Exploring Students' Experiences of Using Multimodal CMC Tasks for English Communication: A Case with Instagram

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ABSTRACT: Employing multimodal computer-mediated communication (CMC) for online language learning and teaching has gained momentum worldwide due to the emergence of various digital modes, such as text, image, audio, and video, for online communication. This pilot study aimed to explore students' learning experiences with multimodal CMC tasks through Instagram. Thirty first-year students at an Indonesian university completed seven CMC tasks, consisting of information gap, reasoning gap, and opinion gap tasks, through three Instagram communication channels: text chat, voice chat, and video chat. Pre- and post-study surveys, journal reflections, and interviews were analyzed using a mixed methods approach. Findings revealed that students overall positively perceived their experiences with tasks delivered through Instagram video, audio, and text chats. They also reported that paralinguistic features afforded by the multimodal Instagram channels— such as emojis, GIFs, images in text chat, intonation in voice chat, and gestures in video chat—facilitated effective communication. However, challenges such as poor internet connections, lack of consciousness of student agency when interacting in video chats, and high anxiety at the beginning of task implementation were also documented during student task performance. The findings suggest that the use of multimodal CMC channels affords greater accessibility and provides multimodal affordances for language learners to communicate using rich semiotic resources. They can strategically draw upon their digital literacy skills to convey messages during meaningful task interaction. Nevertheless, language instructors should consider the availability of internet infrastructure and students' language proficiency prior to utilizing multimodal CMC channels as language learning tools.

Keywords: Multimodality, CMC, Social networking sites, TBLT, Instagram

1. Introduction

The emergence of digital technology has significantly equipped CMC with multimodal features in which users may utilize various modes to convey messages. In the current context of language learning, multimodal CMC has become an indispensable part of learning, evidenced in a variety of widely used communication platforms, such as email, social networking sites, and videoconferencing (Wigham & Satar, 2021). Due to the nature of multimodal CMC, language learners are able to tap into various modes to help convey meaning by mixing text, audio, images, and emoticons. This is achieved, for example, by the use of text chat during videoconferencing, which helps learners to contribute to the discussion board without interrupting the speaker (Hampel & Stickler, 2012). Images and/or emoticons can assist lower-level English language learners to be able to actively engage in text chat conversations (Jin, 2017). The interplay of multimodal communication further enriches learning experiences and facilitates language production beyond a single mode of communication. As a result, the use of multimodal environments in online language learning, and affordances in different types of CMC, have been identified as key research areas in computer-assisted language learning (CALL) research and language learning practices (Guichon & Cohen, 2016).

Social networking sites (SNSs), as the latest revolution of CMC, have become one of the most common platforms used for assisting language learning and teaching (Reinhardt, 2018). To date, Instagram, an application that supports image, text, audio, and video sharing, is one of the most popular SNSs around the world besides Facebook, Twitter, and TikTok (Walsh, 2021). It enables users to send text and audio messages and hold video calls with a single user or group. In the Indonesian context, SNSs are used for socializing with a wider community and for everyday communication and interaction. For example, as an evolving SNS platform, Instagram was reported to have more than 91 million users in Indonesia in 2021 (NapoleonCat, 2021). Notably, around 80% of Indonesian users were teenagers and young adults between 13 and 34 years old (Nurhayati-Wolff, 2021b) actively and frequently using Instagram for daily social life. Indonesian young adults position Instagram as a means for completing social tasks, such as making a meeting appointment, sharing and discussing personal feelings, or promoting commercial sales for personal services and products (Prihantoro & Zulizilah, 2017).

Currently, the majority of literature on the use of Instagram for language learning has only focused on: (1) exploring Instagram features for posting/uploading learning materials, (2) asking the students to respond to the posting by discussing content shared, (3) providing examples in the comments section (e.g., Park & Wu, 2020; Yudhiantara & Nuryantini, 2019). Little attention has been paid to the affordance of synchronous CMC (SCMC) and multimodal features of Instagram, especially for completing authentic daily life tasks. Since Instagram features are frequently used for daily communication needs in peer-to-peer chat or in a small group, it is worth exploring the use of these features within a task-based language teaching (TBLT) framework. Integrating CMC with TBLT promotes language learning through authentic, unrehearsed, meaningful real-life tasks (Ellis et al., 2019). However, utilizing digital technology in language instruction without research-informed learning models might reduce the possibility for English language learners to reach optimum learning outcomes (González-Lloret & Ortega, 2014). Thus, this study married TBLT with CMC as an online learning instruction model. This present study sought to explore students' experiences using multimodal CMC tasks on Instagram and determine how this online learning experience could foster their English language communication skills in an Indonesian context. The research questions (RQs) were:

- What are students' perceptions of completing English language learning tasks through CMC?
- What are the affordances of the text, audio, and video features of Instagram chat as the CMC platform for task completion?
- What are students' perceptions of the use of nonverbal cues (e.g., emojis, GIFs, images, gestures) for fostering English communication?
- What are examples of nonverbal cues used in the text and video chat for fostering English communication?

2. Literature review

2.1. The role of CMC in language learning

Studies suggest that CMC holds great potential for additional language (henceforth LX, see Dewaele, 2017) use and learning (Castrillo, 2013). For example, discussions with classmates conducted through Instagram comments about the content posted have been shown to stimulate students to produce more language output, thus helping them enhance their communication skills (Aloraini, 2018). In addition, it also influences students' affective states, such as motivation when interacting with an authentic audience while doing real-life language learning tasks (Chen & Brown, 2012). It might also reduce students' anxiety due to CMC being a digital space in which direct face-to-face interaction is unnecessary (Côté & Gaffney, 2018).

With the synchronous function, SCMC enables students to connect with others in real-time virtually and supports spontaneous conversation, which may improve students' communication skills (Huang, 2018). This is because SCMC peer-to-peer interactions effectively enable students to interact and practice target language outside the face-to-face classroom (Lin, 2015). Additionally, the multimodality available in SCMC, such as live text chat, audio, and video call, offers optimal alternatives for students to strategically select their preferred channels following their digital learning styles and conversation needs (Guichon & Cohen, 2016). As a result, SCMC provides students with an authentic way of language learning, with varieties of channel options that are directly connected to real-life communication needs.

2.2. The synergy between TBLT and CMC

Task-based instruction is an approach that requires the implementation of communicative tasks to develop learners' communicative competence, problem-solving, and collaboration skills. The emphasis is on learning by doing, with a focus on the use of authentic language. According to Ellis (2018), four key principles undergird the nature of a task: (1) the primary focus during communication must be meaning, (2) there must be some kind of knowledge gap, (3) there must be a communicative outcome, and (4) learners should be encouraged to tap into both linguistic and non-linguistic resources to complete the task. In other words, learners can draw upon their existing LX linguistic repertoires, such as grammar and vocabulary, as well as L1 knowledge, and non-linguistic resources, such as gestures and facial expressions, to facilitate task-based interaction. Thus, the task can stimulate interactions in which learners may experience the dynamic relationship between language knowledge and language use in a particular social context (Samuda & Bygate, 2008). Based on the kind of gaps in the task (Principle 2), a task can be classified into three types (Ellis, 2018; Prabhu, 1987): *information gap* (students have to provide the missing information by interacting with each other), *reasoning gap* (students draw new information through a process of inference, deduction, or practical reasoning), and *opinion gap* (students identify and articulate their personal preferences, feelings, or attitude to complete the task).

For decades, researchers have examined the interrelationships between CMC and task-based instruction as a framework for language learning (Ziegler, 2016), whether as informal activities for sustaining interaction and learning in an outside classroom context, or as a pedagogical framework for designing effective instructional activities in online language courses. González-Lloret and Ortega (2014) assert that CMC offers a more optimal environment for students to learn an LX and improve their digital literacy and skills than a traditional classroom. Levak and Son (2017), for example, noted that the use of Second Life and Skype developed students' listening comprehension skills and boosted their motivation. Students were also reported to have a better grasp of intercultural schema after interacting with their international counterparts. In addition, Castañeda (2019) highlighted the benefits of VoiceThread for improving students' productive and receptive communication skills.

Furthermore, some studies have reported on the effect of CMC modality in conjunction with specific task types on learners' communication skills. For example, the implementation of jigsaw and decision-making tasks in text-based interaction through internet relay chat (IRC) was found to stimulate more negotiation of meaning and awareness of strategy use on self-repair, asking for clarification, and codeswitching, during a communication breakdown (Kost, 2008). Audio-based interaction in a 3D virtual world of Second Life with jigsaw and information gap tasks was reported to promote more negotiation of meaning and communication strategies than did decision-making and opinion exchange (Chen, 2018). The integration of video-based interaction using Skype and narrative tasks was proven to facilitate students' language development as effectively as face-to-face interaction conducted in a physical classroom (Rassaei, 2017).

2.3. Research on multimodality and CMC tasks in online language learning

Multimodality in the context of language learning often refers to the coordination of multiple different modes of communication, both verbal and nonverbal, to deliver a united meaning (Dressman, 2020). Rather than relying on one single mode of communication, people also tap into multiple semiotic resources, such as speech, text, images, and gestures, to construct meaning (Jewitt, 2014). Generally, while people may assume that verbal utterances are the most informative content available to send a message when communicating via the internet, nonverbal elements (e.g., gestures, eye gaze, or images) also contribute significantly to constructing meaning in communication (Jewitt, 2014; Norris, 2004). Hence, verbal and nonverbal communications are integral parts of human interaction and equally add to the intended meaning.

Due to its communicative goal, task-based instruction respects the spontaneous use of both nonverbal and verbal cues for completing CMC tasks. Nonverbal cues serve to convey a meaningful interaction in a language learning context (Dressman, 2020). These features shape the way we communicate and produce multimodal language outputs that are playful, creative, and spontaneous. Prior studies also examined the influence of multimodality on LX communication, with special attention paid to the role of different forms of nonverbal cues to shed light on how students utilize these in online communication. The use of gestures in a videoconferencing task, for example, may extend the negotiation of meaning discourse by constructing vocabulary meaning with the aid of gestural moves (Lee et al., 2019). Another nonverbal resource, gaze, was also reported to facilitate the establishment of social presence during online open-ended task communication (Satar, 2013).

Previous CALL research has asserted that nonverbal cues have a distinctive function related to a particular CMC channel. For example, text-based CMC emojis serve as a replacement for the absence of nonverbal cues used in face-to-face communication and can function pragmatically to signal emotions, backchannel devices, humor, or irony (Li & Yang, 2018). Emojis may also operate as communication strategies to resolve the problem of showing a dramatic expression in written messages, such as an emoji face screaming in fear 😱 for extreme feelings of dread (Hung & Higgins, 2015). Moreover, video-based CMC embodies both verbal and visual modes of communication; the latter includes gestures that reinforce the negotiation of lexical meaning for interlocutors to convey and better comprehend the intended meaning (Lee et al., 2019). Facial expression and gestures also support students' socio-affective communication needs and improve fluency (Satar, 2016). Although the reviewed literature above has investigated the role of nonverbal cues in CMC tasks, further research comparing students' experiences while using nonverbal cues to undertake communicative tasks across communication channels (e.g., text-chat, audio-chat, and video-chat) is relatively underexplored.

3. Methodology

3.1. Participants and the context

The pilot study described here involved 30 first-year business school students ($F = 22$, $M = 8$) enrolled in the General English unit at a university in Indonesia. The unit was run online through a massive open online course (MOOC) "OpenLearning platform" due to the COVID-19 pandemic. It was taught based on the module mandated by the university. Since Indonesian students must pass the university entrance examination before being enrolled in a university, the students' English language proficiency was assessed as ranging between elementary and lower intermediate level based on the Common European Framework of Reference (CEFR). All students were aged between 18 and 21 years ($M = 18.46$, $SD = 0.86$). Participants were recruited from three different formal online classes. They had not met in person before. They were invited to participate in the study and voluntarily signed up. The recruitment principle ensured that all participants met particular criteria, such as being familiar with the Instagram application and having adequate smartphone hardware to access all three channels, text-chat, audio-chat, and video-chat. Human ethics approval was granted for the study, and students further signed a consent form stating that they agreed to have their photographs made public and published. Before conducting one-on-one semi-structured interviews, the participants' communication performance was measured and classified into high, medium, and low achievement, based on their language production and motivation during task completion. It was done by counting the number of turns they took. Further, three participants from each group were randomly selected for interviews using a voice call through WhatsApp as the voice call feature was not available on Instagram at that moment. The interviews were digitally recorded for data analysis.

3.2. Instagram as the CMC platform

This study implemented Instagram as a CMC platform based on the following rationale. First, Instagram allows users to freely utilize multimodal features for communication via either their mobile phone or a web browser. In Indonesia, Instagram was ranked as one of the top three SNSs, followed by YouTube and WhatsApp, in 2020 (Nurhayati-Wolff, 2021a). Around 70% of Instagram users were aged between 18 and 34 years. According to the needs analysis done in the study, Instagram was participants' preferred mobile-based CMC for language learning. One of its salient affordances enables users to select various types of communication channels (e.g., text-chat, voice-chat, and video-chat, as seen in Figure 1) or flexibly combine them with other dynamic features, such as emojis, GIFs, images, and filters.

Figure 1. Screenshots of Instagram chat interface (left to right: text-chat, audio-chat, and video-chat)
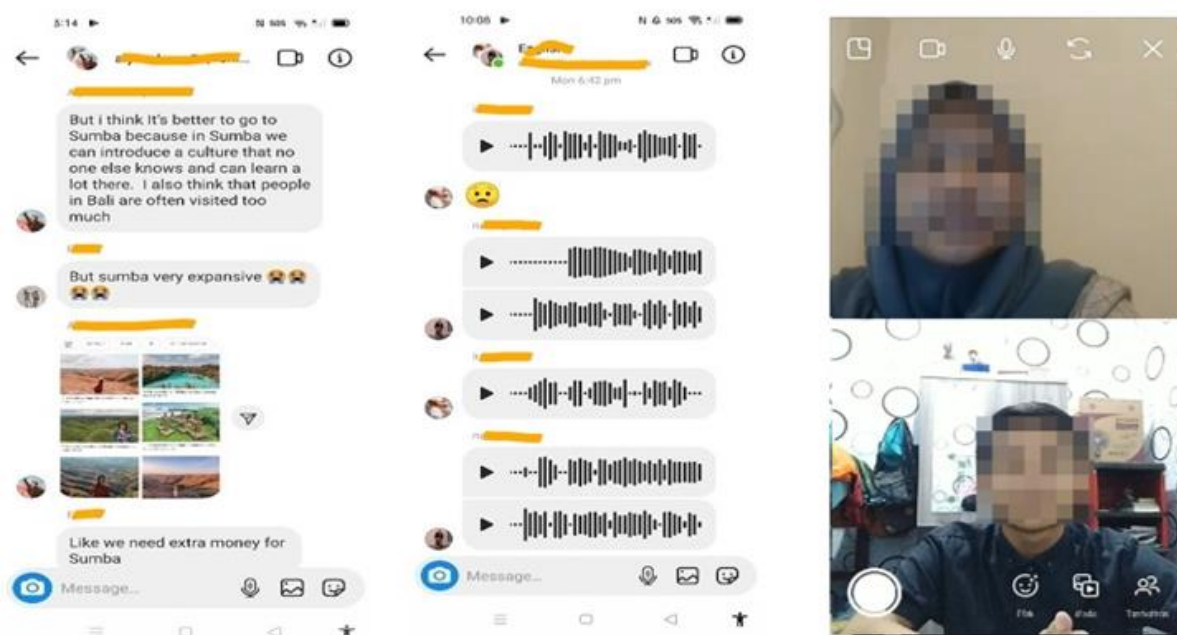
3.3. Procedures

Since the students were expected to be involved in authentic, contextual, and functional use of language through CMC tasks, three types of communicative task (e.g., information gap, reasoning gap, and opinion gap) were designed and implemented in this study, following the task typology suggested by Prabhu (1987) and Ellis (2018). The task contents were developed in line with the task principles of focusing on meaning, having some kind of knowledge gap, producing communicative outcomes, promoting both linguistic and non-linguistic resources to complete the task, and real-world task resemblance (Long, 2015). Before CMC task implementation, a needs analysis was conducted to gather information on the students' communication needs and preferred task topics. Each task was performed twice (except the opinion gap task that ran three times); the first time, students were in a dyad, and the second time, they were in a group of three. The participants were instructed to use a specific channel in the first iteration (e.g., text, audio, or video chat). In contrast, they could select their preferred channel to communicate (free channel) in the second iteration. We considered the nature of each task concerning the functionality of a communication channel before assigning the tasks. For example, students were requested to use video calls in Tasks 1 and 7 that required visual aids (video and pictures). Text chat was used in Task 3, which encouraged students to create a shorter and more efficient exchange of information. Audio chat was selected for Task 5, supporting the participants to express a complex opinion. Furthermore, we allowed free channels (Task 2, 4, and 6) for group activities to explore the possibility of using mixed Instagram channels to complete the tasks (see Table 1 for the summary).

Table 1. Summary of the task types and instruction

	Task types and instruction
Week 1	Information gap; video chat; in a dyad
	Rearranging random short videos become a full story (20-30 minutes)
Week 2	Information gap; free channel; in group
	Rearranging jumbled pictures become a complete story (20-30 minutes)
Week 3	Reasoning gap; text chat; in a dyad
	Discussing to select tourism destination sites for four days' holiday (20-30 minutes)
Week 4	Reasoning gap; free channel; in group
	Selecting only 12 kg survival kits from the provided list to carry on during the journey (20-30 minutes)
Week 5	Opinion gap; audio chat; in a dyad
	Sharing and discussing opinions about 'how to build a strong friendship?' (20-30 minutes)
Week 6	Opinion gap; free channel; in group
	commenting, sharing, and discussing two pictures showing contrast life phenomena (happy and sad family pictures) (20-30 minutes)
Week 7	Information gap; video chat; in a dyad
	Guessing six different characters taken from famous novels and movies (20-30 minutes)

3.4. Data collection methods

We employed a mixed methods research design to obtain in-depth information from the collected dataset and allow for data triangulation to ensure the validity and reliability of the quantitative findings and the trustworthiness of the qualitative findings (Creswell, 2012). The quantitative and qualitative data were gathered from various sources, including pre-and post-study surveys, students' reflection journals, and semi-structured interviews. The surveys were created in Qualtrics and consisted of closed-ended items scored on a five-point Likert scale ranging from *strongly disagree* to *strongly agree* (Link of pre-study survey https://curtin.au1.qualtrics.com/jfe/form/SV_2sfKSwSzNqUvkUd and post-study survey https://curtin.au1.qualtrics.com/jfe/form/SV_3qRuwCMlnfTSDWJ) The surveys were used to acquire information about students' perceptions regarding tasks, Instagram features, and the perceived benefits on their English language proficiency of using multimodal CMC tasks. The items on pre-and post-study surveys were identical as we intended to compare the experience before and after the study. The survey was developed by adapting the items from prior CMC and SNSs research (e.g., Aloraini & Cardoso, 2020; Erarslan, 2019; Lee & Markey, 2014), targeting key constructs, such as affective aspects and perceived benefits related to the use of CMC for language learning. Further, the items were reviewed by two TESOL/Applied Linguistics specialists, and member checked with the teachers to clarify ambiguous items (Dörnyei & Csizér, 2012). We also utilized guiding prompts to elicit information for students' reflection journals. Three high, medium and low achievers (*N* = 9) were interviewed to gather more information about factors affecting their task completion, the challenges in performing tasks, preferences for task types, and experiences with using multimodal features to complete the tasks. The survey items, journal prompts, and interview questions were all in Bahasa Indonesia to reduce any

misinterpretations by participants due to their English language proficiency (Supplementary materials. To view survey items, journal prompts, and interview questions referred to in this article, please visit https://bit.ly/3GBXFna).

This study was conducted over nine weeks. Participants were asked to take the pre-study online survey using a shared link in the first week. Then, the participants were required to select the preferred time to take part in task implementation, as they studied online from home and lived in different geographical regions around Indonesia. In the following seven weeks, participants performed the task-based instruction using their smartphone and Instagram account with guidance from one of the researchers. The researcher's role was participant-observer and involved organizing the online meetings, delivering the task materials, assigning the dyads or groups, and observing, monitoring, and recording each ongoing task session using a smartphone. First, an Instagram whole group chat was created as the main communication channel between the researcher and participants. The researcher posted task instructions and a list of dyads or groups of participants. To form dyads or groups in each task, the participants were randomly selected. In performing the tasks, the participants created a small group chat consisting of the designated students and the researcher. Hence, the researcher was able to monitor students' task interactions and document the process. After finishing each task, participants also kept a journal reflecting on their experiences with Instagram CMC tasks. They considered their experiences of, and attitudes towards, doing the CMC tasks, guided by the reflection prompts. At the end of the study, participants were invited to take the post-study survey, and nine students were interviewed.

3.5. Data analysis methods

Data were analyzed using a convergent mixed method design in which quantitative and qualitative data were analyzed separately, and then the results were compared to see whether they ratified each other (Creswell & Creswell, 2018). First, the qualitative data gathered from the reflection journal and interviews were translated into English and analyzed thematically (Miles et al., 2014). For the thematic analysis, each researcher read students' reflections and interview responses repeatedly and coded the units derived inductively across the qualitative dataset. We then discussed the coding discrepancies and reached a consensus in resolving them. These units were compiled into groups of specific patterns, and then the patterns were compared and classified into several categories. All similar categories were then subsumed into higher-level themes to capture the essence of the participants' perceptions. Meanwhile, the Likert scale survey responses were quantitatively measured to identify trends in students' perceptions before and after the implementation of CMC tasks, the affordances of Instagram features, and students' use of nonverbal cues. Further, we compared the mean scores of survey results using a paired t-test via SPSS 22.0. Before running the paired t-test, the data had been measured as normally distributed.

4. Findings

4.1. Quantitative results

The quantitative results from the pre-and post-study surveys addressed all RQs in three parts: (1) the use of CMC tasks, (2) the use of multimodal features of Instagram, and (3) the use of nonverbal cues for online communication (see Tables 2, 4 and 5).

4.1.1. The use of CMC tasks

Table 2 presents the results obtained from the pre-and post-study surveys related to students' perceptions of using tasks to foster English communication. It can be observed that the students positively perceived the tasks to facilitate English use, meaningful and prolonged communication (96%; Q3), and improved collaboration with peers (from 44% in the pre-study to 96% in the post-study) (Q2). Their motivation for communication in English (Q6) also increased from 79% in the pre-survey to 90% in the post-survey, and more than 96% confirmed that they were actively engaged in tasks (Q1).

Overall, students' perceptions regarding the use of tasks positively changed. The results for the post-study survey ($M = 4.41$, $SD = 0.33$) were significantly higher than the pre-study survey ($M = 3.77$, $SD = 0.33$). The paired t-test found a statistically significant difference in student perceptions of using tasks to foster English communication before and after completing the tasks ($t(29) = -6.38$, $p < .001$, $d = 1.2$) (see Table 3).

Table 2. Students' perception of using CMC tasks

Questions of the survey			SD	D	N	A	SA
1.	I participated actively in English learning tasks (e.g., discussion for deciding holidays destination with partner) through Instagram.	Pre	0.0%	3.4%	17.3%	65.5%	13.8%
		Post	3.3%	0.0%	0.0%	30.0%	66.7%
2.	I worked cooperatively with others both in pairs and in groups during English learning tasks through Instagram.	Pre	6.9%	10.4%	37.9%	41.4%	3.4%
		Post	3.3%	0.0%	0.0%	36.7%	60.0%
3.	I felt that working with peers when doing tasks through Instagram helped me better communicate in English.	Pre	0.0%	0.0%	13.8%	75.8%	10.4%
		Post	3.3%	3.3%	0.0%	30.0%	63.3%
4.	If I encountered difficulties, I still tried my best to complete those tasks.	Pre	0.0%	0.0%	6.9%	62.1%	31.0%
		Post	3.3%	0.0%	0.0%	30.0%	66.7%
5.	Doing tasks through Instagram motivated me more to communicate in English.	Pre	0.0%	0.0%	20.7%	58.6%	20.7%
		Post	3.3%	0.0%	6.7%	53.3%	36.7%
6.	I enjoyed working with peers when completing tasks through Instagram.	Pre	0.0%	0.0%	17.3%	69.0%	13.8%
		Post	3.3%	0.0%	0.0%	53.3%	43.4%

Note. SD: Strongly disagree, D: Disagree, N: Neutral, A: Agree, SA: Strongly agree.

Table 3. Students' perception of using CMC tasks

The use of CMC tasks	n	Mean	SD	t	p
Pre-survey	30	3.77	0.37	-6.38	.001[*]
Post-survey	30	4.41	0.33		

Note. [*]$p < .05$.

4.1.2. The use of multimodal features of Instagram

Table 4 shows the students' responses to using the multimodal Instagram features to perform CMC tasks. Overall, students agreed that Instagram multimodal features rendered enjoyment (93%; Q7), eased anxiety in English communication (76%; Q8), and provided flexibility in communication modes (93%; Q9).

Table 4. Students' perception of using multimodal Instagram features

Questions of the survey			SD	D	N	A	SA
7.	I enjoyed using Instagram features (e.g., text, voice, video, images) to communicate in English.	Pre	0.0%	0.0%	27.6%	48.3%	24.1%
		Post	3.3%	0.0%	3.3%	40.0%	53.4%
8.	I felt more comfortable communicating in English using different Instagram features than only using one mode.	Pre	0.0%	3.4%	31.1%	41.4%	24.1%
		Post	3.3%	3.3%	16.7%	56.7%	20.0%
9.	Instagram features facilitated me with more options to communicate in English.	Pre	0.0%	0.0%	24.1%	51.8%	24.1%
		Post	3.3%	0.0%	3.3%	56.7%	36.7%

Note. SD: Strongly disagree, D: Disagree, N: Neutral, A: Agree, SA: Strongly agree.

Students were generally satisfied with the additional CMC options that the multimodality of Instagram offered to further support their English communication. Table 5 demonstrates a significant difference in the students' perceptions of using the multimodal features between the pre-study survey ($M = 3.94$, $SD = 0.66$) and post-study survey ($M = 4.27$, $SD = 0.46$). The paired t-test results showed ($t(29) = -2.20$, $p = .036$, $d = 0.3$); this meant that students acknowledged the positive effect of multimodal Instagram features on enhancing English communication.

Table 5. Students' perception of using multimodal Instagram features

The use of Instagram features	n	Mean	SD	t	p
Pre-survey	30	3.94	0.66	-2.20	0.36
Post-survey	30	4.27	0.46		

4.1.3. The use of nonverbal cues

Table 6 shows the students' perceptions of using nonverbal cues for online communication. Multimodality was recognized to be important for English communication (96%; Q13). Students also highly valued nonverbal features (e.g., emoji, GIFs; 93%; Q14) and the use of gestures in video chat for English communication (93%; Q15).

Table 6. Students' perception of using nonverbal cues

Questions of the survey		SD	D	N	A	SA
10. Using different modes (e.g., text, voice, video, body language, visual, images) was important for English communication.	Pre	0.0%	0.0%	13.8%	55.2%	31.0%
	Post	3.3%	0.0%	0.0%	53.4%	43.3%
11. Nonverbals features (e.g., emojis, GIFs) of Instagram were valuable for English communication.	Pre	0.0%	3.4%	27.6%	48.3%	20.7%
	Post	3.3%	3.3%	0.0%	46.7%	46.7%
12. Gestures through Instagram video chat were valuable for English communication.	Pre	0.0%	0.0%	37.9%	48.3%	13.8%
	Post	3.3%	0.0%	3.3%	60.0%	33.4%

Note. SD: Strongly disagree, D: Disagree, N: Neutral, A: Agree, SA: Strongly agree.

Overall, as illustrated in Table 7, using nonverbal cues for English communication was well received by the students. The results of the post-study survey ($M = 4.39$, $SD = 0.45$) were higher than the pre-study survey ($M = 3.93$, $SD = 0.62$), and the paired t-test results showed a statistically significant difference in the students' perceptions of using the nonverbal cues, indicating that students acknowledged the positive role of multimodal features in fostering English communication ($t(29) = -2.90$, $p = .007$, $d = 0.5$).

Table 7. Students' perception of using nonverbal cues

The use of nonverbal cues	n	Mean	SD	t	p
Pre-survey	30	3.93	0.62	-2.90	.007*
Post-survey	30	4.39	0.45		

Note. *$p < .05$.

4.2. Qualitative findings

4.2.1. Students' perceptions of using CMC tasks

To answer RQs 1 and 2, the emerging themes from the students' journal reflections and interviews regarding their perception of using CMC tasks for fostering English communication were analyzed. Finally, the challenges they identified in performing tasks were included at the end. All names displayed are pseudonymous.

Supporting LX production. Many students perceived participating in CMC tasks as facilitating their target language production. The CMC tasks themselves seemed to have enabled them to use more LX in their daily communication outside the classroom since they had limited opportunities to practice during the formal lessons (Vandergriff, 2016). Having tasks through CMC created an optimal virtual space and stimulated students to use the target language in an authentic situation since the tasks were designed to resemble real-life communication (Aloraini, 2018). Putri identified her experiences as follows:

In Instagram, I straightaway practiced, . . . In the classroom, we were usually given (teaching) material first. It means we listened to the lecturers talking and we didn't always practice. (Interview/Putri)

In addition, Instagram features were reported to create more flexible communication. Students appreciated the interchangeability between text-chat and voice note features. This could be seen from one student's testimony:

There were times when I did not know the pronunciation of a word in English, so I chose to type it. On the other hand, when I had to explain something long, I preferred to use a voice note instead of having to type it. (Journal/Mukti)

With the user-friendly interface, students just needed to touch the record button to operate voice notes, speak as needed, and then send the recording to their partners. Interestingly, although many students reported practicing CMC tasks with partners supporting LX production, some students complained that not all partners could work

with them to complete the task. One student (Adi) observed that sometimes there was a group member who tended to be silent or unresponsive in the group talk. As he stated, "Thank God, I got a partner who was equally active too, we were also good, we were not nervous."

Encouraging self-confidence and motivation to learn LX. Another positive finding was that multimodal CMC tasks boosted students' agency and motivation to use the LX. As the study progressed, some students gradually developed a sense of self-confidence for communication in English. The exposure they got from exchanging information during CMC tasks was considered to aid in language intake that could serve as a confidence booster. CMC tasks reinforced students' confidence to communicate in English outside of the classroom (González-Lloret & Ortega, 2014). Zahra voiced:

When I did that at first, I did not feel confident because I was still confused with English . . . but more and more I got used to (with the tasks by) finding vocabulary, the right sentences, and how to apply it correctly. (Interview/Zahra)

Rudi mentioned that the use of Instagram as a platform enhanced his self-confidence. Its facility in delivering online communication without physical meetings reduced anxiety:

With the help of social media like Instagram, it could help me increase my confidence because we did not face (to-face) directly with others. (Interview/Rudi)

In terms of learner motivation, many students appreciated the CMC tasks that helped them develop a sense of learning autonomy. Due to their involvement in completing the tasks, students were motivated to access online materials from various sources, such as streaming videos, to acquire more vocabulary. For example, Alevi confessed, "I realize that sometimes I watch something (videos) in English to improve my English vocabulary." They also reviewed the recorded video of their interactions with partners to further scaffold their speaking skills and pronunciation.

Providing enjoyment and fun. Many students perceived that the tasks were linked to their communication needs in daily life, such as deciding where to go, sharing opinions related to a specific phenomenon, or exchanging information about interests. The CMC tasks were considered to be dynamic learning activities as vouched for by Adi: "because there was interaction, there was discussion, and there was debate too." The use of Instagram as a medium was considered to provide enjoyment in two aspects. First, it served as a vibrant communication tool for language learning, as the students felt that visual features such as emojis and GIFs could mediate discourse and add another layer of expression to make their communication more effective and enjoyable. As Irina expressed, "I enjoyed it . . . I could also post gifs, uhm . . . pictures that moved as if I felt what was represented in the emoji on Instagram." Second, with Instagram's basic function for establishing social networking, students were also delighted to gain many new friends on Instagram. Being able to share an opinion and work together with new friends while completing the tasks was fun for them since they had limited access to socializing with their colleagues due to social distancing during the COVID-19 pandemic. Through their involvement in the CMC tasks, they were able to mingle with their peers from other classes and increase the numbers of their Instagram followers as well.

Improving digital literacy skills. Some students felt that doing tasks through Instagram helped them acquire the digital skills they needed. As technology has developed so quickly, they commented on not being able to keep up. They lacked knowledge about the current features and facilities offered by the internet (e.g., cross-communication channels, the plethora of language aid applications, and visual features). By practicing English using Instagram tasks, students had to explore non-linguistic resources, including the availability of multimodal channels and other online tools as useful alternatives to help them complete the tasks (e.g., video calls, internet search engines, and online dictionaries). As indicated by Zahra, "I just found out that there was a video call on Instagram" (journal), and Irina also sought additional information from the internet: "When I didn't know how to express it in English, I would immediately search (meaning in internet browser) for it" (interview). Students also became aware of the affordances and constraints of each Instagram channel for communication, as suggested by Haque: "Text chat is a simple but very important feature; in this case, voice chat is to clarify the pronunciation, and video calls are more effective in discussions" (journal).

Challenges in implementing the multimodal Instagram tasks. Some challenges were also reported during student performance of the CMC tasks. First, the internet connections around their locality were sometimes not stable, thus obstructing the completion of the task process:

Sometimes the signal went out, as during a video call, the screen was blurry, the picture was paused, the sound was sometimes unclear, so it was a bit annoying. (Interview/Putri)

As Indonesia is an archipelago country, internet coverage is not equally distributed, especially in rural areas. The signal quality was poor and insufficient to transfer both audio and visual data requiring higher bandwidth. Another student, Feby, also commented that, "If the signal was not good, we could not do the task well." This finding indicates the importance of internet stability, which was integral to any type of CMC task and its completion.

Second, most students felt very anxious when doing CMC tasks, given the fact that their English class rarely used CMC tasks as a learning platform. As Feby stated:

In the first task, I was inexperienced . . . so, I felt a little scared, confused, afraid of being wrong, and worried whether the pronunciation was correct or not. (Interview/Feby)

These initial qualms and anxieties about performing CMC tasks arose because the students had little experience of performing tasks through CMC. These tasks required them to actively produce language output and hone their communicative skills through speaking and writing spontaneously with their classmates. Students were sometimes not ready for the shift from receptive to productive-based tasks, especially through SCMC. This seemed to be compounded by their English language proficiency level. Satar and Ozdener (2008) suggested that text chat was appropriate for less proficient or more anxious students, while video chat was suitable for more proficient and less anxious students. However, students' anxiety in our study was reduced as they performed the tasks weekly, supporting the claim that students' anxiety will gradually decline once they have achieved familiarity with tasks settings (Gurzynski-Weiss & Baralt, 2013).

4.2.2. Students' perceptions toward the use of Instagram features and nonverbal cues

We also compared the students' perceptions of multimodal communication enacted in the three main types of Instagram channels: text-chat, video-chat, and audio-chat, and provided the example of nonverbal cues used in text and video chat for addressing RQs 3 and 4.

Text-chat feature. Most students felt that multimodal features of text-chat, such as images, emojis, and GIFs, helped them express and convey meaning in various ways:

When I didn't understand a word (related to a feeling) in English, I could express it through emojis or GIFs. (Journal/Andria)

Images could provide a visualization when I imagined a place that I had not visited yet. (Journal/Ferry)

Figure 2. The use of emojis, GIFs, and images in a text-chat interaction

The excerpts above show the value of emojis, GIFs, and images replacing or strengthening verbal messages in online interaction. It can be seen from the conversation in Figure 2 how students employed these visual features during Tasks 3 and 6. For example, when students had to give their opinions about two contrasting pictures, one which illustrated harmonious families and one which showed discordant families in Task 6, they used emojis (A) to express sadness and empathy by adding "a worried face emoji." A GIF (B) was also added to convey a more vivid feeling of sadness through an animation representing a crying girl. They also used the actual image of the object "a water palace" (C) to back up the verbal message sent earlier when discussing tourist destinations in Task 3. Thus, the combination of verbal and nonverbal channels livened up students' use of the English language.

Audio-chat feature. Many students found using voice-chat beneficial for carrying out the tasks. They positively perceived the functionality of voice-chat in bringing suprasegmental elements (e.g., intonation and stress) into the message, thus helping the interlocutors to interpret their words correctly. As Fiona stated, "Using the voice chat feature, I could also bring feelings directly into the sentence, which was interpreted in the form of intonation." In addition, the voice note function in Instagram was user-friendly, allowing students to prepare what they would like to say and replay by rechecking the recording for pronunciation and grammar. When students made a mistake, they could erase it and repeat the recording before it was sent. As noted by Irina:

> For voice notes, it was easy because, for example, when I felt wrong in recording a voice note, I just slid it and deleted it and repeated it. (Interview/Irina)

Video-chat feature. Most students also acknowledged that non-verbal cues, such as gestures and facial expressions, were conducive to online video conversation. They reported that conveying a message with gestures could help the interlocutor to better understand since gestures could carry referential (semantic) meaning:

> Gestures are very helpful, especially when speaking in English; it's like when someone didn't know what I meant, I could use gestures. (Interview/Rani)

Students used gestures, gaze, and facial expressions for online interaction during Task 7 (information gap). Examples of gestures used in online interactions through video calls on Instagram are shown in images in Table 8 below. Here, Irina (IR) described one of the pictures using verbal and nonverbal cues. She used a referential gesture (a gesture that resembles aspects of the semantics and lexical content) (Kendon, 2004) by moving her hand to the back of her shoulder and pointing to the position of the wing (A) while saying, "the character has a . . . black cloth and *sayap* (wing)." It appeared that the gestures emerged when she attempted to find an appropriate word for saying "wing" but failed to retrieve the word, whereupon she used a translanguaging strategy where she called upon the word *sayap* in Indonesian. In this excerpt, referential gestures were used to direct attention to the specific objects that served as distinctive characteristics of the superhero described. They cognitively supported the lexical search process. For the second gesture, Irina directed her index finger to the space in front of her face while saying "black mask" (B). This gesture acted as a co-expressive function since it seemed to be formed at the same time as uttering the phrase "black mask" and indicated the real object worn on the face (Negueruela & Lantolf, 2008). Therefore, it seemed to provide additional information about the type and position of the mask. For the gaze and facial expression, Irina looked at the screen while describing the character with a friendly and relaxed expression, while Askia (AS) paid serious attention by listening and watching Irina's explanation. Askia changed her facial expression when trying to guess the character's name. Hence, the gaze and facial expression built social presence and emotional connectivity between the interlocutors (Satar, 2013).

Table 8. The use of gestures in video call interaction

Speech	Scenes	(I) Gaze and facial expression	(II) Gestures
IR: Ok . . uhm . . next . . uhm, the black mask . . character has a . . . black cloth or *sayap eh apa* (wing eh what) in on the back . . . black mask AS: Oh batman, I know this. ((laugh)) IR: Uhm, yeah, good answer	(IR vs. As) A B	IR: Looks at the screen while describing the character AS: Seriously pays attention while watching IR's explanation, and she changes her facial expression when she realized the character's name	IR: She moves her hand to the back of her shoulder to point to the position of the character's wing (A) and she also tries to direct her index finger in front of her face to indicate "mask" (B)

5. Discussion

The first RQ explored students' perceptions toward completing English language learning tasks through CMC. Quantitatively, students reported positive experiences with the implementation of multimodal CMC tasks, as shown by the statistically significant results between the pre-and post-surveys, indicating that the multimodal CMC tasks were beneficial for fostering English communication (Table 3). Based on the qualitative findings, students characterized multimodal CMC tasks as promising mediums for practicing all language skills in an authentic setting. In line with the previous research findings (Aloraini, 2018; Vandergriff, 2016), CMC tasks in this study encouraged students to immerse themselves in the LX environment more deeply than in the classroom. In the CMC environment, they could spontaneously use more target language in an authentic setting. Students recounted that their involvement in CMC also created a space for them to use authentic target language for their real-life communication needs by conversing and interacting with their friends from different language backgrounds. This finding resonated with Erarslan's (2019) report that Instagram enhanced students' use of the LX as well as focusing on collaboration, cooperation, and sharing knowledge among the users.

Regarding students' affective feelings, the findings showed that the CMC tasks were pleasant and motivating activities. Students respected the familiarity of topics discussed in the tasks, which allowed them to connect the contents to their personal lives. This finding supports Chen and Brown's (2012) claim that performing life-like tasks can stimulate students to produce more meaningful and accurate LX. Besides this, the informality of interaction provided by CMC tasks can bring about freedom for students to express their ideas in the target language without being limited to the scripted dialogue often given in Indonesian classrooms. It echoes Lee's (2016) conclusion that open-ended CMC tasks provide freedom for discussing and understanding the topic. Some positive points related to CMC use were also noted by the students, such as reinforcing their confidence, reducing their anxiety, and offering enjoyment. These positive affective experiences are key to maximizing the potential for language learning by creating a positive emotional bond to learning experiences (Dewaele & MacIntyre, 2014) and intensifying students' participation and engagement in LX learning (González-Lloret & Ortega, 2014).

The second RQ sought to identify the affordances of the text, audio, and video features of Instagram as the CMC platform for task completion. A statistical majority of students found that multimodal Instagram features afforded LX communication and made it enjoyable, comfortable, and flexible, which helps LX production (Table 5). The students shifted between multiple modes, increasing opportunities for interaction and complementing each other's modes of communication. The findings evidenced Hampel and Stickler's (2012) statement that CMC multimodal features can be used to enhance language teaching and learning. However, some drawbacks were also documented. The first was internet infrastructure. Many students involved in this study lived in rural areas and often experienced poor internet connections. Thus, in implementing CMC tasks, particularly via video call, language instructors should consider the stability of the internet networks in their locality to ensure that all the channels will operate well. Second, although students had been familiar with Instagram, they still felt very anxious at the beginning of task implementation, especially in completing tasks through voice chat and video chat since they had rarely practiced English speaking through these channels. Our study also confirmed Satar and Ozdener's (2008) claim that less proficient LX users feel more anxious using voice and video chat compared to text chat. Any use of CMC as a language tool would need to consider this and be sure to familiarize students with the tasks by grading the level of task complexity and staging the channels from text chat to voice chat and then, lastly, video chat.

RQs three and four concerned the students' experiences and perceptions of using nonverbal cues (e.g., emojis, Gifs, images, intonation, gestures) in three different Instagram communication channels (text, audio, and video chats) for their English communication and examples of the nonverbal cues used. We presented nonverbal use focusing only on text and video chat due to the space limitations in this article. The affordance of CMC to offer nonverbal features in online communication provided a vibrant atmosphere to the interaction. Students acknowledged nonverbal cues as an essential tool for interpreting meaning in LX communication since the communication was naturally multimodal. They underscored the idea that semiotic resources (co)constructed meaning and contributed significantly to the determination of meaning in communication (Jewitt, 2014). Emojis and other visual cues encouraged colorful and socially bound interaction. Similar to Chang's (2016) finding that emojis possibly made the interaction more socio-emotional and less face-threatening, students also found that the use of emojis, GIFs, and images facilitated a communication strategy in the absence of visual cues in written based communication, as noted in Hung and Higgins's (2015) study.

Referential gestures were often used by students with inadequate LX vocabulary resources for lexical search functions (Table 8, Image A). Gestures were formed before the students had found the appropriate words to

convey the meaning. During this process, students commonly continued to speak with a filler such as "uhm" (Lee et al., 2019; Negueruela & Lantolf, 2008). Additionally, the referential gesture served as a spontaneous co-expressive function to accompany speech (Table 8, Image B). It seemed to contribute additional information about the real object described. These gestures also acted as a strategy to elucidate meaning for the interlocutor by aligning with the language used to create a coherent semantic message and enabling dual-channel input. This was important for language learning. However, the use of nonverbal cues did not always result in successful communication due to different interpretations from students with different cultural backgrounds. This had the potential to lead to misunderstandings.

6. Conclusion

The findings of this study suggest that Instagram as a means of CMC could be a conducive medium for Indonesian students to practice their English language authentically. It could also be a vehicle for socializing and connecting people to the global community. Despite the constraints found in the study, Instagram still proved to be a valuable tool for fostering language learners' communicative skills beyond the classroom walls. Further, the analysis of student use of multimodality features added to our understanding of how learners engage with verbal and nonverbal semiotic resources within various communication channels and their interrelationship with task-based instruction for enhancing English communication. Thus, it is essential to raise awareness of teachers and students to this and explicitly promote the value of nonverbal cues as well as verbal cues for LX communication. It has to be remembered, however, that this study was limited to one group of students in an Indonesian context. Nonetheless, given the growth of multimodal language learning materials and teaching resources available online, a shift in perspective from a monomodal point of view (e.g., textbook, module) is needed for teachers to create a more meaningful learning atmosphere in the virtual classroom. Further studies on CMC, focusing on multimodality through different channels, using task-based instruction frameworks, are needed with participants coming from wider cultural and linguistic backgrounds. This might help uncover how nonverbal cues (e.g., emojis, gestures, and gaze) are utilized across cultures. Additionally, microanalysis of how students utilize nonverbal cues in tandem with verbal cues in various discourse functions during task interactions needs to be done holistically. Finally, investigating the effect of integrating social media and form-focused tasks into the syllabus by integrating the use of verbal and nonverbal cues is important to connect pedagogical practice to language use in real-world situations.

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