

The Effects of Informal Use of Computer-Mediated Communication on EFL Learner Interaction

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Abstract

The study adopted an experimental approach to investigate the impact of informal use of computer-mediated communication (CMC) on English as a Foreign Language (EFL) learner's interaction. CMC is an umbrella term which refers to human communication via computer either synchronously or asynchronously. It can be implemented in two ways either formally or informally. Informal use of CMC in this study means unevaluated and unplanned activities which can occur outside the classroom, and can be initiated by the students. This study sought to examine: (a) if the learners participate actively in informal CMC; (b) the factors that help informal CMC to be a successful experience; and (c) the impact of CMC on comprehensible written output. The participants were fifty adult EFL Saudi learners at Najran University, Saudi Arabia. The study utilized a homepage on Facebook as a research tool. Data collection was done through a questionnaire and an interview. The participants' exchanges in the Facebook group and their replies to the questionnaire were analyzed. The results of the study revealed that informal use of CMC can be affected by many factors. The voluntary nature of learner participation, busy schedules, and the teacher interference were some of these factors. The results showed that the participants had positive attitudes towards using CMC to improve their language.

Key words: English as a Foreign Language (EFL); Informal; (CMC) Computer mediated communication; Interaction; Facebook; Output

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INTRODUCTION

The use of computer-mediated communication (CMC) such as emails, blogs, and social networks has influenced the ways languages are taught and learnt. Language learners can use CMC environments to increase their language skills. These environments also help teachers to add new tasks that learners can do to learn a language. Regarding the context in which CMC is used, two ways can be distinguished (i.e. formal and informal). The former means that planned CMC activities are used along with traditional classes for learning purposes. The latter means that language learners themselves use CMC environments to improve their language skills according to their convenience. These activities are neither planned nor used for evaluation purposes.

The formal use of CMC has been examined to find out its benefits in language learning (e.g., Chun, 1994; Pellettieri, 2000; Zeng & Takatsuka, 2009). The informal use of CMC, to the best of authors' knowledge, has received little attention in the literature. Therefore, the present study aims at investigating the impact of informal use of CMC in fostering EFL learners' interactions. In particular, this study intends to explore how CMC as it occurs in Facebook exchanges provides opportunities for comprehensible written output, and to what extent it is different from formal CMC.

1. LITERATURE REVIEW

1.1 Computer-Mediated Communication (CMC): Definition, Benefits and Types

Levy (1997) pointed out that CMC concerned with communication between two or more participants via a computer. CMC has also been described as “the process by which people create, exchange, and perceive information using networked telecommunication systems that facilitate encoding, transmitting, and decoding messages” (December, 1996). Bodomo (2010) conceptualized CMC as the coding and decoding of linguistics and other symbolic systems between sender and receiver for information processing in multiple formats through the medium of the computer and allied technologies such as PDAs, mobile phones, and blackberries; and through media like the internet, email, chat systems, text messaging, YouTube, and Skype.

CMC can be divided into synchronous and asynchronous modes. In synchronous communication all participants are online at the same time, while asynchronous communication occurs with time constraints such as email. CMC can occur in different forms which include e-mail, chat (video, audio, text), bulletin boards, blogs, and so on. These forms can be categorized under two main types: oral and written. Another framework includes the distinctions between open and closed CMC. Hrastinski (2010) pointed out that in open CMC all members of a group participate while closed CMC implies that only some individuals are allowed to participate. Interaction via CMC can be classified into three types according to the users of CMC. They are according to Moore (1993): learner-content interaction, learner-to-instructor interaction, and learner-to-learner interaction. The way in which CMC is used can make another distinction for CMC (i.e. formal and informal CMC). Formal use of CMC takes place in formal settings such as classrooms, seminars and language labs, whereas informal CMC can take place anywhere, and at any time.

CMC is widely used in the field of computer-assisted language learning (CALL). However, there are some other related terms such as “online communication”, and network-based language teaching (NBLT). Warschauer (2001) pointed out that “online communication refers to reading, writing, and communication via networked computers. NBLT refers to the pedagogical use of computers connected in either local or global networks, allowing one-to-one, one-to-many, and many-to-many communication” (Kern, Ware & Warschauer, 2008).

Many studies (e.g. Beauvois, 1996; Chun, 1994; Pellettieri, 2000; Sullivan & Pratt, 1996; Warschauer, 1996; Warschauer, 1997) presented a number of potential benefits of CMC. Some of these benefits are of that CMC provides more participation of students, enables students to have meaningful and authentic conversations with others in the target language, encourages a collaborative

spirit among students, enhances motivation and reduces anxiety. It also improves the quality of language output, and offers an effective environment for learner autonomy and empowerment. In addition, it provides an opportunity for learners to monitor their own language production and learn from each other.

Moreover, one of the major advantages of CMC is to bring together geographically dispersed students, and in doing so, adds immediacy and increases motivation (Romiszowski & Mason, 1996). Unlike other ways of teaching and learning a language, CMC can support out of classroom communication between students and their teachers, and among the students themselves. Swaffar (1998) summarized the benefits derived from CMC as compared to oral exchanges in the L2 classroom. He pointed out that networked exchanges seem to help all individuals in language classes engage more frequently, with greater confidence, and with greater enthusiasm in the communicative process than is characteristic for similar students in oral classrooms.

Some studies comparing oral classroom discussion with computer-assisted classroom discussion draw attention to significant differences between the two. Simpson (2002) pointed out that the levels of learner participation and of turn-taking initiation is greater in the computer mode. It is more difficult for anyone, including the teacher, to dominate a computer-based discussion.

1.2 Informal CMC

In general, language learning can be done at different environments. The classroom is not the only place for language learning. Krashen (1988, p. 40) noted that “two sorts of linguistics environments are contrasted: artificial, or formal environments, found for the most part in the classroom, and natural, or informal environments”. Informal learning usually occurs outside the classroom. Hodkinson and Colley (2003) as cited in Melanie, Rosner and Augier (2009, p. 86) defined informal learning as “unplanned, incidental, un-assessed, and uncontrolled by the teacher, and takes place in everyday life”. The main differences of formal and informal learning are summarized in Table 1.

Table 1
Formal and Informal Learning

Formal learning	Informal learning
Inside the classroom	Outside the classroom
Teacher initiated	Student initiated
Compulsory activities	Free activities
Assessed activities	Un-assessed activities
Planned activities	Unplanned activities

Informal environments can support language learning in many ways. Krashen (1988) suggested that in informal environments the language learners might do as well as, or better than learners who have spent a comparable amount of time in formal situations. Following this distinction,

two ways of CMC can be used. The first is a formal CMC, which is found in classrooms equipped with computer technology or language labs. The second one is informal CMC, which can occur outside the classroom (e.g., at home), and can be done at anytime.

1.3 Rationale and Research Questions

Many studies investigated the benefits of CMC, either synchronously or asynchronously, and either oral or written forms. Most of the studies were conducted in formal ways of teaching and learning, such as laboratory, classroom connected with Internet or with LAN (Alahmadi, 2007; Brandl, 2012; Chun, 1994; Cosmire, Morrison, & Osde, 2009; Gonzalez-Lloret, 2003; Hegelheimer & Tower, 2004; Jeon-Ellis, Debski, & Wigglesworth, 2005; Kelm, 1996; Lee, 2004; Pellettieri, 2000; Sykes, 2005; Wang, 2004; Yanguas, 2010; Zeng & Takatsuka, 2009). Results from these studies serve as a starting point to build the knowledge of how CMC fosters the classroom interaction. However, there are some unanswered questions related to the implementation of informal CMC and its effects on foreign language development. The present study seeks to provide insights into some of these questions. Thus, the purpose of this study is to explore the effects of informal use of CMC on language learning. It also explores the benefits of informal CMC in fostering EFL learners' interaction, and to what extent it is different from formal CMC.

The present study seeks to answer the following questions:

1. Do the learners participate actively in the target language in CMC when it is used informally?
2. What are the factors that make informal CMC successful?
3. Does informal CMC foster comprehensible written output?
4. What are the students' perceptions of informal CMC?

2. THE STUDY

2.1 Participants

Data were collected from fifty EFL Saudi students enrolled at the Preparatory Year, Najran University, Saudi Arabia. The participants' age ranged from 19 to 23. All of the participants were male students. The absence of female students in this study was because the educational system in Saudi Arabia does not allow coeducation. In this context, female students study at different campuses. Therefore, it is difficult to find out female participants. They joined the Preparatory Year because it is compulsory for those who want to join medical and engineering colleges. Their level of English can be categorized as pre-intermediate. These students participated voluntarily in the study. They were highly motivated to participate in the study because they thought that CMC activities might be helpful for their language learning. In terms of computer

experience, all of them had experience in using online communication environments such as emails, Facebook and so on. They had easy access to the internet either on or off-campus, via their computers or mobile phones.

2.2 The Study Tool

A homepage on Facebook, a popular social networks website, was designed for the participants of this study. The selection of these students was done according to their familiarity with online communication environments such as email and Facebook. Facebook had been chosen by the researchers for several reasons. First, all members of this group could participate at anytime, and at their own pace. Second, the instructors got a notification for each activity done by the members of this group. Third, Facebook can be used into two ways of communications (i.e. synchronously or asynchronously). The topics covered in this group are from different areas. There was no restriction on the topic selection. The participants could post anything about any topic they liked.

2.3 Data Collection

Data were collected through the use of two instruments: a questionnaire and an interview.

A five-point Likert scale questionnaire was administered to the participants at the end of the study. The aim of this questionnaire was to elicit the participants' perceptions of the CMC environment used in this study (i.e. Facebook). The questionnaire consisted of 15 items. It includes items dealing with the students' attitudes towards using Facebook in learning English and their confidence, motivation and anxiety. A semi-structured interview was conducted with ten of the participants. These students were selected randomly from the fifty students participated in the study. The objective of this interview was to find out the participants' perceptions and opinion about using Facebook for language learning purposes.

2.4 Procedures

The students participated voluntarily in the study. A background survey was administered at the beginning of the study to about 300 students. Only 50 students were selected to participate in this study. They were selected according to their ability to use Facebook. The participants were asked to join a group designed on Facebook specifically for this study. They were encouraged to post and comment on the postings of the members of the group. At the end of the study, a questionnaire was administered to the participants. Then ten students involved in a semi-structured interview.

2.5 Data Analysis

For a more in-depth and thorough understanding of the impact of informal CMC on EFL learners' interaction, both quantitative and qualitative procedures were applied during the data analysis. The participants' responses to the questionnaire were coded and analyzed using SPSS program. The analysis consisted of frequency, percentage

and the mean of each item. The students' postings and comments were analyzed quantitatively. The analysis included: the total number of participants, postings, and comments.

3. RESULTS AND DISCUSSION

Qualitative and quantitative analysis of the postings and comments were carried out to answer the research questions.

Table 2
Total Number of Students, Participants, Postings, Comments and Words

Total number of group members	Participants		Postings		Comments		Words	
	n	%	n	%	n	%	n	%
50	17	34%	129	7.5	310	2.4	1388	4.47

Table 2 shows that the number of those who participated comprises a small fraction of the overall members of the group. Only 17 students out of 50 participated actively. This does not imply that the other did not do anything. Instead, they shared, liked and rarely commented on their friends postings. Through the six months, the period of the study, 129 postings were posted by these students which constitute an average of 7.5 for each participant. 310 comments were written by the participants. The average is 2.4 comments for each posting in relation to the number of participants. The number of the postings as well as the number of the comments does not match the number of the participants. The total number of words written in all comments is 1388. The average number of words per a comment is 4.47 which are somewhat acceptable because comments are usually quite short and snappy.

These results are unexpected since all of the participants had their accounts on Facebook. The low participation may be affected by a number of reasons. First, this was a voluntary activity in which students' output was not evaluated because their participation was not considered for marking purposes. This contradicts the results of Brandl (2012) who found that the optional task yielded significantly more learner output. In this case, tasks that are more meaningful to learners may increase their level of engagement. On the other hand, the results of the present study support the notions of some other authors (Ellis, 2003; Long, 1989) who suggested that the mandatory aspect encourages students to persevere and push for more negotiation and output.

Second, the timing of the study might not be suitable for students to participate actively. They had to attend their classes in the morning and then did some other activities in the evening, so they did not have much time to participate in this group. It seems it would be better if it was conducted during summer vacation. The results here support the hypothesis that Barrs (2012) generated which states that given sufficient time, students would participate and interact in a voluntary out-of-classroom

Research Question 1: Do the learners participate actively in the target language in CMC when it is used informally?

An analysis of students interaction, the number of postings and comments of the participants, was carried out to investigate the activity of the participants in this group. Table 2 shows the total number of group members, total number of participants, number of postings, comments and number of words.

CMC programme aimed at encouraging and maximizing target language interaction.

Third, the presence and the interference of the teacher might affect the learners' participation. Fourth, the group is a homogenous one (i.e., all of them were male Saudi learners). It seems that they did not find it beneficial to join such a group because in this group they met the same students who they also had to meet in the college. If the group members were from different nationalities, speak different languages and represent cultural diversity, then their participations might increase.

Finally, most of these comments were done in one turn only (i.e. one comment for each member). An asynchronous excerpt on a picture that contains a very big book is shown below:

Abdulrahman what a book! ... may spend a year reading it

Ali no no no no u r joking with me, it's spend 537854983 years to read *-*

Hassan ohh, it the largest book I have ever seen

Mohammed hhhhhhhhhhhhh

Hassaan Can you carry out it physically and mentally? Is it true?

Nazim I think the name of that book is "How to Convince Your Wife" ^ ^

Abdulrahman M. H. Al-Wadi'i lol ... nice comment

Naif if I crazy man < I will read it

Mohammed thanks for all

In their responses to the questionnaire and the interview, the participants were asked about the reasons for this limited number of exchanges. They felt that the busy schedule and exams were a major cause of limited participation.

One of the participants stated that he felt bored "because there are no new and stimulating ideas for the group". The low number of the members of this group was considered by some of the participants as a cause for limited participations. They thought that if there had been more members, there would have also been more participation.

Research Question 2- What are the factors that make informal CMC successful?

A quantitative analysis of the number of postings

and comments for each topic was carried out to examine the effects of topics on participation. Table 3 shows the number of postings, and comments for each topic.

Table 3
Total Number of Postings, and Comments for Each Topic

The topic	Postings		Comments		Comments/ posting
	n	%	n	%	
Funny pictures and videos	50	38.7%	151	48.7%	3.02
Education	17	13.17%	11	3.5%	0.64
Greetings	12	9.30%	21	6.7%	1.75
Advice	8	6.20%	36	11.6%	4.5
Jokes	15	11.62%	20	6.4%	1.3
Social affairs	12	9.30%	24	7.7%	2.00
Self-management	7	5.4%	18	5.8%	2.5
Nature	4	3.10%	17	5.4%	4.25
Sport	4	3.10%	12	3.8%	3
Total	129	100%	310	100%	2.40

Table 3 shows that the postings covered many topics. The members of this group could post any picture, video, and text. A total number of 129 postings were posted by the members during the period of the study. The largest number of postings was funny pictures and videos. Fifty postings contained funny subjects (e.g., a very large book, a dentist with carpenter tools, an Indian lady gave birth to eleven babies). These postings received 151 comments. The average number of comments for each posting is 3.02. The second topic which had a good number of postings and comments was education, in which students introduced some materials for listening and speaking, and referred to good web sites for learning English. In this case 17 postings were posted. Some of these postings did not receive any comments. Instead, the participants showed their likes to these postings and shared some of them to be posted on their “walls” on their Facebook accounts. The average number of comments for each posting is about 0.64 comments. Jokes, literature and puzzles also received a good number of postings and comments. Social and religious topics received 12 postings and 20 comments which is also a good number in comparison to other topics. Eight postings that gave advice were also introduced with 36 comments. In fact, seven postings were introduced by the students and one posting was introduced by a professor at their college. This posting received 11 comments. The rest of the topics received few postings and comments. They were ranged from 4 to 7 postings and from 12 to 18 comments. These results indicated that in informal situations, language learners preferred informal topics (such as funny pictures and videos).

Research Question 3- Does informal use of CMC foster comprehensible written output?

An analysis of the comments written by the participants was carried out to investigate the impact of informal use of CMC on students written output during their informal interaction through this group. To begin with, all the comments were written in English. The students did not use their mother tongue in this group, though all of them

were Arabic native speakers. The written output of the students’ postings and comments was analyzed. Several aspects were found. First, the participants used many shortenings. It is known that shortening is a popular aspect of language used in computer mediated communication environments such as emails, blogs and so on. Crystal (2001) pointed out that one of the noteworthy linguistics features in CMC is the innovative use of shortenings, and abbreviations. Second, many comments were written in fragment sentences or grammatically incorrect. The students did not care about the grammatical correctness of their comments because the focus was on meaning. Third, punctuation marks were to some extent neglected. Question mark and exclamation mark were frequently used. It seems that they use them frequently to show their likes to the postings of others. Though the language produced by the participants contains the previous aspects, the output was clear and could be understood easily.

Research Question 4- What are the students’ perceptions of informal CMC?

To answer this question, an analysis of the questionnaire and the interview was carried out. The first section of the questionnaire was analyzed quantitatively. Table 4 shows the frequency and percentage of each item.

Table 4
Students’ Perceptions of Informal CMC

Participation in this group helps me to	Mean
Improve my grammar	2.36
Clarify meaning using English	2.36
Ask for more information using English	2.18
Infer meaning according to the context	2.18
Express my thought better	2.18
Participate more in this group than in the classroom	2.09
Reduce my anxiety in learning English	2.00
Get quick feedback from my teachers	2.00
Increase my motivation in learning English	1.81
Correct my mistakes at once	1.81
Negotiate meaning using English	1.81
Understand the text better	1.72
Build my confidence in using English	1.63
Improve my vocabulary	1.63
Communicate better in this group than in the classroom	1.36

Table 4 shows that the students had positive attitudes towards using informal CMC environments such as Facebook in language learning. They felt that participation in this group helped them to communicate better in this group than in the classroom. They found that they understood the text better when it was presented with pictures and videos in this group. They agreed that they could correct their mistakes, negotiate meaning, and build their confidence in using English.

Moreover, the participants' perceptions were examined through an interview with 10 students. The interview was transcribed and analyzed qualitatively. In general, the participants showed their positive attitudes towards the participation in this group. They mentioned a lot of benefits of joining this group. They found that the participation in this group improved their language. They could communicate better with their peers and teachers at anytime and about different topics.

4. LIMITATIONS AND DIRECTIONS FOR FUTURE RESEARCH

An obvious limitation of the present study is the limited sample size (only 17 out of 50 students posted and commented in this group). Therefore, generalizations must remain tentative. A second limitation is female absence. All of the participants were male students. If female students participated, the results might be different. The study examined only the informal CMC which can be a limitation. It would be better to compare the effect of both formal and informal CMC. The participants were asked only to join the Facebook and participate; however, they might participate much if they were asked to participate through different environments of CMC such as YouTube, OOVVOO, twitter, and MSN messenger. The study should compare the output in each environment.

These limitations, however, provide new opportunities for future research endeavors to investigate the use of CMC in language learning. Future research should engage male and female participants. It would be useful for future research to investigate the benefits of informal CMC in comparison to formal CMC. It also would be useful to utilize more than one an environment of CMC to explore the impact of CMC in language learning.

CONCLUSIONS

The finding obtained from the results of this study revealed that learning purposes, students' beliefs about its benefit for language learning, enough time, interesting topics, teacher's absence, heterogeneous group, and students' absence of identity are important factors to help the success of informal use of CMC. Because it was considered as an informal environment for communication, the students were not afraid of

committing mistakes. The students participated using English only. These results indicate that informal use of CMC helps language learners to use the target language. Although the students' participations consisted of informal aspects of English such as shortenings, slang words, and incomplete sentences, the output can be easily understood. This can support the assumption that informal use of CMC could foster comprehensible output. The use of informal CMC also increases the interaction between language learners and their teachers and with their peers. The study recommends that a portion of informal use of CMC can be added along with traditional ways of language teaching and learning.

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