, unintended sarcasm, or even offense.

From cognitive and pragmatic dimensions, communication involves shared assumptions (Grice, 1975). Emoji colours can act as contextual cues, but when sender and receiver lack shared colour interpretation, it produces pragmatic failure. For example, using orange for uncertainty (as one participant did) might be confusing to someone who interpreted orange as energetic or cheerful, leading to a mismatch between intended and perceived meaning.

To sum up, emoji colour misunderstandings might be caused due to cultural differences, pragmatic mismatches between the sender and the recipient, and semiotic complexity (many meanings).

4.5 Results and Discussion

The semiotic analysis of emoji colours used in digital communication reveal various parameters that have their impacts on comprehension and identification. Within the semiotic framework of emoji colours, the study shows that there are cultural aspects which determine interpersonal relations of digital communication. Sometimes, it is difficult to perceive meaning attributed to emoji colours, cultural connections are also different from one individual compared to another as well as meanings that are related to various implications of contexts and emoji colours.

In this part of the study, the researchers show the outcomes, that observe the semiotic function of emoji colours in online communication and how they influence emotional comprehension, interactive dynamics, and prospective misinterpretations. The analysis, which is carried out by means of Gunther Kress and Theo van Leeuwen (2002) visual semiotic framework, conserved colour not only as a spectacular aspect but also as a means of meaning-making that has special effects on culture and social interactions. The discussion is distributed into four sections: (1) the influence of colour on the perceived comprehension, (2) misinterpretation caused by emoji colours, (3) cultural connotations, and (4) interpersonal and contextual uses of emoji colours. Each section concluded with implications for digital awareness of online interaction and was deduced from previous research.

4.5.1. The Influence of Colour on the Perceived Comprehension

One of the conclusions drawn from the participants' responses is the strong correlation between positive feelings and warm, bright emoji colours. The colour that most frequently used to express happiness and warmth was yellow. On the contrary, darker colours, like grey, were recognized as ambiguous or neutral. Red generally selected by most people to give meaning of love or hankering. However, in certain instances, particularly when they received a red heart emoji from a stranger, some responders thought it was excessively passionate.

This pattern confirmed by Kress and van Leeuwen (2002) hypothesis that colour was a socially created semiotic resource with different connotative meanings depending on its category and its cultural setting. They believed that brightness indicated cheerfulness. These semiotic features were maintained in the current study by the participants' preference subdued tones for negative emotions and for colourful shapes for positive emotions.

Additionally, these findings supported earlier empirical research. with previous empirical research. Miller et al. (2016) discovered that while neutral colours like grey denoted uncertainty, warm colors like yellow and red tend to be related to positive outcomes in emoji employment. Comparable to this, Al Rashdi (2022) showed how colours greatly influence what Arabic people interpret the emotional significance of

emoji, emphasizing that even the same emoji designs can have distinct meanings when presented via various colours.

4.5.2. Misinterpretation Caused by Emoji Colours

Another important topic was the potential for misinterpretation caused by emoji colour variation. Several participants reported situations where they misinterpreted a message because of the colour of an emoji. The red heart emoji was intended a generic way to express appreciation, but one of those participants stated how they mistaken it for a romantic gesture. Another participant reported that gloomy colours occasionally caused them to get confused and ask about the sender's motives.

Miller et al. (2017) believed that any change in the emoji colour changes the relevant meaning attributed to that particular colour and results in rendering an ambiguous structure. Therefore, people are unable to comprehend a written text of internet communication. Gawne and McCulloch believe that the digital design of an emoji colour design helps to a large extent in perceiving and comprehending the emotional implication. Other paralinguistic features may contribute to the clarity of digital text which helps processing and comprehending the intended messages. Ambiguity based on inaccurate use of colours has been also treated by Van Leeuwen (2002) in terms of modality. Misuse of emoji colours selection such as changing a green smiling face instead a yellow one will definitely result in a failure of communication. Thus the message conveyed is further complicated and misunderstand is likely going to occur.

4.5.3. Culture and Personal Colour Connotations

One of the participants preferred brown emojis, relating them with coffee and daily life, while another suggested adding a turquoise emoji colour to represent balance and innovation. The current study revealed that people's understanding of emoji colours varied according to their culture. As mentioned in Kress and van Leeuwen's social semiotic approach, these connotations showed that colour favorites and understandings are culturally and personally produced rather than universal.

These outcomes corroborated earlier cross-cultural research. Even when figures stayed the same, individuals from diverse cultural backgrounds frequently interpreted emoji expressions differently, according to Park et al. (2014). The decoding of emoji colours in Arabic online communication is greatly influenced by cultural symbolism, according to Al Rashdi (2020), who also noted that green usually has favorable spiritual and environmental connotations in Middle Eastern contexts. The idea that semiotic resources acquire meaning through usage rather than being fixed in their interpretation is supported by this observation.

4.5.4. Interpersonal and Contextual Use of Emoji Colours

According to the participants, they frequently employ particular emoji colours for target groups. For instance, more neutral tones were chosen in official or professional conversations, whereas colourful and lively emojis were saved for close relationships. According to Bell's (1984) theory of audience design, speakers modify their language style—and, in digital contexts, their visual symbols—according to their relationship with the other person. This trend is consistent with that theory.

The relational decision suggested by Dresner and Herring (2010) refers to emoji within the framework of pragmatic functions and not only reflecting meanings expressing emotions. Participants in a written text are aware of the meaning differences related to variation of colours and they may have various degrees of formality. Such variables may also indicate messages that express various meanings in different social contexts.

5. Conclusions

The analysis of emoji colour meanings in digital communication, adopting Kress and van Leeuwen's paradigm for visual semiotics, demonstrates that colour functions as a complex semiotic resource with its structure and meaning potential. Since these meanings are not universal and are impacted by social, cultural and individual contexts, people interpret them differently. This distinction highlights how people modify and navigate visual cues, such as emoji colours, to indicate specific emotions, networks and intents, making digital communication more personalized. Emoji colour usage ultimately represents a significant linguistic improvement since visual aids improve traditional linguistic frameworks to provide more intricate interactions in digital communications. These conclusions are explained in details below:

Emoji colours are not arbitrary; rather, they function as a semiotic resource with a grammar (Kress and van Leeuwen, 2002). This grammar allows people to visually send their intents, emotional states as well as social ties.

People's perceptions of what emoji colours mean differ since colour interpretation is socially and culturally situated. A yellow heart, for instance, can represent friendship to one individual but moderation or warning to another. This depends on social and personal experiences.

As a result, different emoji colors represent different concepts. This demonstrates how online communication has evolved. To suit their associations, feelings, and objectives, users alter the colours' meaning.

Online communication may become ambiguous due to the fact that emoji colours may not always represent the same intended meaning. This suggests that more study is required to completely understand how colours and other visual components affect online communication.

Finally, the employment of emoji colours in digital interaction may indicate semiotic growth of language. This implies that the language used in everyday conversations may improve overtime, increasing the significance of visual semiotics in conveying the purpose emojis on social media.

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APPENDIX A

Dear participant,

This questionnaire aims to study how emoji colors are used to express emotions and different situations in digital communication. Please read each scenario and select the emoji color you typically use in that context.

Section 1: Interaction with Text Messages

The Scenario (Situations)	Colors of Emotions						Categorization of Emotions	
	Red	Orange	Blue	Purple	Green	Yellow	Positive	Negative
A family member sends you a cheerful good morning message							<input checked="" type="checkbox"/>	<input type="checkbox"/>
A friend shares the news of winning an award or competition							<input checked="" type="checkbox"/>	<input type="checkbox"/>
You receive an apology message from someone who wronged you							<input checked="" type="checkbox"/>	<input type="checkbox"/>
Someone sends you a motivational message support you in a difficult situation							<input checked="" type="checkbox"/>	<input type="checkbox"/>
Someone asks for your opinion on an embarrassing or sensitive matter							<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>
You receive unexpected news about a friend's wedding							<input checked="" type="checkbox"/>	<input type="checkbox"/>
A friend tells you they feel lonely and need someone to talk to							<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>
A message contains a joke that you don't find funny							<input checked="" type="checkbox"/>	<input type="checkbox"/>
Someone asks for your advice on a personal problem							<input checked="" type="checkbox"/>	<input type="checkbox"/>
You receive a vague and unclear message from someone							<input checked="" type="checkbox"/>	<input type="checkbox"/>

Section 2: Interaction with Images and Posts

The Scenario (Situations)	Colors of Emotions						Categorization of Emotions	
	Red	Orange	Blue	Purple	Green	Yellow	Positive	Negative
A childhood memory photo with an emotional caption							<input checked="" type="checkbox"/>	<input type="checkbox"/>
A picture of a smiling baby							<input checked="" type="checkbox"/>	<input type="checkbox"/>
A photo of a beloved pet (cat, dog, rabbit, etc.)							<input checked="" type="checkbox"/>	<input type="checkbox"/>
A political post expressing an opinion you may not agree with							<input checked="" type="checkbox"/>	<input type="checkbox"/>
A religious post that promotes optimism and peace							<input checked="" type="checkbox"/>	<input type="checkbox"/>
A picture of a celebrity doing charity work							<input checked="" type="checkbox"/>	<input type="checkbox"/>
A satirical post or meme about a trending topic							<input checked="" type="checkbox"/>	<input type="checkbox"/>
A photo with very bright and cheerful colors							<input checked="" type="checkbox"/>	<input type="checkbox"/>
A post containing shocking or unexpected news							<input checked="" type="checkbox"/>	<input type="checkbox"/>
A post calling for a social campaign such as donations or volunteering							<input checked="" type="checkbox"/>	<input type="checkbox"/>

Section 3: Interaction with Voice Messages and Videos

The Scenario (Situations)	Colors of Emotions						Categorization of Emotions	
	Red	Orange	Blue	Purple	Green	Yellow	Positive	Negative
A voice message from an old friend you haven't talked to in a long time							<input checked="" type="checkbox"/>	<input type="checkbox"/>
A short video of someone expressing their sadness							<input checked="" type="checkbox"/>	<input type="checkbox"/>
A voice message from a colleague asking you to complete a difficult task							<input checked="" type="checkbox"/>	<input type="checkbox"/>
A funny video of someone tripping in a harmless way							<input checked="" type="checkbox"/>	<input type="checkbox"/>
A video clip of a wedding or a happy family occasion							<input checked="" type="checkbox"/>	<input type="checkbox"/>
A voice message filled with anger and frustration							<input checked="" type="checkbox"/>	<input type="checkbox"/>
A video showing someone's successful experience and telling their story							<input checked="" type="checkbox"/>	<input type="checkbox"/>
A very long voice message discussing an unimportant topic							<input checked="" type="checkbox"/>	<input type="checkbox"/>
A video featuring a dramatic scene from a famous movie or series							<input checked="" type="checkbox"/>	<input type="checkbox"/>
A voice message that is unclear and difficult to understand							<input checked="" type="checkbox"/>	<input type="checkbox"/>

Section 4: Interaction with Emojis and Symbols

The Scenario (Situations)	Colors of Emotions						Categorization of Emotions	
	Red	Orange	Blue	Purple	Green	Yellow	Positive	Negative
You receive a 😍 (heart eyes) emoji with no accompanying text							<input checked="" type="checkbox"/>	<input type="checkbox"/>
You receive a 😬 (grimacing face) emoji without any explanation							<input checked="" type="checkbox"/>	<input type="checkbox"/>
You receive a 😬 (grimacing with tears) emoji in response to a serious message							<input checked="" type="checkbox"/>	<input type="checkbox"/>
Someone sends you a 👍 (Thumbs up) instead of responding to your long message							<input checked="" type="checkbox"/>	<input type="checkbox"/>
You receive a 💔 (broken heart) emoji from someone going through a tough time							<input checked="" type="checkbox"/>	<input type="checkbox"/>
Someone sends you a 😴 (sleeping face) emoji in response to your comment in a conversation							<input checked="" type="checkbox"/>	<input type="checkbox"/>
Someone sends you 🙌 (clapping hands) after you accomplish something							<input checked="" type="checkbox"/>	<input type="checkbox"/>
A family member sends you 😘 (kissing face) after a farewell call							<input checked="" type="checkbox"/>	<input type="checkbox"/>

Section 5: Open-ended Questions

Do you prefer using emojis of a specific color more than others? Why?
 Yes I prefer red

Have your feelings about a message ever changed based on the emoji color used?
 Yes I feel

Do you think some colors carry different cultural meanings in emojis?
 Yes I think

Is there a specific color you never use when sending emojis? Why?
 No I never use red

Which color do you think best represents happiness?
 white

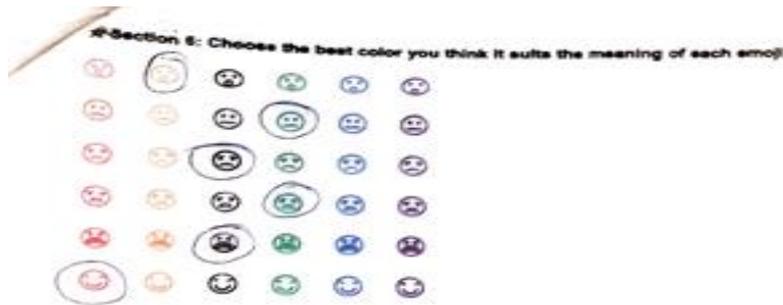
What color do you use when you're unsure about your feelings toward a message?
 blue

Have you ever misunderstood a message because of the emoji color used?
 Yes I have

Do you think the choice of emoji color can affect your relationships with others?
 No

Do you use specific colors to communicate with certain people only?
 Yes for all of us white

If you could suggest a new emoji color, what would it be and why?
 blue



Dear participant,

This questionnaire aims to study how emoji colors are used to express emotions and different situations in digital communication. Please read each scenario and select the emoji color you typically use in that context.

Section 1: Interaction with Text Messages

The Scenario (Situations)	Colors of Emotions						Categorization of Emotions	
	Red	Orange	Blue	Purple	Green	Pink	Positive	Negative
A family member sends you a cheerful good morning message							<input checked="" type="checkbox"/>	
A friend shares the news of winning an award or competition							<input checked="" type="checkbox"/>	
You receive an apology message from someone who wronged you							<input checked="" type="checkbox"/>	
Someone sends you a motivational message support you in a difficult situation							<input checked="" type="checkbox"/>	
Someone asks for your opinion on an embarrassing or sensitive matter							<input checked="" type="checkbox"/>	
You receive unexpected news about a friend's wedding							<input checked="" type="checkbox"/>	
A friend tells you they feel lonely and need someone to talk to							<input checked="" type="checkbox"/>	
A message contains a joke that you don't find funny							<input checked="" type="checkbox"/>	
Someone asks for your advice on a personal problem							<input checked="" type="checkbox"/>	
You receive a vague and unclear message from someone							<input checked="" type="checkbox"/>	

Section 2: Interaction with Images and Posts

The Scenario (Situations)	Colors of Emotions						Categorization of Emotions	
	Red	Orange	Blue	Purple	Green	Pink	Positive	Negative
A childhood memory photo with an emotional caption							<input checked="" type="checkbox"/>	
A picture of a smiling baby							<input checked="" type="checkbox"/>	
A photo of a beloved pet (cat, dog, rabbit, etc.)							<input checked="" type="checkbox"/>	
A political post expressing an opinion you may not agree with							<input checked="" type="checkbox"/>	
A religious post that promotes optimism and peace							<input checked="" type="checkbox"/>	
A picture of a celebrity doing charity work							<input checked="" type="checkbox"/>	
A satirical post or meme about a trending topic							<input checked="" type="checkbox"/>	
A photo with very bright and cheerful colors							<input checked="" type="checkbox"/>	
A post containing shocking or unexpected news							<input checked="" type="checkbox"/>	
A post calling for a social campaign such as donations or volunteering							<input checked="" type="checkbox"/>	

Section 3: Interaction with Voice Messages and Videos

The Scenario (Situations)	Colors of Emotions						Categorization of Emotions	
	Red	Orange	Blue	Purple	Green	Pink	Positive	Negative
A voice message from an old friend you haven't talked to in a long time							<input checked="" type="checkbox"/>	
A short video of someone expressing their sadness							<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>
A voice message from a colleague asking you to complete a difficult task							<input checked="" type="checkbox"/>	
A funny video of someone tripping in a harmless way							<input checked="" type="checkbox"/>	
A video clip of a wedding or a happy family occasion							<input checked="" type="checkbox"/>	
A voice message filled with anger and frustration							<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>
A video showing someone's successful experience and telling their story							<input checked="" type="checkbox"/>	
A very long voice message discussing an unimportant topic							<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>
A video featuring a dramatic scene from a famous movie or series							<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>
A voice message that is unclear and difficult to understand							<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>

Section 4: Interaction with Emojis and Symbols

The Scenario (Situations)	Colors of Emotions						Categorization of Emotions	
	Red	Orange	Blue	Green	Pink	Grey	Positive	Negative
You receive a 😍 (heart eyes) emoji with no accompanying text	<input checked="" type="checkbox"/>						<input checked="" type="checkbox"/>	
You receive a 😡 (angry face) emoji without any explanation	<input checked="" type="checkbox"/>							<input checked="" type="checkbox"/>
You receive a 😂 (laughing with tears) emoji in response to a serious message			<input checked="" type="checkbox"/>					<input checked="" type="checkbox"/>
Someone sends you a 👍 (thumbs up) instead of responding to your long message			<input checked="" type="checkbox"/>					<input checked="" type="checkbox"/>
You receive a 💔 (broken heart) emoji from someone going through a tough time	<input checked="" type="checkbox"/>							<input checked="" type="checkbox"/>
Someone sends you a 😴 (sleeping face) emoji in response to your comment in a conversation	<input checked="" type="checkbox"/>						<input checked="" type="checkbox"/>	
Someone sends you 🙌 (clapping hands) after you accomplish something	<input checked="" type="checkbox"/>						<input checked="" type="checkbox"/>	
A family member sends you 😘 (kissing face) after a farewell call	<input checked="" type="checkbox"/>						<input checked="" type="checkbox"/>	

Section 5: Open-ended Questions

Do you prefer using emojis of a specific color more than others? Why?
Yes, I prefer using pink and blue because they are symbols of calmness & love.

Have your feelings about a message ever changed based on the emoji color used?
No

Do you think some colors carry different cultural meanings in emojis?
Yes

Is there a specific color you never use when sending emojis? Why?
No

Which color do you think best represents happiness?
Red

What color do you use when you're unsure about your feelings toward a message?
blue

Have you ever misunderstood a message because of the emoji color used?
No

Do you think the choice of emoji color can affect your relationships with others?
Yes

Do you use specific colors to communicate with certain people only?
Yes

If you could suggest a new emoji color, what would it be and why?
Angry face is red to be as symbol of nervousness, I'd like to add orange also.

Section 6: Choose the best color you think it suits the meaning of each emoji



This questionnaire aims to study how emoji colors are used to express emotions and different situations in digital communication. Please read each scenario and select the emoji color you typically use in that context.

Section 1: Interaction with Text Messages

The Scenario (Situations)	Colors of Emotions						Categorization of Emotions	
	Red	Orange	Blue	Purple	Green	Pink	Positive	Negative
A family member sends you a cheerful good morning message							<input checked="" type="checkbox"/>	<input type="checkbox"/>
A friend shares the news of winning an award or competition							<input checked="" type="checkbox"/>	<input type="checkbox"/>
You receive an apology message from someone who wronged you							<input checked="" type="checkbox"/>	<input type="checkbox"/>
Someone sends you a motivational message support you in a difficult situation							<input checked="" type="checkbox"/>	<input type="checkbox"/>
Someone asks for your opinion on an embarrassing or sensitive matter							<input checked="" type="checkbox"/>	<input type="checkbox"/>
You receive unexpected news about a friend's wedding							<input checked="" type="checkbox"/>	<input type="checkbox"/>
A friend tells you they feel lonely and need someone to talk to							<input checked="" type="checkbox"/>	<input type="checkbox"/>
A message contains a joke that you don't find funny							<input checked="" type="checkbox"/>	<input type="checkbox"/>
Someone asks for your advice on a personal problem							<input checked="" type="checkbox"/>	<input type="checkbox"/>
You receive a vague and unclear message from someone							<input checked="" type="checkbox"/>	<input type="checkbox"/>

Section 2: Interaction with Images and Posts

The Scenario (Situations)	Colors of Emotions						Categorization of Emotions	
	Red	Orange	Blue	Purple	Green	Pink	Positive	Negative
A childhood memory photo with an emotional caption							<input checked="" type="checkbox"/>	<input type="checkbox"/>
A picture of a smiling baby							<input checked="" type="checkbox"/>	<input type="checkbox"/>
A photo of a beloved pet (cat, dog, rabbit, etc.)							<input checked="" type="checkbox"/>	<input type="checkbox"/>
A political post expressing an opinion you may not agree with							<input checked="" type="checkbox"/>	<input type="checkbox"/>
A religious post that promotes optimism and peace							<input checked="" type="checkbox"/>	<input type="checkbox"/>
A picture of a celebrity doing charity work							<input checked="" type="checkbox"/>	<input type="checkbox"/>
A satirical post or meme about a trending topic							<input checked="" type="checkbox"/>	<input type="checkbox"/>
A photo with very bright and cheerful colors							<input checked="" type="checkbox"/>	<input type="checkbox"/>
A post containing shocking or unexpected news							<input checked="" type="checkbox"/>	<input type="checkbox"/>
A post calling for a social campaign such as donations or volunteering							<input checked="" type="checkbox"/>	<input type="checkbox"/>

Section 3: Interaction with Voice Messages and Videos

The Scenario (Situations)	Colors of Emotions						Categorization of Emotions	
	Red	Orange	Blue	Purple	Green	Pink	Positive	Negative
A voice message from an old friend you haven't talked to in a long time							<input checked="" type="checkbox"/>	<input type="checkbox"/>
A short video of someone expressing their sadness							<input checked="" type="checkbox"/>	<input type="checkbox"/>
A voice message from a colleague asking you to complete a difficult task							<input checked="" type="checkbox"/>	<input type="checkbox"/>
A funny video of someone tripping in a harmless way							<input checked="" type="checkbox"/>	<input type="checkbox"/>
A video clip of a wedding or a happy family occasion							<input checked="" type="checkbox"/>	<input type="checkbox"/>
A voice message filled with anger and frustration							<input checked="" type="checkbox"/>	<input type="checkbox"/>
A video showing someone's successful experience and telling their story							<input checked="" type="checkbox"/>	<input type="checkbox"/>
A very long voice message discussing an unimportant topic							<input checked="" type="checkbox"/>	<input type="checkbox"/>
A video featuring a dramatic scene from a famous movie or series							<input checked="" type="checkbox"/>	<input type="checkbox"/>
A voice message that is unclear and difficult to understand							<input checked="" type="checkbox"/>	<input type="checkbox"/>

Section 4: Interaction with Emojis and Symbols

The Scenario (Situations)	Colors of Emotions						Categorization of Emotions	
	Red	Orange	Blue	Green	Purple	Yellow	Positive	Negative
You receive a 😍 (heart eyes) emoji with no accompanying text							✓	
You receive a 😡 (angry face) emoji without any explanation								✓
You receive a 😂 (laughing with tears) emoji in response to a serious message								✓
Someone sends you a 👍 (thumbs up) instead of responding to your long message								✓
You receive a 💔 (broken heart) emoji from someone going through a tough time								✓
Someone sends you a 😴 (sleeping face) emoji in response to your comment in a conversation							✓	
Someone sends you 🙌 (clapping hands) after you accomplish something							✓	
A family member sends you 😘 (kissing face) after a farewell call							✓	

Section 5: Open-ended Questions

Do you prefer using emojis of a specific color more than others? Why?
 Yes, to express my feelings.

Have your feelings about a message ever changed based on the emoji color used?
 No.

Do you think some colors carry different cultural meanings in emojis?
 Yes, I do.

Is there a specific color you never use when sending emojis? Why?
 Black, because it's not expected to attract people.

Which color do you think best represents happiness?
 Yes, I do.

What color do you use when you're unsure about your feelings toward a message?
 maybe white.

Have you ever misunderstood a message because of the emoji color used?
 No.

Do you think the choice of emoji color can affect your relationships with others?
 Yes, I do.

Do you use specific colors to communicate with certain people only?
 Yes, I do.

If you could suggest a new emoji color, what would it be and why?
 I think white is good.

Section 6: Choose the best color you think it suits the meaning of each emoji



دراسة لغوية وسميائية لألوان الرموز التعبيرية في الاتصالات الرقمية

Abstract in Arabic

المستخلص:

في الاتصالات الرقمية، تُعد الرموز أسلوبًا أساسيًا لدعم الرسالة النصية بتمييزات سياقية وعاطفية ودقيقة. تلعب الألوان المختلفة دورًا أساسيًا في نقل المعنى الدلالي للنص أو الرسالة في التفاعل. تستكشف الدراسة الحالية أهمية ألوان الرموز التعبيرية في تفاعلات منصات الوسائط من خلال التحقيق في كيفية إدراك الأشخاص واستخدامهم للألوان المختلفة لنقل رسائل ومشاعر وهوية فردية معينة من خلال معرفة ما إذا كانت الألوان تؤثر على تفسير الأشخاص من خلال سياقات لغوية واجتماعية مختلفة. من أجل إظهار مدى إدراك الألوان في سياقات مختلفة، تم إجراء استبيان تم توزيعه على خمسة عشر طالبًا وجمع إجاباتهم وتحليلها. تم استخدام غونتر كريس وثيو فان ليوبين (2002) كنموذج رئيسي للتحليل السيميائي. كشفت نتائج الدراسة أن ألوان الرموز التعبيرية لا ترتبط بالاختلافات الأسلوبية. بدلاً من ذلك، يُنظر إليها من حيث السمات الدلالية التي قد تؤدي إلى تأثيرات على إعدادات الإنترنت. ومن المأمول أن تساهم النتائج الموضحة في الدراسة الحالية بشكل مباشر في الاتصالات السياقية التي يستخدمها المشاركون في الخطاب المنطوق والمكتوب من خلال التلاعب بالرموز التعبيرية الملونة لتحقيق التواصل السياقي.