

Emoji use in WhatsApp interactions: discursive functions, group formation strategies, and mediation¹

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Abstract: This study analyzes the interactions of 227 teachers in a language learning and teaching course on WhatsApp and aims to a) identify the use of emojis in syntactic and discursive functions in educational experiences via WhatsApp, b) understand the role of emojis in the evolution of learning communities in this application, and c) discuss the use of emojis in mediating online educational experiences. The findings show the use of emojis with several syntactic and discursive functions meant to make up for the absence of non-verbal resources typical of face-to-face interactions. They also suggest that emojis significantly contributed to the construction of group cohesion, a sense of belonging, and identity manifestations in the interactions that took place during the course, as well as the

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appropriation of emojis as a mediation strategy to highlight the educators' and teaching assistants' posts and to prompt pedagogical interventions.

Keywords: Emoji use; WhatsApp interactions; Discursive functions; Group Formation Strategies; Mediation.

Título: O uso de emojis em interações via WhatsApp: funções discursivas, estratégias de formação de grupos e mediação

Resumo: Este estudo analisa as interações de 227 professores em um curso de ensino e aprendizagem de línguas no *WhatsApp* e tem como objetivo a) identificar o uso de *emojis* em funções sintáticas e discursivas em experiências educacionais via *WhatsApp*, b) compreender o papel dos *emojis* na evolução das comunidades de aprendizagem nesse aplicativo, e c) discutir o uso de *emojis* na mediação de experiências educacionais online. Os resultados mostram o uso de *emojis* com diversas funções sintáticas e discursivas destinadas a compensar a ausência de recursos não verbais típicos das interações face a face. Sugerem também que os *emojis* contribuíram significativamente para a construção da coesão do grupo, sentimento de pertencimento e manifestações identitárias nas interações ocorridas durante o curso, bem como a apropriação dos *emojis* como estratégia de mediação para destacar as postagens de educadores e tutores e para incitar as intervenções pedagógicas.

Palavras-chave: Uso de emoji; Interações de WhatsApp; Funções discursivas; Estratégias de formação de grupos; Mediação.

Introduction

The literature in the field of computer-mediated communication (CMC) has pointed out that the lack of nonverbal cues is a challenge in online interaction, since the purpose of these resources is to facilitate the exchange of social information (INGAND, 2018; WALTHER; PARKS, 2002). According to Ingand (2018) and Walther (2011), given the lack of these cues, building relationships in virtual teams or groups may take longer if compared to face-to-face.

With today's technological advances, online interaction has gained other forms of communication that can be used to express and exchange social presence, as defined by Garrison, Archer and Anderson (2000, p. 94) as "one's ability to project themselves socially and emotionally, as 'real' people (i.e., their full personality), through the medium of communication being used." According to Crystal (2004, p. 48), different types of language have emerged with the advent of the [World Wide] Web and digital technologies in online communication, something genuinely different from other communication modes, which includes 'speech + writing + electronically mediated properties' to express one's feelings or mood, such as :-) for happy, and :(for sad.

Although emoticons, i.e., typographic displays of a facial representation, have been used to make up for the absence of nonverbal cues in text, technological advances have allowed for the creation of emojis to convey meaning. These images are widely used in social media and interactions via SMS, Messenger, mobile applications like WhatsApp, and most operating systems, to express feelings and other forms of meaning and they are not restricted to text such as emoticons.

Some studies underscore the discursive functions of emojis in social media interactions (PAIVA, 2016; ALSHENQEETI, 2016; DANESI, 2017) and their use to supply non-verbal language. However, few studies have explored these functions in interactional spaces, such as WhatsApp, a mobile application, when used for educational experiences, especially those involving peer collaborative discussions. Furthermore, the use of emojis as resources that can positively or negatively influence the formation of learning communities still needs to be further explored. Based on these questions, this study aims to: i) identify the use of emojis in syntactic and discursive functions in educational experiences via WhatsApp; ii) understand the role of emojis in the evolution of learning communities in this application; and iii) discuss the use of emojis in mediating online educational experiences.

As social manifestation is recognized as an integral part of the online learning process, we believe that investigating how emojis are used in educational experiences via mobile devices can contribute to discussions in the field.

The language of emojis

The growing use of emojis, digital images that can represent a word or a feeling in a message, is due to the fact that they allow online interactions to be increasingly multimodal, resembling face-to-face interactions in which we use intonation, facial expressions, and gestures, in addition to words, to ensure that the message is understood in all its nuances.

Barbieri, Ronzano and Saggion (2016) point out that emojis allow describing objects, situations, or even feelings with small images, providing a visual and quick way of communicating. Similarly, Alshenqeeti (2016) states that emojis help individuals to convey thoughts and feelings digitally, filling the void of facial expressions that enhance verbal communication. Likewise, Bliss-Carroll (2016) points out that emojis can allow users to emphasize and enhance written messages in a way that written text alone cannot.

According to Skiba (2016), a milestone in the trajectory of popularizing the use of emoji occurred in 2015, when the image known as "Face with Tears of Joy" was chosen as the word of the year by the Oxford Dictionary, denoting how the use was already recurrent among different populations.

Emojis have a not-so-old ancestor, the emoticon. Moro (2016) reports that the emoticon, first used in 1982, was an idea proposed by Professor Scott Fahlman of Carnegie Mellon University (Pittsburgh, USA) to differentiate the use of serious emails from those with a joke. The "Smiling Face" was created by an American graphic artist named Harvey Ross Ball in 1964 (DANESI, 2017) for an insurance company that wanted to put it on buttons for its employees to boost team morale. The image became popular and soon found its way onto mugs, t-shirts, and stickers over the next few decades.

According to Maddox (2015), the similarity between emoji and emoticon is a coincidence. The term *emoji* derives from a combination of Japanese characters (e = image and moji = letter) and was coined in 1928. In fact, the use of small images as words was widespread in Japan before it became popular around the world. The idea came from

programmer Shigetaka Kurita, who in 1998 worked at Docomo, one of the main Japanese telecommunications companies; he created an “add ❤️ to text” button for pagers, which became popular in the country and started the design of the first symbols that would become what we now know as emojis.

Docomo could not patent the symbols and the idea of using characters to express emotions spread across the internet. It wasn't until 2007 that Apple incorporated the images into the iPhone's keyboard. At first, it was a feature only to be used by the Japanese, but it became popular around the world when the “hidden” keyboard was discovered by North American users. There was a significant increase in the use of emojis in 2015 when Twitter allowed their use in hashtags (ALSHENQUEETI, 2016). Currently, there are 3,521 registered emojis in Unicode, divided into several categories (EMOJIPEDIA, 2021), and anyone can suggest images they miss in their daily communication.

According to Tauch and Kanjo (2019), many studies have found that people feel that expressing themselves with emojis is easier than with text, as images cover a wide range of categories, including facial expression, animals, food, activities, objects, and mood, to suit different topics of conversation. Danesi (2017) points out that the main function of emojis is to provide nuances of meaning in the tone of the message. Therefore, they do not completely substitute for traditional written forms; rather, they reinforce and expand the meaning of a written communication, often denoting sympathy or adding a certain tone of humor.

Elements such as age, gender, and cultural aspects seem to influence the way emojis are used. In a society that increasingly interacts through screens, age is not an exclusionary factor for the use of emojis; people of all ages are increasingly making different uses of images in their digital daily lives. Alshenqueeti (2016) points out that there are indications that emojis may be cultural or gender-specific, with evidence in their study that women use them more than men to express their feelings. Likewise, global events, such as the social isolation caused by the Covid-19 pandemic, have had an impact on the increased frequency of use of emojis related to the event. The *Face with Medical Mask* emoji took first place in publications related to the pandemic on Twitter (WILLINGHAM, 2020), and there was also a significant increase in interactions using the *Nauseated Face*, the *Face Vomiting*, the *Sneezing Face*, and the *Face with Thermometer* emojis.

Cultural differences also affect how the same emoji is used. Barbieri, Kruszewski, Ronzano and Saggion (2016) analyze the differences in meanings between emojis used by people from different countries. For example, those that denote a sunny climate such as ☀️, 🌴, and 🌻 are widely used by Spanish and Italian users, but not by British ones; the authors claim that the influence of the climate in those countries could account for the low usage of these emojis in the UK. Also, the *Top with Upwards Arrow Above* emoji 📌 means approval for Italian users, being similar to the *Victory Hand* emoji ✌️ and the *Thumbs Up Sign* emoji 👍, but that is not the case for US and British users where the *Hundred Points* emoji 100 is used to denote the same idea.

Similarly, Paiva (2016, p. 385) highlights examples of cultural variations, such as the

Pile of Poo emoji 🍌, “which in Japan is used to wish good luck, but can be offensive in Brazil;” the *OK Hand Sign* emoji 🙌, which is positive in the United States, but a curse word for Brazilians, and the *Person with Folded Hands* emoji 🙏, typically used as a symbol for prayer and thanking God in Brazil, was created to mean a high-five, a type of greeting common in North American culture.

As Alshenqeeti (2016) points out in face-to-face communication, resources such as prosody, gesture or laughter can reveal the speaker's emotions, adding information to the message or even modifying its meaning. In this way, emojis aim to fill a void and make up for the lack of these non-verbal resources. In the words of the researcher, “[...] visual forms of language, which include non-verbal communication such as body language have been used since prehistoric times to underline and reinforce verbal language. Emojis therefore, are simply placing these visual forms into the digital arena.” (ALSHENQEETI, 2016, p. 64).

In addition to expressing ideas and emotions quickly and revealing underlying virtual nuances in a message, emojis have been found to exhibit both semantic and syntactic patterns as they are used.

Schnoebelen (2012) discusses some of these syntactic patterns after analyzing several tweets: 1) the emojis appeared at the end of messages as punctuation; 2) when they appear in the middle of a message, they always do so after a complete thought; 3) when several emojis are used in a row, they follow a linear order of attitude or emotion, such as the *Crying Face* and then the *Broken Heart* emojis.

Drawing on the work of Schnoebelen, Paiva (2016) analyzes the discursive function of emojis in messages. The author lists five functions, namely: the first function entails using emojis to replace words, such as the use of the *Crying Face* emoji 😞 instead of words to denote sadness; the second function involves expressing emotion, using images to congratulate someone or show appreciation; the third function indicates affection, such as using the *Red Heart* ❤️ emoji and the *Smiling Face with Hearts* emoji 😍 to show gratitude, love and happiness for a person; the fourth function is that of an enhancer, when the emoji is used at least twice to emphasize the emotion, as in the sequence 🤯🤯🤯🤯🤯 to demonstrate surprise at some news received or fear of what might happen to someone; the fifth and last function listed by the author is the use of emojis to express irony.

Based on Paiva's (2016) discussions, Ranieri (2021) conducts a study on emojis as discursive markers in conversations via WhatsApp, noting that they are characterized by a hybridization that "occurs through texts in the written modality, by audios, by the use of images, by the recurrence of emojis and emoticons, by stickers, among others" (p. 126). However, the author points out that such interactions are marked by characteristic elements of the organization of conversational oral texts. She adds that there are no specific emojis for each marker and that the use of each one is associated with the context of the interaction mixed with the characteristics of the written text. The author concludes that “emojis are not decorative elements in conversations, but assume an undeniable discursive and textual condition for the construction of interaction” (p. 135). In this sense, through emojis we seek to reproduce some conditions of face-to-face interaction by imitating facial expressions,

reproducing behaviors, etc., in addition to functioning as discursive markers and modalizers, which is fundamental for the construction of senses in conversations via WhatsApp.

The work of Novak, Smailovic, Sluban and Mozetic (2015) also identified that emojis can be placed anywhere within a text, but usually appear at the end of the message or from the middle to the end. Furthermore, the authors noted that there is a wider range in the use of emojis to express positive feelings. Tauch and Kanjo (2019), on the other hand, found that some, such as the *Microphone* emoji 🎤, appear at the beginning of messages and usually help to describe the content of the text that follows and do not denote the feeling of the user.

In addition to how the emoji is used within a message, there is also the appearance of the image itself that changes over time. Starting with yellow, the default color for all emojis that showed facial expressions, different skin tones have been added. Danesi (2017) shows that the idea of using yellow as the undefined color of facial emoji is allegedly an attempt to eliminate any possible ethno-racial innuendo to messages, assuming that people of any ethnicity or race would use them for purely communicative reasons. However, users began to complain about the lack of diversity in skin color, and since 2014 Unicode has incorporated different skin tones.

Likewise, the space for women in the world of work and emojis has also been the target of criticism and debate, which led to the launch in 2016 of icons of female professionals in different areas. Emojis are thus being continuously updated with new elements and expanded meanings allowing more ideas to be represented in images.

The discussion about racial issues and gender diversity has been on the agenda for the definition of several emojis, leading Unicode to release a list of emojis to be included, such as the *Pregnant Man*, the multiracial *Handshake*, as well as several combinations with people of neutral gender to allow users to select the image with which they identify the most.

Identification is an important word when thinking about using emojis. We make recurrent use of those that best express our feelings and translate our daily lives and who we want to be in the world. Schnoebelen (2012) points out that despite being apparently simple manifestations and acquiring different meanings from person to person, emojis function as instruments for the expression of shared identities and perceptions.

Bai, Dan, Mu and Yang (2019) discuss the development of emojis, their different uses and functions, and the research carried out on emojis in different domains. These authors assert that research on emoji comes mainly from the fields of computer science and communication science, but research has also examined emojis in marketing, behavioral science, linguistics, psychology, medicine and education. In their review, the authors state that the research primarily uses empirical analysis, focusing on the diversity of individuals, cultures and platforms in the use of emojis, as well as the attributes and characteristics of emojis, their roles in communication, and the application of emojis in various research directions.

Bai, Dan, Mu and Yang (2019) highlight some summaries specifically presented in research in the areas of communication, linguistics and education. One of the functions of an emoji is to make up for the lack of non-verbal cues, helping to convey emotions and meanings, while promoting social interaction online. Furthermore, the use and the effect of emojis may

vary in different contexts, depending on users' platforms, cultural issues, linguistic environment, and personal characteristics. McIntyre (2016) claims that emojis emerged as a means of indicating euphemisms, sarcasm, hints, and emotions that were previously difficult to convey in a virtual interaction.

The authors also highlight research studies that report on the possibilities and the effectiveness of emojis in education, especially in early childhood education and online education. Emojis allow one to overcome language barriers and can facilitate learning and understanding concepts, in addition to helping foreign language learners. Using emojis can help students understand verbal resources and increase communication effectiveness in an online course.

Emerging language in the formation of virtual learning communities

Studies on the formation and evolution of groups and virtual communities seem to indicate that interactions in those spaces rely on resources and strategies that emerge from the need to express emotions, minimize misunderstandings, favor interpersonal relationships, and so on.

One of the resources that emerge in online interactions towards meeting these needs is the emoticon, a language that has been studied for a long time by researchers in the field of distance education. Emoticons are understood as resources that can favor the construction of social presence and the formation of learning communities (ROURKE; ANDERSON; GARRISON; ARCHER, 1999; DUNLAP; BOSE; LOWENTHAL; YORK; ATKINSON; MURTAGH, 2016). The findings of studies by Sadera, Robertson, Song and Midon (2009), and Swan (2002) indicate that one of the factors that can promote a successful educational experience is related to students' sense of community and we add that, like emoticons, emojis can be great allies in the construction of knowledge by favoring social presence in online interactional contexts.

As technology evolved, emojis were created. Drawing on Street (1984), Dunlap, Bose, Lowenthal, York, Atkinson and Murtagh (2016, p. 8) remind us that “[c]ommunities are constructed and maintained in part with language”. Dunlap and colleagues (2016) also report on Tu's (2001) finding that the use of emoticons made students feel more comfortable when interacting with peers online and that emojis helped them feel like members of the learning community and develop a sense of belonging.

Virtual learning communities form around issues of identity and common values, transcending geographic barriers. The participants in these communities depend on one another to build knowledge (BRAGA, 2007; PALLOFF; PRATT, 1999). A learning community, whether in a face-to-face environment or in a virtual one, benefits from shared resources, reciprocal relationships, and respect for diversity (WENGER, 1998; PALLOFF; PRATT, 1999).

An online learning community develops through mutual negotiation. Drawing on discussions by Palloff and Pratt (1999), Braga (2007) lists a few indicators that an online learning community has been formed:

- a) active interaction encompassing course content and personal communication;
- b) collaborative learning evidenced by comments among learners;
- c) social construction of meaning evidenced by questioning and according to the interest in reaching a consensus of meaning;
- d) sharing of resources among learners;
- e) exchange of expressions of support and encouragement among learners, as well as the desire to critically assess the work of the other.

Braga (2007) also presents some indicators related to the formation of a learning community per Wenger (1998):

- a) mutually supported relationships;
- b) the development of activities must rely on the engagement of the participants;
- c) a fast flow of information and propagation of innovation;
- d) absence of introductory preambles as if the interactions were a mere continuation of an ongoing process;
- e) jargon and shortcuts in communication;
- f) shared discourse reflecting a certain perspective on the world;
- g) specific instruments and other artifacts.

According to Braga (2007), the concept of a learning community is aligned with the assumptions of a learning group in terms of Johnson and Johnson (1982) and Dörnyei and Murphey (2003) with regard to the realization of common purposes, the negotiation of meaning for the fulfillment of tasks, and the tendency toward decentralization and distribution of power. In online learning communities, the use of emojis plays a key role in promoting interaction and mediation as well as in supporting the collective construction of knowledge.

Methods

In this qualitative study, we have analyzed the interactions from the posts of 227 English language teachers who work with K-K12 education in multiple cities in Brazil. The interactions were generated over an 8-week continuing-education course via mobile devices developed on WhatsApp. Titled "*Taba Móvel*" (Mobile Taba), this teacher formation project is part of the "*Projeto Taba Eletrônica*"⁶ (Electronic Taba Project) and aims to train teachers

⁶ Extension project of the School of Letters of the Federal University of Minas Gerais in Brazil that seeks to offer opportunities for the development of digital literacy for K-K12 teachers with a view to using tools related to information and communication technologies. For Brazilian indigenous peoples, a *taba* is a space inhabited by the community, in which all individuals share their lives, knowledge and practices. The project is conceived as a large technological village, a collective and collaborative place for exchanging ideas and skills related to new media.

with a focus on teaching and learning additional languages via mobile devices. Teachers enrolled in the initiative were divided into 6 groups to facilitate management, and each group was supported by 2 educators and 2 teaching assistants.

This initiative involved the following steps:

a) familiarization with different mobile apps and recognition of genres circulating on mobile platforms;

b) discussions about using mobile devices and apps in the language classroom and creation of teaching and learning materials;

c) integration of mobile devices in language teaching practices and reflection on their use in the contexts situated by the participants, based on lived experiences.

The data were generated while participants were carrying out the following tasks:

1) Introducing “*your selvies*” - Teachers took selfies while doing things or in situations that showed other aspects of their lives, writing captions for each selfie. They were expected to read their colleagues’ posts and record an audio message about the ‘*selvies*’ they had something in common with. Finally, they were told to post a ‘braggie’, that is, a photo purely intended to show off.

2) Where are you now? - the teachers used the location function on WhatsApp to show where they were, along with an oral report on what they were doing there, making some comments about the place. They were then asked to take a look at the posted locations and record a comment/review about the places they would like to visit, explaining why they would like to go there.

3) Language Learning History⁷ - the teachers sent an audio recording about their language learning process, reflecting on important moments in their lives as English learners and narrating their learning journey. A video interview was used to pose some questions on informal learning and development of English skills.

4) Language learning mobile apps - the teachers brainstormed on mobile apps for language learning they have used or heard of. They were asked to post the names of as many apps as they could remember, while reading the previously-posted suggestions in advance in order to add something new. They were also asked to choose a couple of apps and suggest how they could be used to develop language skills.

5) Spotting Fake News - the teachers watched a video and read texts about strategies for spotting fake news. They were then instructed to read some news items, identify the fake one, and explain why it was fake. Finally, they were asked to choose a message or piece of news that had been forwarded to any of their WhatsApp groups (work, family, friends) and

⁷ A text genre by which people revisit their lives as learners and narrate important moments in their learning journeys. By reflecting about their learning processes, they are expected to discover more about their preferences, attitudes and learning strategies.

use audio or text messages to answer the following question: *Are there signs of misinformation in this post? If so, what are they?*

6) Creating memes and animated GIFs - the teachers read about memes and animated GIFs in a section of the course called *Taba Bits* where extra information and materials were shared. Afterwards, they were asked to make a meme or animated GIF about fake news using a web-based tool from a list on *Taba Bits*. They also elected the most creative ones by sending an audio message describing the meme/GIF they had chosen.

7) Using quizzes in language learning - the teachers took a quiz to find out which WhatsApp features they knew. They were then asked to use one of the provided links to create a quiz about a topic they were teaching or planning to teach.

These tasks allowed for an extensive sharing of experiences and ideas, generating hundreds of lines of text in the form of posts among the six studied groups. Many of the interactions included all sorts of emojis whose uses are analyzed and discussed in the following section.

Findings and discussion

In this section, we will present some linguistic (syntactic and discursive functions) and extra-linguistic (non-verbal resources) aspects mediated by the use of emojis in interactions during the continuing education course via WhatsApp, followed by an analysis of identified aspects of group identity construction in these interactions, and a discussion on the use of emojis in building and maintaining online learning communities.

Emojis: syntactic functions, discursive functions and non-verbal cues

Following the interactions below, we present a discussion about language learning through games that occurred spontaneously in group 1. This discussion was motivated by a task that sought to brainstorm informal activities and environments that can promote learning experiences, which was divided into parts in this section for the purpose of organizing the analysis.

We start the analysis by pointing out the syntactic functions observed during these interactions. The first indication of the use of emojis in syntactic functions occurred in excerpt 1⁸, with a linear order of time and action of emojis. In this excerpt, the teacher uses two emojis sequentially. First to express some discomfort and embarrassment, with the *Grimacing Face* emoji 😬, and then humor, with the *Face with Tears of Joy* emoji 😂, in relation to her son's comment that his learning of English was influenced not only by her instruction but also through his interactions with games in English. Similarly, in excerpt 2, the emojis used by T1 in response to T2 express a linear sequence of time and action. In this excerpt, T1 uses emojis

⁸ The excerpts have been kept as in the original interactions.

😊😄🎮 to refer to her son as a digital native, sequentially indicating the ideas of joy, delight, and games. In excerpt 3, we identify the *Upside-Down Face* emoji 🙄 as punctuation at the end of the sentence. This emoji seems to have been used to convey an idea of good humor or to lighten up the situation presented. This seems to be confirmed when the teacher relativizes her initial approach to the issue of games and language learning, as shown in excerpts 4 and 5 that make up the sequence of the conversation.

- 1) 4/3/19, 9:12 PM - T2: T1! When I complained with my son about games he said: "Mom I didn't learn English only with you. In the games I learned a lot of words and expressions 😊😄"
- 2) 4/3/19, 9:17 PM - T1: Your son should be a great example of a native digital 😊😄🎮
- 3) 4/3/19, 9:20 PM - T2: Kkk sure! Although I hated the games! And he always explained: "Mom the games helps me to reason, to have perception 🙄"
- 4) 4/3/19, 9:22 PM - T2: And "unfortunately" he knows a lot expressions that I don't know.
- 5) 4/3/19, 9:24 PM - T2: I'm expressing in this way because I hated those games that he played.

The following interactions are part of the discussions initiated by T2, a participant of group 1. In these interactions, we identify some discursive functions that occur in the use of emojis. For example, in excerpt 6, this teacher uses the *Face with Hand Over Mouth* emoji 🤔 to indicate mood, that is, express emotion per Paiva (2016). The same occurs in excerpt 7, when T1 uses emojis 🤔🤔 to comment on the English expressions learned by teacher T3 in games. In this last example, we can consider that the emojis were used as intensifiers per Paiva (2016), since there was a repetition of two emojis to emphasize the manifestation written by T1, who found the expressions "very funny".

- 6) 4/3/19, 9:25 PM - T3: Not exactly... the digital migrants also learned expressions through games... who don't remember expressions like "fire in the hole" or "taking fire, need assistance"? 🤔
- 7) 4/3/19, 9:30 PM - T1: This expressions are very funny[...]

Still on the expressions that T3 mentions, T2 uses the *Face with Hand Over Mouth* emoji 🤔 of humor in excerpt 8 when indicating that she does not know the expressions because she has never played online games. The laughter and humor emoji sequences, 😂😂😂😂😂 and 😊😊😊, used in excerpts 9, 10, 12 and 15, on the other hand, contribute to maintaining the interactional sequence, making up for the absence of non-verbal elements typical of face-to-face conversation. In excerpt 10, for example, the use of the *Face Screaming in Fear* emoji 😱 after a sequence of the *Face with Tears of Joy* emojis,

😄😄😄, serves to keep the mood in the course of the conversation. Following the conversation, the *Face Screaming in Fear* emoji 😱 is probably used as a substitute for expressions, such as 'I can't believe it!', a discursive function also pointed out by Paiva (2016).

- 8) 4/3/19, 9:34 PM - T2: T3! I really don't know these expression kkkk I haven't played yet any games!!! 😊
- 9) 4/3/19, 9:34 PM - T3: 😄😄😄😄😄
- 10) 4/3/19, 9:34 PM - T2: 😄😄😄😱
- 11) 4/3/19, 9:34 PM - T2: Completely lost!!!
- 12) 4/3/19, 9:35 PM - T3: That's why I explained. But I thought you have played before 😊😊😊
- 13) 4/3/19, 9:35 PM - T3: 😱
- 14) 4/3/19, 9:35 PM - T2: Never!
- 15) 4/3/19, 9:36 PM - T2: Remember! I'm 55 years old 😄😄😄😄😄😄

These interactions indicate the recognition that games can be allies to the language classroom. Although the interactions were triggered by the teacher's questioning of games, discussions culminated in a reflection on the possible benefits of using these resources for language learning. These questions can also be seen in the following excerpts:

- 16) 4/3/19, 9:43 PM - T2: I'll correct. I hate games of Guns! Things like that!
- 17) 4/3/19, 9:45 PM - T2: But I put sites to the students played! In the Lab I used "agenda web" site! They loved it
- 18) 4/3/19, 9:48 PM - T3: Yes. I like because they are very useful for grownups students, who don't learn through games frequently
- 19) 4/3/19, 9:48 PM - T2: I know that!
- 20) 4/3/19, 9:48 PM - T1: I don't doubt
- 21) 4/3/19, 9:49 PM - T1: 😘
- 22) 4/3/19, 9:49 PM - T2: 😘❤️
- 23) 4/3/19, 9:52 PM - T2: I'm talking about Guns games!

As far as body language is concerned, the *Face with Tears of Joy* 😄 (snippets 1, 9, 10 and 15), the *Kissing* 😘 (snippets 21 and 22), the *Grimacing Face* 😬 (snip 1), the *Face with Hand Over Mouth* 🙄 (excerpt 6, 7, 8 and 12) and the *Face Screaming in Fear* 😱 (excerpt 10 and 13) emojis seem to make up for the lack of face-to-face interaction features. Other occurrences of emojis making up for this absence were also observed during interactions in the course, in this case represented by the use of hands. For example, the *OK Hand Sign* emoji 🙌 and the *Thumbs Up Sign* emoji 👍 indicate support for an idea posted by a teacher or colleague, and the use of the *Index Pointing Up* emoji 📌 to point out media posted in the group.

We share Alshenqeeti's (2016) assertion that in face-to-face communication, resources such as prosody, gesture, or laughter can reveal the speaker's emotions, adding information to the message or even modifying its meaning. In online communication, however, such manifestations rely on emojis as a means of expression. We consider that the analysis presented seems to indicate the appropriation of emojis in a fluid way during the interactions via Whatsapp for both linguistic and extra-linguistic functions.

Emojis: sense of belonging, group cohesion and identity issues

In addition to the linguistic and extra-linguistic elements presented in the previous section, we identify that emojis seem to be used as strategies to approach group participants and develop or maintain group cohesion. In excerpts 21 and 22, the *Face Blowing a Kiss* 🙄 and the *Yellow Heart* ❤️ emojis, both in discursive functions of emotions and in expression of affection, seem to have also served to mitigate possible clashes of ideas, thus ensuring the maintenance of group cohesion.

The recurrence of humor emojis during the discussions about games can also be considered indicative of this approach since teachers appropriate these resources by reacting to their peers' fun interactions, making them lighter and more pleasant during group discussions. This also works as a discursive strategy to defend the role of games in language learning, smoothing out the discussion, as the relationship between games and learning still seems to cause mistrust.

In this sense, one can also glean from the discussions about games that the collaborative construction of knowledge relies on negotiations supported by the use of emojis. These negotiations aim at both expressing divergence of opinions and reaching consensus on a certain topic, like possible benefits of games for language learning, seeming to indicate that the online community is formed and evolving.

In addition to using humorous and affective emojis, the continuing education teachers appropriated other types of emojis to create a feeling of belonging and closeness within the group. Upon reading the colleague's message (excerpt 24), T4 immediately sent the *Hot Beverage* emojis ☕☕☕ and the *Person Raising Both Hands in Celebration* emojis 🙌🙌🙌🙌🙌🙌 as a way to support the colleague who expresses being busy grading activities. The use of the *Hot Beverage* emojis ☕ also works as an approach strategy, underscoring love of coffee as a common element between them and showing empathy and solidarity with the situation presented by the colleague.

Another indicator of group cohesion is the time interval between posts, typically less than 5 minutes, demonstrating the group members' concern to be present or express a reaction during interactions, even if only occasionally, as in the case of T5 that posts only a *Smiling Face with Smiling Eyes* emoji 😊.

- 24) 3/25/19, 3:35 PM - T6: I'm working in this public school at the moment, drinking my coffee and correcting the activities 📖📚💪
- 25) 3/25/19, 3:35 PM - T4: ☕☕☕ coffee
- 26) 3/25/19, 3:36 PM - T4: ☕☕☕ coffee 🙌🙌🙌🙌🙌🙌
- 27) 3/25/19, 3:37 PM - T5: 😊

These questions take us back to the discussions of Barbieri, Ronzano and Saggion (2016), who indicate that emojis can be used in virtual environments to describe objects, situations, and even feelings with small images, providing fast visual communication. In excerpt 24, for example, T6 uses the *Books* emoji 📖, to illustrate the reference to the work mentioned in the interaction, and the *Flexed Biceps* emoji 💪, which, by suggesting resilience to work in public school, has the effect of reinforcing a feeling cohesion through class identity.

The use of emojis as a strategy for quick reaction to posts and timely communication occurs at various stages of task development during the training course. Discussions of how selfies and braggies could be explored in the language classroom generated a number of reactions during the posting of media created by course participants, most of which through clapping emojis. Notably, the *Clapping Hands Sign* emoji 🙌 and the *Face Screaming in Fear* emoji 😱 also seem to indicate applause or expressions of surprise typically used after presentations of work in physical environments as a way of showing appreciation.

- 28) 3/21/19, 10:45 AM - T7: <Media omitted> In Egypt with my husband! Purely showing off.
- 29) 3/21/19, 10:45 AM - T8: 😱🙌🙌🙌
- 30) 3/21/19, 10:46 AM - T9: Wwwwoww
- 31) 3/21/19, 10:53 AM - T10: <Media omitted> Me, myself and all my colleagues at UFMG at ensino de língua estrangeira mediado pelo computador.
- 32) 3/21/19, 10:57 AM - E1: 📖 : 🙌🙌🙌🙌🙌
- 33) 3/21/19, 10:58 AM - T8: 🙌🙌🙌🙌🙌
- 34) 3/21/19, 11:01 AM - E2: <Media omitted> In Rio de Janeiro during Carnival, waiting to be on Sapucaí with Salgueiro.
- 35) 3/21/19, 11:13 AM - T7: 🥳
- 36) 3/21/19, 11:14 AM - T8: I ❤️ RJ

The quick response through the use of emojis in these interactions (excerpts 29, 32, 33 35 and 36) as can be seen in the day/time stamp of the posts, facilitated by the ubiquity of mobile devices, also seems to ensure the flow of interactions, the group's cohesion, and the reaction to the tasks posted by colleagues, all of which seem to indicate the formation and evolution of communities of practice in line with Wenger's (1998) postulation. It is also noteworthy that the exchange of expressions of support and encouragement among participants in the continuing education course is also considered indicative that the

community was formed according to Palloff and Pratt (1999).

In addition to relying upon expressions of humor and affection to maintain the flow of the interactions, the feeling of belonging, and group cohesion, learning communities are formed around issues of identity and common values, transcending geographical barriers.

As we pointed out earlier, identity traits such as skin color in body part emojis was a claim of social media users who included emojis as an interactional resource. The appropriation of these and other resources can ensure diversity in communities that constitute online social spaces. In the specific case of training courses, the choice of skin tones for body parts occurred with great frequency, as can be seen in the *Clapping Hands Sign* emoji 🙌 in excerpts 24, 29 and 33, in the *Flexed Biceps* emoji 💪 in excerpt 24, as well as in several times during the discussions where the *OK Hand Sign* emoji 🏆, the *Thumbs Up Sign* emoji 👍 and the *Index Pointing Up* emoji 📌 were used.

Other emojis were also used to emphasize regional aspects and value local culture. These manifestations took place during the discussions of a course assignment in which an assessment of places close to home was based on the use of GPS and the characteristics of the review genre. The following excerpts show the use of emojis to make visible cultural activities aimed at vigorous outdoor sports in Soure and the famous crab festival in São Luiz.

38) 3/20/19, 6:56 AM - T1: Living in Soure has rejuvenated me 10 years because of the weather. It is a city in which most people are sporting. Every day we find her doing hiking, participating in championships such as cycling, marajoara fighting, horse racing. At last a city that was designed against sedentarism. 😊😊🏠🏃🐎

39) 3/28/19, 5:42 AM - T11: Would love to spend a "🦀 weekend" at that restaurant and take in all that Sao Luís has to offer! Maybe in August?

As we can see, the emergence of emojis in interactions via WhatsApp played a fundamental role in the process of forming learning communities and maintaining group cohesion.

The appropriation of emojis as a mediation strategy

Although emojis have been used spontaneously in most of these interactions, the appropriation of these resources to mark the presence of trainers and tutors during interactions should be underscored as a strategy created by the trainers involved in the *Taba Móvel* Project to facilitate mediation courses via WhatsApp. This strategy, which involved the use of the *Mobile Phone* emoji 📱 to facilitate the recognition of tutors, was created from a study carried out in previous iterations of the course – 2016 and 2017 – with the goal of contributing to the pedagogical design and mediation in spaces like WhatsApp. As Tauch and Kanjo (2019) point out, the use of symbols such as the *Microphone* emoji 🎤 at the beginning of a message helps in describing the content of the text that follows.

With regard to mediation, we observe that the fluid and instantaneous nature of the posts in this application made it difficult to identify messages with task instructions and feedback from trainers and tutors, an issue pointed out by teachers who participated in these editions. Although the course focused on collaboration among peers and the collective construction of knowledge with a view to a shared mediation process, that is, with the intervention of peers as demands arose, the instructions often needed to be reiterated by the tutors, mainly because they were related to the use of WhatsApp applications with which all participants are not familiar. Excerpt 40 illustrates an instruction in group 1 regarding access to a video, and excerpt 41, extracted from group 5, demonstrates that the *Mobile Phone* emoji 📱, coupled with the use of @ to notify the group participant, streamlined communication and troubleshooting regarding the execution of WhatsApp-based tasks during the teacher education course.

- 40) E2: 📱 Click on the black box at the end of the presentation to see the video on YouTube.
- 41) E1 📱 : 📱 T13 do you want to learn how to take a selfie 📷 ? We can send you a private message and give you instructions. It's not difficult, trust me! You can choose to comment on your peers' selfies.

Other instances of communication in the groups were streamlined with the use of the *Mobile Phone* emoji 📱 to remind of task instructions already posted during the course, excerpt 42 (group 3), and to correct possible task deviations as illustrated in excerpt 43 (group 4). In the case illustrated in excerpt 43, there was a need to emphasize the characteristics of the review genre to develop the proposed task.

- 42) TA1: 📱 Good morning everyone! #2 is about using geolocalization to promote language learning opportunities. Stop by an amazing park, restaurant, museum, food market, bakery, etc and send us a review of the place. We're looking forward to getting to know the best spots in your town.
- 43) 3/25/19, 12:17 PM - TA2: [3/25, 1:08 PM] TA2 📱 : Your role as a reviewer is to
inform
describe
analyse
advise
[3/25, 1:08 PM] - TA2 📱 : Make sure you follow these four moves
[3/25, 1:10 PM] - TA2 📱 :
<https://www.bbc.com/bitesize/guides/zqt7k7h/revision/2>
[3/25/19, 12:20 PM] - TA2: It's great to see your comments on your peers' reviews.
😊

[3/25/19, 12:21 PM] - TA2: Make sure you write an informative one so that your peers feel like commenting. 😊

The use of the *Mobile Phone* emoji 📱 in the course mediation also favored the identification of feedback posts by trainers and tutors, as in excerpt 44 and 45 (group 6). This feature was also used to identify posts with the purpose of minimizing conflicts that occurred during interactions. This is exemplified by excerpt 46, a post sent to ponder on the accurate use of the English language during course interactions.

- 44) E3: 📱 using selfies and braggies in the English classroom could be a great resource to raise awareness of how (much) we expose ourselves on social media. By doing that, we would be using elements from the S's realities to promote their critical thinking. That is, blending our S's social and school lives. Killing many birds with one stone!
- 45) TA3: 📱 Hi Ygor!!! Yes, I do!! It is an amazing tool to keep students engaged and work with gamification strategies in the classroom.
- 46) E1 📱 : 📱 The aim of the course is to experience what a mobile experience via WhatsApp is like, and discuss how we can integrate mobile applications in the language learning context. As we are always on the go, we make mistakes when interacting here. The idea is to get the discussion going. If I had to proofread all my posts I would not be able to move on. I think that making mistakes is part of any learning process. Everyone's opinion is always welcome in this group and can serve as a starting point for new discussions like this one 😊 .

It is interesting to note that the tutors' posts showed a recurrent pattern, the use of the *Winking Face* emoji 😏, which occurred spontaneously and emergently, that is, without having been discussed by the group as a mediation strategy on WhatsApp.

- 47) 3/25/19, 7:46 AM - TA1: Guys, let's think about what a good review should contain... It is different from a comment.. 😏❤️ check the example on the posts!
- 48) 3/28/19, 12:27 PM - TA4: 📱 Let's interact, people!!! I wanna hear your voices and read your messages too. 😊

The analysis of the occurrence of these emojis indicates that their role in the tutors' posts was to minimize any negative impact of the guidance and the instructions.

Final remarks

In this work, we discuss the use of emojis in the evolution and maintenance of the interactional dynamics of an online learning community. The results pointed to the use of

emojis with syntactic and discursive functions (PAIVA, 2016) and as a way to overcome the absence of non-verbal resources typical of face-to-face interaction. The use of emojis significantly contributed to the construction of group cohesion, a sense of belonging and identity manifestations in the interactions that took place during the course. The appropriation of emojis stands out as an intentional mediation strategy to mark the posts of trainers and tutors, as is the case of the *Mobile Phone* emoji 📱. The use of other emojis, such as the *Winking Face* emoji 😜 and the *Orange Heart* emoji ❤️, emerged spontaneously in the course of interactions as a pedagogical strategy.

Emoji are elements that contribute to the evolution and maintenance of an online learning community and its use patterns, which emerge from the interactional dynamics that occur in this context. As such, they play an important role in pedagogical practices, especially in instantaneous communication environments such as this case of WhatsApp, favoring the mediation among peers, the negotiation of meaning, and the creation of a shared repertoire. We observe that the use of emojis facilitates the exchange of expressions of support and encouragement among learners, in addition to serving as a strategy to minimize disagreements, possible misunderstandings, and conflicts.

Some pedagogical implications of this study include understanding the dynamics of using emojis in online interactions via WhatsApp so as not to perceive them as random, identifying behavior patterns manifested by the use of emojis that may raise the need for intervention/mediation on the part of trainers, and offering insights related to the instructional design of training courses mediated by WhatsApp.

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