Communication Strategies in Computer-Mediated Communication: An Egyptian EFL Context*

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ABSTRACT
This article reports the results of an exploratory study investigating the use of four communication strategies in synchronous written chat and asynchronous threaded discussion. Task-based interactions among 15 Egyptian university learners of English as a foreign language (EFL) were analyzed. The results showed that topic continuation was used in synchronous computer-mediated communication (CMC) at a significantly higher rate compared to the significantly low use of hypothesis testing. Several factors were identified as potential reasons for variation in communication strategy use. The data also indicated factors that closely related to low interactivity in asynchronous CMC. The findings of the study suggest that the nature of communication strategies, the nature of medium type, and/or intra-/interpersonal factors may (de-)activate communication strategy use. The study highlights the importance of studying learner interactions with a problem-free lens, focusing more on EFL learners' communicative successes than their linguistic and communicative deficiencies. The article concludes that further investigation is needed to study how interactivity relates to communication strategies, medium types, medium preferences, intra-/interpersonal factors, and task design.

KEYWORDS
Computer-mediated Communication (CMC), Synchronous CMC, Asynchronous CMC, Written Chat, Threaded Discussion, Communication Strategies, Task-based Interaction, Strategic Competence, English as a Foreign Language (EFL)

INTRODUCTION
Recent second language acquisition (SLA) research trends reflect a sociocultural interactionist paradigm shift. Task-based learning is used to enhance communicative effectiveness rather than just language acquisition (Ellis, 2000). For example, the promotion of agency, or the ability to take meaningful and powerful actions and test the results, is replacing focus on just fluency and accuracy (Kern, Ware, & Warschauer, 2004). Bringing authentic language and culture to the classroom has become a necessity. Creating contexts in which learners receive comprehensible input so that they can produce comprehensible output is now seen as indispensable (Kern & Warschauer, 2000). One of the most significant innovations in language learning and teaching that has emerged in the paradigm shift in SLA is network-based language teaching (NBLT) in which research has shown a clear sociocultural interactionist turn toward enhancing communicative effectiveness in learner interactions.

*This study was conducted in partial fulfillment of the requirements of an MA degree in TEFL at the American University in Cairo (AUC) in 2008.
BACKGROUND
In recent studies the investigation of discrete linguistic items has been giving way to more complex levels of communicative competence, for example, interaction, speech acts, and communication strategies. Adopting task-based pedagogy (Ellis, 2000), NBLT studies explore metalinguistic features that enhance language acquisition as well as communicative effectiveness. Special emphasis is placed on communicative effectiveness in online interaction where a focus on accuracy is oftentimes superfluous. Errors in CMC output can be due to factors such as typing errors, fatigue, and unmonitored production, among others. Problematic interactions have been heavily investigated in the CMC literature, and a great deal of NBLT research is dedicated to the study of nonnative negotiated interactions containing instances of communication breakdown. In contrast, problem-free nonnative interactions have not been given the same attention (Firth & Wagner, 1997; Smith, 2003b), especially the use of communication strategies in problem-free CMC interactions.

PURPOSE OF THE STUDY
The present study aimed at examining the frequency of four communication strategies during problem-free task-based interactions in synchronous written chat and asynchronous threaded discussion. The strategies under study were hypothesis testing, forward inferencing, topic continuation, and off-task discussion. These strategies exemplified how pre-freshman Egyptian EFL university students could avoid problems and maintain common ground in problem-free CMC interactions. It is noteworthy that interactions were considered problem-free, even if the students had linguistic problems, as long as the interlocutors provided positive evidence of understanding. For the purposes of the study, communication strategies were defined as moves taken by the interlocutors to help facilitate the construction of meaning as well as to avoid potential communication breakdowns (Smith, 2003b).

The following were the research questions in the study, within an Egyptian EFL perspective:

1. Of the selected communication strategies, which is/are the most frequent one(s) produced during problem-free task-based interactions in synchronous written chat?
2. Of the selected communication strategies, which is/are the most frequent one(s) produced during problem-free task-based interactions in asynchronous threaded discussions?

METHODOLOGY
This study adopted an applied, exploratory, quantitative/qualitative design. One intact class was selected as a convenience sample. The participants were 15 pre-freshman university students, taking English language courses to improve their writing skills before enrolling in mainstream courses at the American University in Cairo (AUC). They were divided into three mixed groups of four (two males and two females each) and one group of three (two males and one female). Data collection was divided into three stages over 4 days: pretask, in-task, and posttask.

In the pretask stage, the participants were given a 50-minute orientation session in the computer lab. They were familiarized with the fundamentals of participation and making posts in synchronous and asynchronous modes. They had access to reading materials, exercises, and a quiz throughout the data collection period via WebCT.
The in-task stage took 2 days in which the participants completed a two-part decision-making task (see the tasks in the Appendix). The design of the task presupposed that the participants had access to the same information and directed them to reach a decision, not necessarily a consensus, on the issues under discussion. The participants completed this part of the task in a written chat session of 30 minutes on Day 1 in the computer lab. They worked on the second part of the task in a threaded discussion on Day 2 in the lab first and then on their own. Group members fulfilled the requirements of the tasks by sending an introductory message, responses to peers, and a closing message.

In the posttask stage the participants completed a perceptions questionnaire. To gain additional insights, the class instructor also provided her feedback on the study and the participants’ performance during their task completion.

Customary discourse analysis procedures were followed. The data were electronically collected and archived via WebCT. The scripts were processed and marked for all occurrences to be classified later by two coders, including the researcher. A coding scheme was developed to facilitate coding and analysis. Some editing was found to be necessary in instances in which typos or other language problems obscured the message; corresponding native-like forms were added in between square brackets ([[ ]]) following these instances. Abbreviations, symbols and emoticons were also spelled out in between square brackets. Examples from the synchronous written chat and asynchronous threaded discussion data sets were included in the results. The examples were coded to identify the order of the item in the group in which it was produced in both data sets. For example, [#200G4] denotes item number 200 produced in Group 4.

DATA CODING AND ANALYSIS

The two coders worked separately on classifying the occurrences in each data set, according to the typology tailored for the purposes of the study. On the first round of coding, the coders had 77.4% agreement on the data set of written chat and 81.3% on that of threaded discussion. They then met in a moderation session to settle debatable items. They reached a 100% agreement on the instances that matched the four categories under study and those that were not applicable. Consensus was mandatory since the four categories under study were mutually exclusive.

The two coders agreed on 192 instances in written chat and 26 instances in threaded discussion where they found evidence on the use of the four communication strategies under consideration. All turns and postings were considered, including those nonnative-like forms with language problems, such as punctuation, spelling, and grammar and were counted as long as they illustrated the communication strategies under investigation.

RESULTS

Research question 1

Of the selected communication strategies, which is/are the most frequent one(s) produced during problem-free task-based interactions in synchronous written chat?

The two coders identified 192 instances in the synchronous written chat data set matching the four defined categories. These instances were present in interactions that were free from evidence of nonunderstanding or communication breakdown. The category of topic continuation had the highest frequency of use, 39.1%; followed by off-task discussion, 32.8%; forward inferencing, 15.1%; and hypothesis testing, 13% (see Figure 1).
A chi-square analysis revealed that there was a significant difference in communication strategy use in synchronous written chat, $X^2 (3, N = 192) = 38.42, p < .000$. This finding indicates that the distribution of the four communication strategies occurred at significantly different rates. The high frequency of topic continuation, followed by the low frequency of hypothesis testing were the biggest contributors to this statistically significant difference.

Table 1 shows the four categories under study with their baseline definitions, in addition to their forms of use, and illustrative examples in the written chat data set. Two additional categories that were found prominent in the data set were also included.

<table>
<thead>
<tr>
<th>Category of communication strategy</th>
<th>Forms of use in the data</th>
<th>Examples from the data</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Hypothesis testing:</strong> Interlocutor asks questions or makes comments about the previous discourse to test his/her own understanding (based on Rost &amp; Ross, 1991; Smith, 2003b; Vandergriff, 2006; Vandergriff, 1997)</td>
<td>A question or comment to challenge the interlocutor to explain his/her reasoning</td>
<td>EHM&gt;&gt;they should regularly check the houses in the country side RHL&gt;&gt;<strong>all the houses everyday??</strong> [#16G1] EHM&gt;&gt;probably they would make a campaign [[campaign]] from time to time</td>
</tr>
<tr>
<td><strong>Topic continuation</strong></td>
<td>Repetition of what was previously said to verify self-understanding</td>
<td>SMN&gt;&gt;ok i agree if we get the doctors to check on them and show the parents how those chicken are harm [[harmful]] a [[to be continued ...]] SMN&gt;&gt;agreeeeeeepreeme SMN&gt;&gt;so all of you agreed that doctors should check on them and show them how dangerous are those chicken’s and they should be removed [[removed]] from the house [#134G2] CRG&gt;&gt;yes</td>
</tr>
<tr>
<td>Category of communication strategy</td>
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<tr>
<td><strong>Forward inferencing:</strong></td>
<td>A question in which one accepts what was previously said and challenges the interlocutor to justify or explain his/ her reasoning</td>
<td>SMN&gt;&gt;we can gove [[give]] her example if one of her neighbours died because of those chicken MYR&gt;&gt;**what if they dont agree after we tell them politely that they have to remove the chicken [[chickens?]] [#110G2] AAM&gt;&gt;i think we can inform the authority and they will take the procedures to protect them and protect their neighbors [[neighbors]]</td>
</tr>
<tr>
<td>Interlocutor explicitly indicates his/her own understanding of the previous discourse by asking questions based on established information (based on Rost &amp; Ross, 1991; Smith, 2003b; Vandergriff, 2006; Vandergrift, 1997)</td>
<td><strong>A question in which one accepts what was previously said and challenges the interlocutor to justify or explain his/ her reasoning</strong></td>
<td></td>
</tr>
<tr>
<td><strong>Topic continuation:</strong></td>
<td>A question or comment to prompt the interlocutor to continue</td>
<td>SAY&gt;&gt;ok i agree with u this may let her forget about the chickens SAY&gt;&gt;**do u all agree ?????????????????????? [#207G4] MWL&gt;i do KSG&gt;&gt;yessss SAY&gt;&gt;ok we have finished then</td>
</tr>
<tr>
<td>Interlocutor uses promoters to prompt the continuation of the discussion or hand the floor to the others (based on Chun, 1994; Smith, 2003b; Sotillo, 2000; Vandergriff, 2006; Vandergrift, 1997)</td>
<td><strong>A question mark to prompt the interlocutor to continue</strong></td>
<td>AMH&gt;&gt;she will call the police YGS&gt;&gt;**why ?????????[] #178G3] AHM&gt;&gt;guys YGS is right i agree with her</td>
</tr>
<tr>
<td><strong>Off-task discussion:</strong></td>
<td>A question or comment to prompt the interlocutor and hand him/her the floor</td>
<td>KSG&gt;&gt;what about you? [#11G1]</td>
</tr>
<tr>
<td>Interlocutor makes a personal comment about issues that do not directly relate to the final outcome of the task but can add a personal dimension to the discussion (humor, praise, sympathy, thanks, wishes) (based on Smith, 2003b; Sotillo, 2000)</td>
<td><strong>A question or comment to prompt the interlocutor to justify his/her reasoning</strong></td>
<td>RHL&gt;&gt;but you are so young to advise her EHMD&gt;&gt;maybe they should start with advertising campaigns RHL&gt;&gt;**how [#45G1] SMK&gt;&gt;they did this before</td>
</tr>
<tr>
<td>A question or comment to direct the interlocutor toward task completion</td>
<td><strong>A question or comment to direct the interlocutor toward task completion</strong></td>
<td>AMH&gt;&gt;bc [[because]] it seem she doesn’t agree about leaving her chicken outside and then we are building AAT&gt;&gt;**we have 5 min. we must decide what is our solution? [#177G3] AMH&gt;&gt;really</td>
</tr>
<tr>
<td>A question or comment for praise</td>
<td><strong>A question or comment for praise</strong></td>
<td>MWL&gt;&gt;read it and tell if ok or not KSG&gt;&gt;**ok that is nice [#210G4]</td>
</tr>
<tr>
<td>A question or comment for humor</td>
<td><strong>A question or comment for humor</strong></td>
<td>SAY&gt;&gt;no it won’t be a joke SAY&gt;&gt;it is horrible KSG&gt;&gt;**i see that we kjill [[kill]] this woman [#200G4]</td>
</tr>
<tr>
<td>Emoticons or symbols for humor</td>
<td><strong>Emoticons or symbols for humor</strong></td>
<td>EHM&gt;&gt;u cant make people who make the same mistake advise another people EHM&gt;&gt;^_^ [[happy]] [#31G1]</td>
</tr>
</tbody>
</table>

The synchronous written chat interactions revealed other related as well as complex forms of communication strategy use. Two prominent forms are worthy of mention: reprises (clarification requests) and code-switching (see Table 2).
Table 2
Additional Categories, Forms of Use, and Examples of Communication Strategies in Synchronous Written Chat

<table>
<thead>
<tr>
<th>Category of communication strategy</th>
<th>Forms of use in the data</th>
<th>Examples from the data</th>
</tr>
</thead>
</table>
| Reprises (Clarification requests)  | With evidence of understanding | CCC>>everyone says his opinion
SMK>>EHM
CCC>>EHM what [[what]] do u think? [#139G2]
EHM>>probably i agree with it it may harm the family since they are raising those chickens indoors |
| Code-switching                     | In off-task discussion for humor | SMK>>bosoM a7san 7al ne7ra2 el beyoot bely fehom [[look, the best solution is to burn down the houses with those people inside]] [#64G1] |

These two categories have been predominantly recognized in the literature as communication strategies that interlocutors resort to when they encounter difficulties in understanding (Rost & Ross, 1991) or in cases of breakdown where meaning is negotiated (Vandergrift, 2006; Vandergrift, 1997). These categories are generally found in problematic nonnative interactions (Firth & Wagner, 1997). In fact, the scripts in this study included some of these occurrences, but they included several more in which there was no evidence of nonunderstanding or communication breakdown, that is, problem-free interactions.

Code switching was another prominent form of communication strategy use in synchronous written chat. Consistent with previous findings about code switching (Tarone, 1983), few instances were identified in which the interlocutors faced problems expressing meaning in the L2 that resulted in their use of the L1. However, in the problem-free interactions in the synchronous written chat data set, code switching was more frequently used as off-task discussion, especially to add humor and personalize the interactions.

Research question 2
Of the selected communication strategies, which is/are the most frequent one(s) produced during problem-free task-based interactions in asynchronous threaded discussion?

The two coders identified 26 instances in the asynchronous threaded discussion data set matching the four defined categories of communication strategies. These instances were present in interactions without any evidence of nonunderstanding or communication breakdown. Topic continuation clearly ranked first in frequency of occurrence (65.4%), followed by off-task discussion (19.2%) and forward inferencing (15.4%). Hypothesis testing was not used at all in the asynchronous threaded discussion (see Figure 2).
Figure 2
Distribution of Overall Communication Strategy Use in Asynchronous Threaded Discussion

The communication strategies under study appeared in the asynchronous threaded discussion data set much less frequently than they did in that of synchronous written chat. A chi-square analysis could not be conducted since the number of occurrences was too small. This low frequency may be partly ascribed to the relatively small body of postings totaling approximately 2,180 words collected in one day in a threaded discussion, as compared to a total of approximately 4,530 words collected in a 30-minute session of written chat.

Table 3 shows the four categories under study with their baseline definitions, their forms of use, and illustrative examples in the threaded discussion data set.

Table 3
Baseline Definitions, Forms of Use, and Examples of Communication Strategies in Asynchronous Threaded Discussion

<table>
<thead>
<tr>
<th>Category of communication strategy</th>
<th>Forms of use in the data</th>
<th>Examples from the data</th>
</tr>
</thead>
<tbody>
<tr>
<td>Forward inferencing:</td>
<td>A question in which one accepts what was previously said and challenges the interlocutor to justify or explain his/her reasoning</td>
<td></td>
</tr>
<tr>
<td>Interlocutor explicitly indicates his/her own understanding of the previous discourse by asking questions based on established information (based on Rost &amp; Ross, 1991; Smith, 2003b; Vandergriff, 2006; Vandergriff, 1997)</td>
<td></td>
<td>AMH&gt;&gt;---&gt;AHM&gt;&gt; i agree with you about not recreating the virus, but how exactly does it harm people? [#26G3]</td>
</tr>
<tr>
<td>Hypothesis testing</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Off-task discussion</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Topic continuation</td>
<td></td>
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</tbody>
</table>
**DISCUSSION**

**Variation in Communication Strategy Use**

The results showed a statistically significant difference between the use of topic continuation and hypothesis testing in synchronous written chat. A closer look at the frequency analyses revealed considerable variation in communication strategy use. One or more factors seemed to be at play in terms of the nature of the four communication strategies, the nature of medium type, and/or intra-/interpersonal factors.

First, the four communication strategies in this study were selected to reflect moves that signal understanding or forward communication. Hypothesis testing, forward inferencing, and continuation signals are among those strategies with forward orientation (Vandergrift, 1997); they consolidate mutual understanding and advance communication among interlocutors. The results of communication strategy use in the synchronous CMC data presented here are consistent with Vandergrift’s (1997) premises about spoken interaction. However, the fact that forward inferencing and hypothesis testing were used comparatively less often reveals the different nature of these two communication strategies.

As illustrated in Tables 1 and 3, each of the four communication strategies had distinctive uses. First, the participants used hypothesis testing to verify their self-understanding or challenge peers to explain their reasoning. For example, one participant questioned the words of a peer by echoing what was said as a challenge to reconsider the meaning (see [#16G1] in Table 1). Second, forward inferencing was used to accept what was previously said and challenge peers to justify their reasoning by asking about possibilities and consequences (see [#110G2] in Table 1). Third, topic continuation was most frequently used to prompt peers to carry on with the discussion (see [#11G1] in Table 1). Finally, off-task discussion, in its various forms, was frequently used. Although these questions or comments had little or no
relevance to the final outcome of the task, they added a personal dimension to the discussion (see [#177G3] in Table 1).

Put differently, the data highlight inherent differences in the four communication strategies. The real-time nature of synchronous CMC, in which all group members were available at the same time, must have encouraged informal interactions. Topic continuation was evidently the most accessible in advancing the discussions. Off-task discussion seems to have facilitated task completion through personal contributions. Forward inferencing may have been the most challenging because of its complex nature; it requires analyzing old information as well as synthesizing new ideas in question form and, as a result, was used at lower rates. Hypothesis testing, to verify self-understanding or challenge peers to justify their reasoning, was also used at lower rates.

Second, medium type may be related to variation in communication strategy use. Analysis showed that while certain communication strategies were particularly active in synchronous CMC, the same strategies decreased in use or even disappeared in asynchronous CMC, as will be explained in more detail in the following section. Synchronous CMC gave ample room for personal, humorous, and other comments. The data seem to imply a relationship between medium type and the (de-)activation in communication strategy use.

Third, intra-/interpersonal differences may be related to variation in communication strategy use. A closer look at the data revealed that code switching and humor were predominant in off-task discussions among some participants more than others. One participant adopted the role of a joker or challenger in most contributions. Some participants produced the fewest number of forward inferencing utterances; forward inferencing sometimes gave way to off-task discussion, especially in synchronous CMC. Some participants engaged in light-hearted discussions more than others. Thus, differences in personality types seemed to lead to differences in ways of interacting with others, and interpersonal dynamics differed among participants in the various groups. Put together, intra-/interpersonal variation in the degree and way of interacting among participants could well relate to the variation in the use of the communication strategies investigated.

To sum up, three factors emerged as potential sources of variation in communication strategy use in synchronous CMC: the unique nature of each of the four communication strategies, the relationship between medium type and communication strategy use, and the intra-/interpersonal differences among participants.

**Low Interactivity in Asynchronous CMC**

In the asynchronous threaded discussion, the number of observed differences was too small for statistical analysis. However, some trends were clear; topic continuation was used at a higher rate, followed by off-task discussion and forward inferencing, but hypothesis testing was not used at all. Several considerations regarding interactivity in this mode came to the fore in participant comments, instructor feedback, and researcher observations. In general, the nature of medium type, medium preference, the novelty of interaction type, and/or task design may have resulted in low interactivity in asynchronous CMC.

First, there seems to be a relationship between medium type and low interactivity in asynchronous CMC. The participants’ posttask perceptions and the class instructor’s feedback provided evidence that the participants viewed asynchronous threaded discussion as being quite different from synchronous written chat. Some of the identified characteristics of threaded discussion were nonsimultaneous interaction, delayed responses, and formality. The scripts
also showed that asynchronous CMC included monologues and sporadic fragmented dialogues, unlike the extended dialogues in synchronous CMC. The complete absence of hypothesis testing is especially noteworthy and may be due to lack of immediacy in asynchronous CMC. The interlocutors may have also found it unnecessary to use hypothesis testing in asynchronous CMC because they could always go back to previous posts and respond in delayed time.

Second, medium preference may have strongly affected the amount of output in general and the rate of communication strategy use in particular. The participants’ posttask perceptions revealed a general comfort level with CMC discussions, but a dislike for asynchronous CMC. The interactions were described as slow and tiresome, “like an email [that can] take two days to discuss,” as affirmed by one participant. The participants sometimes felt bored or disappointed because they received late or no responses at all; “some of the group members did not reply,” as stated by another participant. Some felt that there were barriers in asynchronous CMC, “barricades between [their] thoughts,” as described by a third participant, preventing them from expressing their ideas freely. Still, threaded discussion had an advantage since “[the] opinions[?] of every one [was clearly] shown,” as maintained by the same participant. A few participants enjoyed threaded discussion because it allowed them more time to think and reflect on each other’s ideas, in addition to being challenging and interesting.

The class instructor’s feedback confirmed the participants’ strong inclination toward chat rather than threaded discussion. According to the class instructor, the participants were more comfortable with chat because most of them use it often in nonacademic online discussions. Having captured their attention, chat was more informal, engaging, and appealing and resulted in more interaction. The only disadvantage, from the instructor’s point of view, was the participants’ use of their L1. She also noted that chat allowed ample room for interaction and the discussion of ideas and that threaded discussion seemed to encourage a higher level of formality. She believed that the outcome of interactions was satisfactory in both modes, relative to the participants’ maturity. In her view, the issues raised during chat were more varied, but she believed that “the quality was slightly better during threaded discussion [because] the activity lends itself to more profound ideas and a more formal level of communication.”

Third, the novelty of the type of interaction and the type of task may have also been factors. The participants reported that they had not been extensively exposed to the use of either mode in academic discussions before the study. They were also inexperienced in completing decision-making tasks in group discussions in an EFL context, but it can be assumed that their familiarity with the type of task in both modes was the same. Despite the participants’ lack of experience in the type of interaction and the type of task, analysis of the scripts provided evidence of their grasp of the underlying notions in decision-making tasks. In synchronous CMC, the participants managed to present, challenge, support, and elaborate on ideas before making their final decisions, but not to the same extent in asynchronous CMC.

Finally, the scenarios in the two tasks could have been slightly different in nature. Although both tasks were intended to be parallel in topic and complexity, the decision-making task in synchronous CMC may have been more personal, allowing the participants to simply refer to their own background knowledge. The decision-making task in asynchronous CMC was more technical, requiring the participants to refer to the reading in addition to their own background knowledge. That is, the participants may have found the first task easier to discuss than the second one.

In summary, the data supported several considerations in relation to low interactivity in asynchronous CMC, namely, the nature of medium type, medium preference, the novelty of interaction type, and task design. The relationships among medium type, interactivity, and communication strategy use will require further research.
**FINDINGS IN SIMILAR STUDIES**

The present study is consistent with Vandergriff’s (2006) findings on reception-grounding strategies. Her study compared the frequencies of global reprise, specific reprise, hypothesis testing, and forward inferencing in spoken versus synchronous CMC interactions. The findings indicated that hypothesis testing had equal frequencies in both modes, while forward inferencing was used at lower rates in synchronous CMC. The present study reported that topic continuation was used at significantly higher rates in synchronous CMC than hypothesis testing. It should be noted that both studies reported rankings in which forward inferencing was higher than hypothesis testing in synchronous CMC.

However, the results of the present study differ from those reported by Smith (2003b). In his study, Smith investigated the frequency of a set of 26 communication strategies in synchronous CMC. His study listed other kinds of communication strategies as the most frequently used: substitution, politeness, framing, and fillers. Communication strategies similar to those investigated here were used at relatively low rates. Their ranking in Smith’s study, from the most to the least frequent, was hypothesis testing, continuation signals, meta-talk, and forward inferencing.

Overall, the present study implicitly supports premises and findings in several NBLT studies. First, it supports Vandergriff (2006) in the use of decision-making or consensus-building tasks to investigate metalinguistic features such as communication strategies. Tasks in other studies (e.g., jigsaw or information gap) may be better suited for the investigation of linguistic features such as lexis (Blake, 2000; Smith, 2003a, 2003b). Second, the findings in this study are consistent with those of Sotillo (2000) that synchronous CMC, rather than asynchronous CMC, elicited more discourse functions (i.e., communication strategies), that are similar to those in spoken interaction. Third, the present study emphasizes the validity of investigating communication strategies in problem-free CMC interactions first suggested by Smith (2003b). Although the scripts included a few breakdowns where meaning was negotiated, the majority of interactions illustrated communication strategy use before the occurrence of communication breakdown. Finally, the study lends support to Blake (2000), Smith (2003a), and Tudini (2003) who found that much less time was spent on meaning negotiation when interlocutors encountered problems in understanding; the data described here provide evidence that more time was spent on successful task completion.

**PEDAGOGICAL IMPLICATIONS**

The current investigation of communication strategies in problem-free CMC interactions has a number of pedagogical implications. Besides adding interest to in-class activities, CMC is now essential in EFL/ESL settings because of its capacity in building an online community of practice that extends beyond classroom boundaries (Zhao, 1996). Furthermore, CMC modes, especially asynchronous CMC, are the backbone of distance learning programs. Learner preferences and comfort level affect decisions about the most suitable modes of interaction in these contexts (Levy & Stockwell, 2006). For this reason, it is important to raise learners’ awareness of the dynamics of different CMC modes. The present study identified several areas that need careful consideration: the nature of communication strategies, the kind of medium, medium preferences, and inter-/intrapersonal factors. EFL/ESL instructors should use this knowledge to set up an environment with optimum learning conditions for their learners. They should also prepare learners to deal with various modes of face-to-face and online learning, considering the advantages and disadvantages of each mode of interaction.
Finally, the current investigation reiterates the importance of studying learner interactions with a problem-free lens. This perspective contrasts with a longstanding focus on EFL learners’ “linguistic deficiencies” and “communicative problems” (Firth & Wagner, 1997, p. 288). Along with predominant studies on difficulties and problems, this alternative view may provide insights into EFL/ESL learners’ productive efforts to achieve “communicative success,” despite their linguistic and communicative limitations (Firth & Wagner, 1997, p. 288).

This focus on learner agency should by no means sacrifice accuracy. The present study acknowledges the potentially negative side of CMC interactions, especially synchronous CMC in which there were a number of typos and language problems in addition to informality and code switching. However, these are natural byproducts of authentic communicative activities. On the positive side, the scripts can be always retrieved for later reference. Posttask activities can follow in which, under the guidance of their EFL/ESL instructor, learners identify and correct their own errors.

Most important, emphasizing the use of efficient communication strategies in CMC can enhance reasoning abilities in EFL/ESL contexts. The class instructor declared that decision-making task-based activities can help students “become more analytical and consequently better thinkers.” The findings of the present study revealed forms of communication strategy use in which the participants challenged each other to justify or explain their reasoning. Hypothesis testing, forward inferencing, topic continuation, and even off-task discussion encourage students to open a dialogue in which they question ideas presented by their interlocutors. Explicit instruction on the use of various communication strategies can train EFL/ESL learners to present, challenge, support, and elaborate on ideas (Yule & Tarone, 1997). Practice and consciousness-raising activities on efficient communication strategy use in various modes can help improve communicative effectiveness. These activities can promote the transferability of communicative competence across modes of interaction (Chun, 1994). As a result, EFL/ESL learners should be able to build stronger, well supported arguments in speaking and writing.

CONCLUSION
This study explored the use of four communication strategies in problem-free synchronous and asynchronous CMC interactions among pre-freshman Egyptian students in an EFL university context. The data yielded a statistically significant difference in overall communication strategy use in synchronous CMC. The difference resulted from the use of topic continuation at significantly higher levels, compared to the use of hypothesis testing. These findings suggest that certain communication strategies may be more accessible than others in a given mode of interaction when intra-/interpersonal factors are taken into account. The data implied several considerations that particularly relate to low interactivity in asynchronous CMC, namely, the type of medium, medium preference, the novelty of interaction type, and task design.

REFERENCES


**APPENDIX**

The Discussion Task

In this stage, you will have online discussions on an issue of concern over two days. You are required to make two decisions based on readings and interactions with your team members. You will remain with the same team members throughout the two days of discussion. All the groups will start with the chat discussion, and then do the threaded discussion the following day. Remember that all your discussions are in English, just like your class discussions. Also remember that successful task completion depends on your weighty and timely contributions. In the chat, you need to give attention to all your team members, asking questions and making comments throughout the 30-minute discussion. In the threaded discussion, you need to make a minimum of five postings including an introductory message, responses to your team members, and a concluding message. Here are the details:
Chat Discussion-Decision 1

In the holiday, you visit your grandparents’ house in the countryside. You meet with your good old friends at the neighbor’s house as you normally do on your visits. You happen to notice that their mom is still raising chickens indoors. You feel an obligation to do something about this situation since the whole family, let alone your grandparents, may be at great risk. In a 30-minute chat session, decide with your group members what you will do to ensure the safety of all those concerned. You may agree or disagree with other group members. However, you are encouraged to challenge each other’s views to reach a sound decision. Note that all your discussion is in English.

Threaded Discussion-Decision 2

You have been designated to join a committee of consultants to discuss the liability of conducting research on virus recreation in Egypt. Over a whole-day threaded discussion, your group of committee members needs to decide whether research on virus recreation should be authorized in Egypt. You, as an expert committee member, must consider various perspectives to come up with a well-supported decision on the matter before it is referred to the Parliament for voting. It is highly recommended that the committee consider current affairs, facts, and opinions related to this matter. The committee members may agree or disagree, as long as each makes a sound argument. However, you are encouraged to challenge each other’s views to reach a common vision. Note that all your discussion is in English.

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