On the Role of Instruction, Language Proficiency, and Personality Traits in the Use of Communication Strategies by L2 Learners

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Abstract
Following controversies over teaching communication strategies, the present study, first, examined the impact of language proficiency and extraversion/introversion on the use of communication strategies (hereafter CSs) by administrating communication strategy questionnaire developed by the researchers on the basis of Dornyei and Scott's (1997) *Inventory of Strategic Language Devices* and the Persian restandardized form of EPQ to 182 students at elementary, pre-intermediate, and intermediate levels in a private English Language Institute. The One-way ANOVA and independent sample t-test analyses were performed to examine the effects of language proficiency and extraversion/introversion on the use of CSs. The analyses of the data indicated that language proficiency does not influence the use of CSs and CSs favored by introverts are similar to those favored by extraverts; they only differ in the use of a few strategies. Second, the impact of teaching CSs of circumlocution, appeal for help, time-stalling devices, and message abandonment on Iranian EFL elementary students' oral performance was investigated. Four intact classes were selected (3 as the treatment groups with 27 students and 1 as the control class with 20 students). Data were collected through video/tape recording of pre and post tests of picture description, telling a story, and telling a joke and CSs were identified on the basis of Dornyei and Scott's (1997) taxonomy of CSs. The Chi-square analysis of the findings revealed that teaching

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circumlocution, appeal for help, and time-stalling devices are pedagogically effective.

Keywords: Communication strategy; Language proficiency; Extroversion/Introversion

Introduction
Since 1980s, the goal of ESL/EFL teachers has been promoting learners' communicative competence which refers to linguistic knowledge (e.g. what one knows about the language) and skills required for using this knowledge (e.g. sociolinguistic competence, discourse competence, and strategic competence) when interacting in actual communication (Canale, 1983). Broadly speaking, communication needs more than knowing grammar and words of a language. It involves using other sources of knowledge and abilities to put the linguistic knowledge to use (Canale, 1983; Cook, 2003; Thornbury & Slade, 2006). Therefore, in addition to knowing grammar and lexical items, second language learners need some tools such as communication strategies (henceforth CSs) to compensate for their inadequate linguistic knowledge to convey their messages.

To date, a number of researchers have been interested in defining communication strategies (e.g. Faerch & Kasper, 1983; Corder, 1983; Bialystok, 1990), taxonomies of communication strategies (e.g. Corder, 1983; Faerch & Kasper, 1983; Dornyei & Scott, 1997), variation in communication strategy use (e.g. Varadi, 1983; Bialystok, 1983), the implications of communication strategy research - particularly on the teachability of communication strategies (e.g. Dornyei, 1995; Lam & Wong, 2000; Rossiter, 2003; Lam, 2006) and communication strategy use in computer-mediated communication (e.g. Smith, 2003). However, there have been few studies investigating the impact of language proficiency and personality traits on the use of CSs. Furthermore, the number of studies on the instruction of CSs is not satisfactory and further research has been suggested by researchers (e.g. Dornyei, 1995; Rossiter, 2003; Lam, 2006). In this regard, the present study attempted to examine the impact of instruction, language proficiency, and extraversion/introversion on the use of CSs by Iranian EFL learners.

Review of Literature
Through the years, there have been different approaches to conceptualizing and defining CSs; as a result, various definitions of CSs have been suggested in the literature and different taxonomies of CSs have been developed. According to Dornyei & Scott (1997), some researchers (Tarone, Cohen, & Dumas, 1983; Faerch & Kasper, 1983; Canale, 1983) followed a linguistic approach to define CSs. For them

> Communication strategy is a systematic attempt by the learner to express or decode meaning in the target language, in situations where the appropriate systematic target language rules have been not formed.
>
> (Tarone, Cohen, & Dumas, 1983, p. 5)

> Communication strategies are a systematic technique employed by a speaker to express his meaning when faced with some difficulty. Difficulty in this definition is taken to refer uniquely to the speaker's inadequate command of language used in the interaction.
>
> (Corder, 1983, p.16)

> Communication strategies are potentially conscious plans for solving what to an individual presents itself as a problem in reaching a particular communicative goal
>
> (Faerch & Kasper, 1983, p. 36)

In their views, CSs are seen as systematic techniques used by learners to overcome language difficulties in order to achieve a communicative goal. These researchers, focused on the surface structures of CSs (e.g. grammar and vocabulary). On the other hand, other researchers (Bongaerts & Poulisse, 1989; Bialystok, 1990) adopted a psychological approach and claimed that to examine CSs, underlying cognitive processes involved in CSs' production should be taken into account rather than mere surface structures of verbal strategies.

Later on, scholars (e.g. Dornyei, 1995; Brown, 2000; Ellis, 2003) adapted the formers' definitions and noted that communication strategies are conscious plans taken by people in order to cope with performance problems and to enhance the

effectiveness of communication. They argued speakers employ CSs when they encounter problems in producing and understanding messages; in such cases, CSs enable them to stay active in communication. Canale (1983) regarded communication strategy as one of the major elements of communicative competence that is used by language learners to compensate for breakdowns in communication due to insufficient linguistic, sociolinguistic, or discourse competence. Bialystok (1990, p.116) also asserted that "communication strategies are an undeniable event of language use, their existence is a reliably documented aspect of communication, and their role in second language communication seems particularly salient." Highlighting the importance of CSs, Bou-Franch (2001) argued that even a brief analysis of any spontaneous speech or observation of any L2 classrooms reveals the importance of CSs. In this regard, it has been suggested that communication strategy training could be integrated into English curriculum (Dornyei & Thurrell, 1991; Dornyei, 1995; Faucette, 2001; Maleki, 2007).

The possibility of teaching CSs has been controversial. Some researchers (e.g. Bongaerts & Poulisse, 1989; Bialystok, 1990) claim that language learners have already developed strategic competence in their L1 which is transferable to L2; therefore, there is no need for teaching communication strategies. On the other hand, many researchers (e.g. Faerch & Kasper, 1983; Cohen, 1990; Dornyei, 1995) believe that by teaching communication strategies, learners become conscious about their already existing strategies and become able to use them more appropriately and effectively. Faerch and Kasper (1983, p.55) argue that:

> If by teaching we mean passing on new information only there is probably no need to teach strategies: FL learners no doubt have implicit knowledge about communication strategies and make use of this. But if by teaching we also mean making learners conscious about aspects of their (already existing) behavior, it is obvious that we *should* teach them about strategies, in particular, how to use communication strategies most appropriately.

In addition, Dornyei and Thurrell (1991, p.16) noted that "the lack of fluency or communication skills that students often complain about is, to a considerable extent, due to underdevelopment of strategic competence." Consequently, some studies (Dornyei, 1995; Lam & Wong, 2000; Gallagher Brett, 2001; Rossiter, 2003; Lam, 2006; Maleki, 2007) have been done on the teachability of

communication strategies. In the following section these studies have been reviewed.

Studies on teachability of CSs
Dornyei (1995) examined the teachability of three CSs – circumlocution, fillers and hesitation devices, and topic avoidance and replacement - on 72 girls and 37 boys, aged 15-18, in Hungry. The study which lasted for six weeks comprised one treatment and two control groups. In the first control group, students received no treatment and followed their regular EFL curriculum; in the second control group, general conversational training was given without any specific strategic focus; the treatment group received the instruction of three CSs based on the techniques described by Dornyei & Thurrell (1991). Because the research involved the investigation of the effect of L2 proficiency on strategy use as well as the effectiveness of strategy training, students in the treatment and control groups were from different levels of language proficiency. The analysis of the results showed the instruction was successful in improving the quality of circumlocution and the frequency of fillers and circumlocution in the oral post-test consisting of topic description, cartoon description, and definition formulation. In addition, the findings showed no significant relationship between the students' language proficiency and the extent of strategy use; therefore, it was suggested that strategy training can be integrated even at a pre-intermediate level. This study provided preliminary support for the teachability of CSs and the effectiveness of CS Training.

To examine the effectiveness of CS training, another study was conducted by Lam and Wong (2000). They aimed at investigating the impact of CS training on the development of oral competency; particularly discussion skills. 58 students from the sixth grade of the secondary school in Hong Kong participated in the study. The CSs of clarifying one's self, seeking clarification, and checking one's understanding of other people's messages were selected since these strategies were seen by experienced teachers as the most needed strategies in group discussion. The treatment aimed at raising participants' awareness to the selected CSs, reinforcing the use of those strategies, and consolidation and revision of the three CSs. Findings showed that strategy training resulted in a greater use of CSs. However, limited linguistic resources prevented the learners to clarify themselves effectively; in spite of learning new strategies, the learners were unable to use them effectively due to their lack of vocabulary knowledge. This failure suggests that

strategy training should be accompanied with linguistic instruction and promoting learners' language proficiency.

In another attempt, Gallagher Brett (2001) examined the effects of CS instruction on beginners learning German as a second language in a mixed ability class of 29 students. In a study that lasted for 8 weeks, the language learners were taught a number of turn taking phrases; requests for help, clarifications, and repetitions; phrases expressing agreement and disagreement; pauses and fillers; and greetings. Data was collected from questionnaire and audio recordings of learners participating in classroom tasks and taking an oral test. Findings showed that some strategic phrases such as openers, closers, and turn-takers could be successfully taught to the beginners although the utility of them might depend on the nature of the task and communicative function of the phrase. Findings also indicated that most of the pause fillers were directly transferred from L1; therefore, the instruction of them seemed to be unsuccessful.

In another study, Rossiter (2003) examined the effect of more extensive CS training on the performance of 30 adult immigrants, aged 19-59, who enrolled in a full-time intermediate ESL program in Canada. One class received 12 hours of direct CS training and the control group followed the regular curriculum. Participants in the experimental group were provided with opportunities for practicing approximation, super-ordination, analogy, all-purpose words, and circumlocution. Data were collected from observation and an oral test containing object description and narrative task. Findings showed that CS training increased the frequency of the CSs although it did not improve fluency. The results pointed to the impact of task type on the use of CSs. Therefore, it was concluded that since different tasks elicit different types of CSs (e.g. the object description task necessitates the use of paraphrasing), multiple task types should be used in CS training courses. In addition, because one of the limitations of the study was the heterogeneity of the learners, it was suggested that CS training might have more positive effects on more homogeneous classes or at a lower level of language proficiency.

More recently, Lam (2006) conducted a study which aimed to investigate the impact of CS instruction on two intact classes of ESL students (20 in each) who were 13-14 years old and had six years of English instruction in Hong Kong. CSs of resourcing, paraphrasing, repetition, filler, self-correction, asking for

clarification, and asking for confirmation were explicitly taught to the treatment group. The control group followed the regular curriculum. The study lasted for five months. The analyses of the questionnaire, observation, group discussion, and stimulated recall data supported the value of CS training and suggested that CS training might have a positive effect on enhancing the self-efficacy of the learners, increasing students' strategic awareness and acquiring declarative knowledge of CSs which may lead to acquiring procedural knowledge of strategy use. Moreover, it was suggested that to maximize the benefits of CS training, it is desirable to match the cognitive/linguistic demands of strategy use with learners' language proficiency.

In another recent study, Maleki (2007) investigated the effectiveness of CS training in Iran. Participants were 60 intermediate level students, aged 20-25 -with the same L1 (Persian). They were in the third year of study and majored in different fields of humanities, social, and basic sciences at University. The participants were divided into two thirty-member classes (one as a treatment group and one as a control group) and two different course books, *Learning to Learn English* and *Breaking the Ice,* were taught to the treatment class and the control class respectively. The course lasted for 4 months and strategies of approximation, circumlocution, word coinage, appeal for assistance, foreignizing, and time-stalling devices were instructed. The findings indicated that not only is teaching CSs pedagogically effective but also it has a significant effect on the functional use of language.

Although these studies point to the positive impact of CS training, there have been some controversies on the effect of language proficiency and personality style on the use of CSs which may affect success or failure of CS training. Bialystok (1990, p.48) pointed that "the first factor that may be expected to predict the choice of a specific communication strategy is the proficiency level of the speaker. The strategies make different linguistic demands, and some may be too sophisticated for less advanced language learners." And Coder (1983, p.18) noted that "there is some evidence that there is a personality factor involved. Different learners will typically resort to favorite strategies – some are determined risk-takers, others value social factors of interaction above the communication of ideas." Therefore, in the following sections studies which have examined the impact of language proficiency and personality style on CS use have been presented.

Studies on the Impact of Language Proficiency on CSs Use
To examine the impact of language proficiency on CS use, Bialystok (1983) conducted a study on 16 students of French at grade twelve in high school (10 from the regular French program and 6 from an advanced class) and 14 adults learning French in a Civil Service French Language Training Program. In order to determine the level of language proficiency, all participants received a cloze test. The participants were asked to describe a picture and a native speaker of French was expected to reconstruct the picture accurately. Findings indicated that the advanced students used significantly more L2-based strategies such as semantic contiguity while the regular students basically relied on L1-based strategies such as language switch and foreignizing. However, no relationship was found between the level of language proficiency and the frequency of the CSs. Besides, Chi-square analyses comparing the selection of each strategy by the adults and the students showed no significant difference in selection of CSs. Therefore, she suggested "language proficiency biases the learner to select differentially between L1 and L2 based strategies but does not predict the selection of specific strategy" (p.110).

In another study, Si-Qing (1990) examined the relationship between language proficiency and strategic competence. Participants were 12 Chinese EFL learners, 6 of them were high-proficient and 6 were low-proficient learners (3 females and 3 males comprised each group). A concept-identification task was adopted to elicit CSs. 12 concrete and 12 abstract concepts were chosen and each participant was expected to convey 2 concrete and 2 abstract concepts to 2 native speakers. The native speakers were asked to identify the concepts and to rank the communicative effectiveness of the strategies. Each interview was recorded and transcribed. The results indicated that high-proficient learners employed less CSs than did the low-proficient learners; hence, it was suggested that since high-proficient learners are equipped with more linguistic knowledge, they appeal less to CSs. With regard to types of CSs, qualitative analysis of the data indicated that language proficiency would determine the choice of CSs; for instance, the low-proficient learners tended to employ more knowledge-based strategies (e.g., exemplification, cultural knowledge, and simile) and repetition; whereas the high-proficient learners seemed to use more linguistic-based strategies (e.g., metalanguage, superordinate, synonym, antonym). Finally, qualitative and quantitative analyses revealed that the most effective CSs were used by the high-proficient learners. Based on the findings, Si-Qing proposed that "it seems possible to develop Chinese EFL

learners' communicative competence, one of the components in language proficiency, by increasing their strategic competence" (p.179).

To further examine the effects of language proficiency on the use of CSs, another study was conducted by Ting and Phan (2008). Participants were 20 Malaysian undergraduates, aged 21 to 25, with different L1 as they came from different Chinese subgroups. High-proficient learners were selected from Malaysian University English Test (MUET) Band 5 (i.e., they were fluent and had a good understanding of English and could communicate effectively and accurately); less-proficient learners were selected from MUET Band 3 (i.e., they were fairly fluent in English and were able to communicate appropriately with noticeable inaccuracies. Their understanding was at the average level and they were likely to misinterpret messages). Data were collected through tape recording of students' oral interaction and transcribing; two researchers evaluated the CSs. Findings showed that the proficient and the less-proficient learners did not differ much in the frequency of CSs use; this finding is in line with findings of studies by Bialystok (1983) and Dornyei (1995). In addition, Findings indicated that both high and less proficient groups employed restructuring and self- repletion almost equally. However, the proficient learners showed greater ability to use intonation and stress as message-enhancing strategy than did the less-proficient learners; they also employed few language-switch strategies which were employed by less-proficient learners. Therefore, it was concluded that although language proficiency does not affect the frequency of CSs, it affects the choice of CSs (i.e., the high-proficient learners employ more discourse-based strategies and the less-proficient learners use more L1-based strategies).

Studies on the Impact of Extraversion/Introversion on CS Use
Haastrup and Phillipson (1983) analyzed 20 minutes conversation between Danish learners of English and English native speakers. Eight learners were selected from three different schools to investigate the impact of learners' styles, attitudes, and teachers' expectation on the use of CSs in the English-Danish interactions. All the students had five years of English as part of their compulsory schooling. Data were collected through video-taping and two investigators, one Danish speaker and one English speaker, transcribed and analyzed them. Findings revealed that in spite of five years of English learning, the learners employed more L1-based strategies (e.g. borrowing and literal translation) than interlanguage-based strategies (e.g. generalization and paraphrasing). In addition, their CSs use varied considerably

according to their styles (e.g. a confident learner used more restructuring, literal translation, and non-verbal strategies while an anxious learner often used borrowing, englicizing (e.g. in the marine for navy), literal translation, and paraphrasing). Therefore, the researchers concluded that strategy use could be affected by personality factors, linguistic competence, and sociolinguistic competence.

Validy (1997) investigated the influence of extraversion/introversion on the selection of CSs by Iranian EFL learners who were 135 freshmen majoring in English translation and literature at Allameh Tabatabaee University. The Comprehensive English Language Test was used as the placement test and the Eysenck Personality Questionnaire was used to differentiate between extraverts and introverts. To elicit CSs, writing a narration based on a series of related pictures and translation were used. Findings showed that the extraverts used more achievement strategies, particularly risk-taking while the introverts used more reduction strategies. No significant relationship was found between language proficiency and the types of CSs. Although the results showed significant difference between strategies used by extraverts and those used by introverts, this study suffered from a major shortcoming. The data were collected through writing and the spoken language was ignored; in addition, the focus was on lexical problems; the syntactic, discourse, pragmatic, and sociolinguistic problems were not addressed in this study.

Another study which examined the relationship between extraversion/introversion and CSs used by Iranian EFL learners in oral performance was conducted by Keyvani (2001). The study was carried out in three phases. In the first phase, the Michigan test of English Language Proficiency were administered to 120 juniors majoring in English teaching, English literature, and English translation at Al-Zahra University and Azad University (south branch). Based on gain scores and an oral interview 60 students were selected. In the second phase, Eysenck Personality Questionnaire was used to measure the degree of extraversion/introversion. Finally, to elicit CSs, the students participated in a narration task of cartoon – first in English and then in Persian. The data were classified into achievement and reduction strategies. Findings indicated that extraverts differ from introverts in the use of CSs (i.e., extravert students were more risk-taker and used more achievement strategies while introvert students employed more reduction strategies).

To explore the impact of extraversion on group oral performance, Gan (2008) focused on pronunciation and delivery, communication strategies, vocabulary and language patterns, and idea and organization. The criteria for assessing CSs emphasized the use of turn-taking strategies, appropriate use of body language, and discourse patterns such as hesitation. Participants were 14 males and 26 females ESL learners - aged 15 to 18 - in Hong Kong. They were grouped into 10 four-member groups and participated in an oral interaction task (i.e., reading a scene and then deciding about rewriting the script); each discussion lasted for 8 minutes and was video taped. Pearson correlation analysis indicated that, among the assessment scores, the highest level of correlation was between CS scores and extraversion although this correlation did not reach the significance. Therefore, it was hypothesized that extraverts employ more CSs.

The review of previous studies on CSs points to inconsistencies with respect to the effect of language proficiency on CS use. While some researchers (e.g. Bialystok, 1983; Dornyei, 1995) reported that there is no significant relationship between language proficiency and CSs use, others (Si-Qing, 1990; Lam, 2006) noted that language proficiency determines the frequency and type of CSs employed by learners. In addition, few studies have been carried out to examine the impact of personality traits such as extraversion/introversion on the use of CSs. Since extraversion/introversion could affect students' oral performance (Ellis, 1994; Sternberg, 1995; Brown, 2000), it may influence the use of CSs; and, therefore, success of CS training. Subsequently, the present study aimed at investigating the impact of language proficiency on CS use, CSs favored by extraverts and introverts, and the impact of teaching four CSs – circumlocution, appeal for help, time-stalling devices, and message abandonment on Iranian EFL learners' oral performance. More specifically, the present study addressed the following research questions:

1) Does the level of language proficiency influence the use of communication strategies?
2) Is there a significant difference between communication strategies favored by extravert learners and communication strategies favored by introvert learners?
3) Does communication strategy training influence Iranian EFL learners' oral performance?

Method
Design
The study was conducted in two phases. In the first phase, a questionnaire which was developed by the researchers on the basis of Dornyei and Scott's (1997) *Inventory of Strategic Language Devices* (see Appendix) was utilized to elicit information about self-reported CSs. Along with CS questionnaire, the Persian restandardized form of Eysenck Personality Questionnaire (1975) was used to classify participants as extravert/introvert. In the second phase, four intact classes at elementary level - three as experimental groups and one as control group - were selected to examine the impact of CS training on EFL learners' oral performance.

Participants
Phase 1
To find out the effect of language proficiency and extraversion/introversion on CSs use, two different questionnaires were administered to 182 female students (65 intermediate, 62 pre-intermediate, and 55 elementary students) aged 12 to 35 studying English in Milad Language Institute in Tehran. The majority of the students had studied English in Milad Institute for at least one year. Since we wanted to examine the impact of language proficiency on the use of CSs, we relied on the institute's criterion to differentiate between participants and selected intact classes from different levels (i.e., participants who studied *New Interchange One*, *Two,* and *Three* were regarded as elementary, pre-intermediate, and intermediate language learners respectively). Participants who did not complete the questionnaires were eliminated from the study. Table 1 presents a summary of the participants.

Table 1
Participant distribution based on the level of Language Proficiency and Extraversion/Introversion

Participants: to examine the impact of LP on CSs use (N=137)			Participants: to examine the impact of ex/in on CSs use (N=95)		
Elementary	Pre-intermediate	Intermediate	Elementary	Pre-intermediate	Intermediate
41	43	53	38	31	26

Phase 2
To examine the effectiveness of CS training, four intact classes at the elementary level were chosen (three as the experimental classes and one as the control class). The rational for choosing the elementary students was that results gained from analyzing the communication strategy questionnaire in phase 1 indicated that language proficiency does not have any impact on CS use; therefore, it was concluded that all the students regardless of their language proficiency would benefit from CS training. Since elementary students are linguistically and sociolinguistically less competent than their pre-intermediate and intermediate counterparts, it was assumed that CS training would benefit elementary students more than upper-proficiency students. This is echoed by Haastrup and Phillipson (1983) who noted that by improving strategic competence, it is possible to improve elementary students' linguistic and sociolinguistic competence. Therefore, participants, in phase 2, were 47 elementary learners aged of 12 to 17. The experimental group comprised three classes each including 7, 9, and 11 language learners. In the control class, there were 20 language learners. The course book was *New Interchange One*. Since the researchers intended to video record pre-test and post-test, the participants' consent were obtained prior to the commencement of the research.

Instruments
To investigate the impact of language proficiency on the use of CSs and to see whether there is a difference in the choice of CSs by extraverts and introverts, two questionnaires were used. First, to estimate the frequency and the types of CSs, a five-point Likert scale questionnaire ranging from 1 (never) to 5 (always) with 48 items in the students' L1 was developed by the researchers (see Appendix). The reliability coefficient as estimated by Cronbach's Alpha was 0.83 and all the items represent the types of CSs.

Second, the Persian restandardized form of the adult EPQ with 38 items in the *YES/NO* format was utilized to measure the degree of extroversion/introversion. Seventeen items measure the degree of extraversion and the rest of the items are used as lie fillers (social acceptability) to detect the inconsistencies in replies. As Kiani (1998) noted, the English form of EPQ measures three psychological traits of extraversion, neuroticism, and psychoticism. However, the Persian restandardized form of EPQ used in this study just measures the trait of extraversion and the other items related to measuring neuroticism and psychoticism are not included in the

questionnaire. The EPQ has been shown to be both reliable and valid in its different administration in Iranian context (Kiani, 1998; Shahini, 2006). However, the Cornbach's Alpha reliability of the questionnaire for the present study turned out to be 0.52 which is not satisfactory.

To examine the impact of CS training on students' frequency of the use of strategy a strategy training course was conducted and the effects of treatment were assessed. Pictures of animals, appliances, gadgets and other instruments were used to elicit desirable CSs in pre and post tests. In addition, the participants were asked to take part in telling a story and a joke task.

Procedures
Procedures in Phase 1
First, the students were asked to fill in the questionnaire (in their L1) developed on the basis of Dornyei & Scott's (1997) *Inventory of Strategic Language Devices* in 20 minutes. Then, they were asked to fill in the Persian restandardized form of the adult EPQ in order to measure the degree of extraversion/introversion in 10 minutes. The steps used to pilot the questionnaires on a small group of volunteers indicated that the average completion time for the two questionnaires was about 20 and 10 minutes respectively. All the questionnaires were filled out in the classrooms while one of the researchers was observing the students.

Procedures in Phase 2
First of all, four CSs (circumlocution, appeal for help, time-stalling devices, and message abandonment) from Dornyei and Scott's (1997) taxonomy were selected for the instruction. As Dornyei (1995) argues, in order to integrate strategy training into core curriculum, teachers must select strategies well. The review of the studies on CSs indicates that the instruction of CSs has been based on the assumption that there are identifiable effective strategies utilized by successful learners. For example, by examining the effectiveness of strategy training, Dornyei and Thurrell (1991) suggested that fillers, topic avoidance, circumlocution, and appeal for help are mainly effective at enhancing some aspects of message adjustment and resource expansion skills. Dornyei (1995) pointed that circumlocution is often seen as the most important achievement strategy. To date, circumlocution has been the focus of many strategy training studies (Dornyei, 1995; Gallagher Brett, 2001; Lam, 2006; Maleki, 2007). Moreover, as Dornyei (1995) noted, topic avoidance, replacement, pause-filler, and hesitation devices improve students' fluency;

therefore, teaching these strategies is suggested. Maleki (2007) concluded that since interactional strategies such as appeal for help were employed effectively by learners to negotiate meaning, it is desirable to teach this strategy to facilitate learners' interactions. Therefore, on the basis of previous research, circumlocution, appeal for help, time-stalling devices, and topic avoidance were selected for the instruction. In addition, the findings of the phase 1 indicated that there is no significant difference in the use of these strategies; therefore, it was expected that the success of CS training in this study would be independent of the type of strategy selected.

After deciding on the types of CSs to be taught, the students in the experimental and the control classes took part in a pre-test involving picture description. They were divided into pairs and were asked to describe the pictures for their partners to elicit circumlocution (e.g. it is a kind of appliance), time-stalling devices (e.g. let me think), and topic avoidance strategies (e.g. just this). To elicit appealing for help strategy, the listeners were asked to find the described objects. The purpose of the pre-test was to find the degree to which the students use CSs without instruction. Some of the CSs used by the students in describing different objects and animals are described below.

1) It has big ears … long nose and 4 legs and short tail (i.e., circumlocution to describe an elephant).

2) It is a kind of animal. It was fat and the color of body is orange… he has black eyes and it's … just this (i.e., the student first tried to describe a lion by using circumlocution but she was unsuccessful in describing it and decided to finish her message by saying *'just this'*).

3) What is it (showing the picture of pram) (i.e., appeal for help)?

4) Goat … and that's it (i.e., after some pauses, message abandonment).

5) The girls pushed the … (showing the pram and looking at the teacher after some pause she said) children … and I forgot (i.e., message abandonment).

To further elicit CSs, sometimes the researcher posed some questions such as:

Researcher: (showing the picture of saw) you need this one but you don't know the name of it, what do you do to get it from your friend?

Student: I take a picture of it and show it to her.

Researcher: What if you don't have a camera?

Student: (she doesn't say anything)

To teach CSs in the experimental classes, first the learners were provided with definitions of the selected CSs in L2 (i.e. circumlocution is defined as describing or explaining the meaning of the object through describing its shape, size, color, and function). Second, the purpose of using the selected CSs was given to the learners (i.e. people use circumlocution when they do not know a word for an object). Third, useful expressions and phrases were introduced (i.e. expressions such as *'it is used for', 'it looks like', 'it is an appliance',* and *'it is a kind of'* are used to describe objects). Finally, the learners participated in activities including picture description, telling a joke, and telling a story to practice the CSs.

At the end of the treatment period, the students were given a post-test which included picture description with the same pictures used in the pre-test, telling a joke (i.e. two different jokes were told by each student in pairs), and a story (i.e. the students were asked to tell the summary of a story book). Some of the CSs employed by the students in the post-test are presented here (since these sentences were produced by the students, they have grammatical mistakes).
1) It is a gadget when we want to talk somebody or send message (i.e., circumlocution for cell phone).
2) Let me think … I think it is steam-hoover (i.e., time-staling device).
3) I'm getting lost … is it cell phone (i.e., appeal for help)?
4) Could you repeat it again (i.e., appeal for help)?
5) I see one place in the tree … let's say (i.e., time-staling device) … it is a place the birds go in it (i.e., circumlocution for nest).

Results and Discussion
The impact of Language Proficiency on the Use of CSs
Table 2 presents the descriptive statistics of CS use reported by the students. These strategies were identified on the basis of Dornyei & Scott's (1997) *Inventory of Strategic Language Device* and were translated into Persian by the researchers. As can be seen, asking for repetition (M = 4.03), is the most frequently used communication strategy and foreignizing (M = 1.32) is the least frequently used one regardless of differences in language proficiency. Therefore, it can be suggested that learners use some CSs such as asking for repetition, self-repair, message reduction, and restructuring more than other types of strategies such as mumbling, use of similar sounding words, and foreignizing without being instructed. It is speculated that participants' past experience may have influenced the choice of strategies; as Bialystok (1990) noted language learners employ some

CSs in their L1 communication and transfer those strategies that they regard effective to the L2 situations. Similarly, Leki (1995) argues that sometimes students use strategies which seem to be effective in L1 situations in the L2 classrooms; this transfer of strategies, however, is not always effective in L2 contexts; therefore, they should be taught how to use more effective strategies.

Table 2
Descriptive Statistics of CS Use for Elementary, Pre-intermediate, and Intermediate
Students (N = 137)

	Minimum	Maximum	Mean	Std. Deviation
Asking for repetition	1.00	5.00	4.036	0.910
Self-repair	2.00	5.00	3.985	0.857
Message reduction	1.00	5.00	3.883	0.883
Restructuring/replacement	2.00	5.00	3.832	0.862
Asking for clarification	2.00	5.00	3.799	0.588
Over explicitness	1.00	5.00	3.737	0.901
Response confirm	1.00	5.00	3.715	0.931
Non-Understanding	1.50	5.00	3.562	0.697
Other-repair	1.00	5.00	3.503	1.036
Guessing	1.00	5.00	3.467	1.043
Direct appeal for help	1.50	6.50	3.463	0.869
Interpretative summary	1.00	9.00	3.379	1.266
Own-accuracy check	1.50	5.00	3.310	0.853
Asking for confirmation	1.00	5.00	3.204	1.138
Circumlocution	1.50	5.00	3.186	0.804
Use of fillers	1.00	5.00	3.058	1.034
Comprehension check	1.00	5.00	3.036	1.153
Indirect appeal for help	1.00	5.00	2.965	0.779
Approximation	1.00	5.00	2.963	1.172
Use of all purpose words	1.00	5.00	2.897	1.261
Verbal strategy markers	1.00	5.00	2.810	0.989
Self-rephrasing	1.00	5.00	2.729	1.032
Word coinage	1.00	5.00	2.715	1.242
Retrieval	1.00	5.00	2.700	1.045
Self-repetition	1.00	5.00	2.700	1.202
Other-repetition	1.00	5.00	2.627	1.169
Literal translation	1.00	5.00	2.609	0.977
Response reject	1.00	5.00	2.518	1.078
Message abandonment	1.00	4.20	2.474	0.719
Omission	1.00	5.00	2.438	1.076
Mime	1.00	4.50	2.394	0.916
Feigning understanding	1.00	5.00	2.335	1.093
Mumbling	1.00	5.00	1.890	1.068
Use of similar sounding words	1.00	5.00	1.729	0.951
Foreignizing	1.00	5.00	1.321	0.766

It was expected that the frequency of CS use might vary as a function of language proficiency; in this regard, the researchers hypothesized that more proficient students use less CSs due to their good command of language and do not need to resort CSs. To check this hypothesis, the researchers selected 41 participants from Elementary, 43 from Intermediate, and 53 from Advanced level. To examine the differences between CSs used by EFL students across three levels of proficiency, the one-way ANOVA analysis was performed. The results in Table 3 shows that there are no significant differences in communication strategy use between any of the three levels, except in foreignizing ($f_{(2,134)} = 5.88$, p= 0.004) and self-repetition ($f_{(2,134)} = 3.17$, p= 0.045); to find out where the differences lie, Scheffe test was conducted for foreignizing and self-repetition. The results of the Scheffe test indicated that the pre-intermediate students (M=1.62) outperformed the elementary students (M=1.27) in using foreignizing; the elementary students employed more self-repetition (M=3.07) than the intermediate students (M=2.62).

On the basis of the findings it can be argued that language proficiency does not influence the frequency of CS use. This accords with the results of the studies by Bialystok (1983), Dornyei (1995), and Ting and Phan (2008) who found that language proficiency does not influence the frequency of CS use. Dornyei (1995) concluded that language proficiency does not predict the use of CSs and noted that CSs can be taught to lower-proficiency language learners as well as upper-proficiency language learners. Bialystok (1983) claims that "the average number of strategies used bore no relation to proficiency, but the blend of those strategies, in terms of their base in the L1 or L2, did."(p. 108) Also she states that "hence target language proficiency biases the learner to select differentially between L1- and L2-based strategies, but does not predict the selection of specific strategies" (p.110).

Table 3
One-way ANOVA of CS Use across Three Levels of Proficiency

		Sum of Squares	df	Mean Square	F	Sig.
Message reduction	Between Groups	0.149	2	0.074	0.094	0.910
	Within Groups	105.983	134	0.791		
Word coinage	Between Groups	0.878	2	0.439	0.281	0.755
	Within	209.020	134	1.560		

	Groups					
Use of all purpose words	Between Groups	1.062	2	0.531	0.330	0.719
	Within Groups	215.507	134	1.608		
Approximation	Between Groups	1.460	2	0.730	0.528	0.591
	Within Groups	185.375	134	1.383		
Foreignizing	Between Groups	6.453	2	3.226	5.889	0.004
	Within Groups	73.416	134	0.548		
Use of Similar sounding words	Between Groups	4.989	2	2.495	2.833	0.062
	Within Groups	118.018	134	0.881		
Mumbling	Between Groups	3.211	2	1.606	1.414	0.247
	Within Groups	152.147	134	1.135		
Omission	Between Groups	3.597	2	1.798	1.563	0.213
	Within Groups	154.126	134	1.150		
Asking for repetition	Between Groups	0.485	2	0.242	0.289	0.749
	Within Groups	112.333	134	0.838		
Retrieval	Between Groups	0.139	2	0.069	0.063	0.939
	Within Groups	148.591	134	1.109		
Interpretive summary	Between Groups	3.504	2	1.752	1.093	0.338
	Within Groups	4.759	134	1.603		
Asking for confirmation	Between Groups	0.279	2	0.139	0.106	0.899
	Within Groups	175.999	134	1.313		
Comprehension check	Between Groups	1.874	2	0.937	0.702	0.498
	Within Groups	178.943	134	1.335		
	Groups					

Self-repair	Between Groups	0.679	2	0.340	0.458	0.633
	Within Groups	99.292	134	0.741		
Other-repair	Between Groups	0.177	2	0.088	0.081	0.922
	Within Groups	146.071	134	1.090		
Response confirm	Between Groups	0.470	2	0.235	0.268	0.765
	Within Groups	117.428	134	0.876		
Other-repetition	Between Groups	4.415	2	2.208	1.629	0.200
	Within Groups	181.599	134	1.355		
Response reject	Between Groups	1.590	2	0.795	0.680	0.508
	Within Groups	156.615	134	1.169		
Use of fillers	Between Groups	2.903	2	1.452	1.364	0.259
	Within Groups	142.630	134	1.064		
Restructuring	Between Groups	0.837	2	0.419	0.559	0.573
	Within Groups	100.301	134	0.749		
Self-rephrasing	Between Groups	0.420	2	0.210	0.194	0.824
	Within Groups	144.588	134	1.079		
Over explicitness	Between Groups	0.752	2	0.376	0.459	0.633
	Within Groups	109.788	134	0.819		
Feigning understanding	Between Groups	2.531	2	1.265	1.060	0.349
	Within Groups	160.024	134	1.194		
Verbal strategy markers	Between Groups	1.457	2	0.729	0.742	0.478
	Within Groups	131.608	134	0.982		
Guessing	Between	2.756	2	1.378	1.271	0.284

	Groups					
	Within Groups	145.346	134	1.085		
Message abandonment	Between Groups	1.260	2	0.630	1.222	0.298
	Within Groups	69.061	134	0.515		
Circumlocution	Between Groups	2.247	2	1.124	1.756	0.177
	Within Groups	85.756	134	0.640		
Literal translation	Between Groups	3.594	2	1.797	1.907	0.153
	Within Groups	126.264	134	0.942		
Clarification	Between Groups	.460	2	0.230	0.661	0.518
	Within Groups	46.645	134	0.348		
Indirect appeal for help	Between Groups	.544	2	0.272	0.444	0.642
	Within Groups	82.104	134	0.613		
Direct appeal for help	Between Groups	.794	2	0.397	0.522	0.595
	Within Groups	102.023	134	0.761		
Expressing Non understanding	Between Groups	0.841	2	0.420	0.862	0.425
	Within Groups	65.382	134	0.488		
Own accuracy check	Between Groups	0.943	2	0.471	0.644	0.527
	Within Groups	98.123	134	0.732		
Self-repetition	Between Groups	8.892	2	4.446	3.172	0.045
	Within Groups	187.838	134	1.402		
Mime	Between Groups	1.244	2	0.622	0.738	0.480
	Within Groups	112.972	134	0.843		

The Differences in the Use of CSs between Extraverts and Introverts
To find out the differences in the use of CSs between extraverts and introverts, first, extravert and introvert participants were differentiated by using the Persian restandardized form of the adult EPQ. The mean of extraversion/introversion and the standard deviation were 22.29 and 3.82 respectively. According to Eysenck, Eysenck, & Barrett (1985), the students who gained the score of M + Sd or more were seen as extraverts and the students who got the score of M − Sd or less were regarded as introverts. The students who scored in the range of M+Sd and M-Sd were seen ambivalent and excluded from the study.

To examine the differences in the use of CSs between extraverts and introverts an Independent Sample T-test was run. The results in Table 4 show that there is a significant difference between extraverts and introverts in using mime, word coinage, approximation, comprehension check, and interpretive summary. Regarding the other types of CSs no significant difference was found between extraverts and introverts. Although the comparison of the means of CSs use between extraverts and introverts indicates that extraverts use more CSs than introverts do, the differences do not reach the significance. Therefore, it is concluded that there is no significant difference between CSs favored by extraverts and CSs favored by introverts. This finding is in contrast with the assertion of researchers (Hasstrup & Philipson, 1980; Bialystok, 1990; Ellis, 1994; Jie & Xiaoqing, 2003) who believe that learner's style influences the choice of CSs (e.g., extroverts are eager to use co-operative strategies such as appeal for help and introverts are keen on employing reduction strategies such as topic avoidance). This finding is in contrast with the assertion of researchers (Corder, 1983; Hasstrup & Philipson, 1983; Bialystok, 1990; Ellis, 1994; Validy, 1997; Keyvani, 2001) who believe that learner's style influences the choice of CSs (e.g., extraverts are eager to use co-operative strategies such as appeal for help and introverts are keen on employing reduction strategies such as topic avoidance).

Table 4
Independent Sample t-test to examine the Differences in the use of CSs between Extroverts and Introverts

Equal variances not assumed	Introvert Extrovert	N	Mean	Std. Deviation	T	df	Sig. (2-tailed)
Own-accuracy check	In	16	3.250	0.707	-.944	37.600	0.351
	Ex	24	3.500	0.966			
Similar sounding words	In	16	1.625	0.885	-.435	32.602	0.666
	Ex	24	1.750	0.896			
Mumbling	In	16	1.500	0.730	-1.503	37.790	0.141
	Ex	24	1.958	1.197			
Interpretive summary	In	16	2.812	1.046	-3.323	28.853	0.002
	Ex	24	3.875	0.899			
Comprehension check	In	16	2.437	0.892	-2.314	36.281	0.026
	Ex	24	3.166	1.090			
Self-repair	In	16	4.062	0.928	0.077	25.800	0.939
	Ex	24	4.041	0.690			
Asking for confirmation	In	16	4.8753	1.408	0.992	27.02	0.33
	Ex	24	2.917	1.122			
Foreignizing	In	16	1.125	0.341	-1.788	29.595	0.084
	Ex	24	1.541	1.062			
Response reject	In	16	2.687	0.873	.474	36.213	0.638
	Ex	24	2.541	1.062			
Use of fillers	In	16	2.875	1.024	-1.194	34.947	0.240
	Ex	24	3.291	1.160			
Replacement	In	16	3.687	0.873	-.643	34.079	0.524
	Ex	24	3.875	0.946			
Self-rephrasing	In	16	2.437	0.892	-2.005	36.897	0.052
	Ex	24	3.083	1.138			
Feigning understanding	In	16	2.375	1.024	.116	36.121	0.909
	Ex	24	2.333	1.239			

Message abandonment	In	16	2.425	0.789	-.757	29.108	0.455
	Ex	24	2.608	0.686			
Circumlocution	In	16	3.093	0.554	-.748	37.679	0.459
	Ex	24	3.250	0.766			
Mime	In	16	2.218	0.729	-2.807	36.898	0.008
	Ex	24	2.958	0.931			
Literal translation	In	16	2.250	0.983	-1.999	31.446	0.054
	Ex	24	2.875	0.946			
Direct appeal for help	In	16	3.031	0.805	-1.976	31.941	0.057
	Ex	24	3.541	0.792			
Message reduction	In	16	3.875	0.957	-.426	29.151	0.674
	Ex	24	4.000	0.834			
Word coinage	In	16	2.187	1.167	-2.602	29.545	0.014
	Ex	24	3.125	1.034			
Use of all purpose words	In	16	2.812	1.046	-1.016	37.497	0.316
	Ex	24	3.208	1.413			
Approximation	In	16	2.562	1.030	-2.105	36.453	0.042
	Ex	24	3.333	1.274			
Omission	In	16	2.250	1.064	-.917	35.067	0.365
	Ex	24	2.583	1.212			
Ask for repetition	In	16	3.875	1.408	-.885	19.416	0.387
	Ex	24	4.208	0.658			
Retrieval	In	16	2.562	1.209	-.965	28.387	0.342
	Ex	24	2.916	1.017			
Self-repetition	In	16	2.687	1.078	.173	34.139	0.863
	Ex	24	2.625	1.172			
Other-repair	In	16	3.062	0.997	-1.799	30.533	0.082
	Ex	24	3.625	0.923			
Response confirm	In	16	3.500	1.032	-.270	27.379	0.789
	Ex	24	3.583	0.829			
Other-repetition	In	16	2.562	1.093	-1.013	36.612	0.318
	Ex	24	2.958	1.366			

Over explicitness	In	16	3.500	1.095	-1.317	24.887	0.200
	Ex	24	3.916	0.775			
Verbal strategy markers	In	16	2.562	0.629	-1.900	37.328	0.065
	Ex	24	3.083	1.100			
Guessing	In	16	3.500	1.032	-.820	26.469	0.420
	Ex	24	3.750	0.794			
Indirect appeal for help	In	16	2.843	0.768	-.921	34.688	0.363
	Ex	24	3.083	0.858			
Asking for clarification	In	16	3.640	0.706	-2.039	24.066	0.053
	Ex	24	4.052	0.477			
Non-understanding	In	16	3.437	0.771	-.789	29.392	0.436
	Ex	24	3.625	0.679			

The Impact of CS training on EFL Students' Oral Performance
To see whether there is an increase in the number of CSs use after training, first, the students in the treatment groups took a pre-test containing picture description to explore the extent to which they employ CSs without being taught. Second, circumlocution, appeal for help, time-stalling devices, and message abandonment strategies were taught to the students. Finally, the treatment groups and the control group participated in post-test activities including telling a joke (i.e. two jokes were told in pairs), telling a story, and picture description task (i.e. pictures were the same as pictures used in the pre-test) - the interval between pre and post test was two and a half months. The students' performances were videotaped and transcribed.

To explore the impact of CS training on the frequency of the instructed CSs, parametric procedure such as ANOVA was not performed due to the nature of the data. Therefore, to see whether changes have been caused by the training, Chi-square analysis was used to compare the frequency of instructed strategies employed by the participants in three different tasks. Table 5 presents the comparison of the frequency of the four strategies used in telling a story, telling a joke, and picture description tasks. The results in Table 5 indicate that the students in the treatment groups showed improvement in their use of time-stalling devices in telling a story task (X^2=14.84, p<.002). However, no significant improvement was found in the use of circumlocution, appeal for help, and message abandonment.

The Chi-square analysis of the results of telling a joke task reveals that there is a significant difference (X^2=19.56, p<.012) between the treatment and control groups in the frequency of appeal for help strategies. However, no significant difference was found between the control and treatment groups in using circumlocution, time-stalling devices and message abandonment. Table 5 also presents the analysis of the CSs used by treatment and control groups in picture description. The findings indicate that the students in the treatment groups used more circumlocution (X^2=27.97, p<.00), appeal for help (X^2=9.29, p<.05), and time-stalling devices (X^2=9.40, p<.009) than their counterparts in the control group. However, no significant difference was found in the frequency of message abandonment between the treatment and control groups. There are two possible reasons for these findings: first, the nature of the task might have influenced the findings (Bou-Franch, 1994; Smith, 2003; Rossiter, 2003). Smith (2003) noted that decision-making task elicits more compensatory strategies than jigsaw tasks and Rossiter (2003) pointed that object description tasks bring out more paraphrase strategies than narrative tasks. In the present study, it could be speculated that telling a joke elicits more asking for help strategies; since the students were eager to understand the joke, they asked more questions for clarification, meaning, or repetition. On the other hand, since the participants read a joke from a written text, they did not need to use time-stalling devices to gain more time for thinking or message abandonment strategies to give up a conversation. It was also observed that circumlocution, appeal for help, and message abandonment are used rarely in telling a story; therefore, it could be concluded that the frequency of these CSs is rather low in telling a story. Second, students' previous experience in the use of strategies might have influenced the outcome. This is highlighted by Hong-Nam and Leavell (2006) who note that past experiences influence the choice of strategy use in EFL contexts.

Table 5

Chi-square Analysis on the Frequency of Four Types of CSs Employed by Treatment (N=27) and Control Groups (N=20) Participating in Telling a Story, the Telling a Joke, and Picture Description Task

	X^2	df	Sig	X^2	df	Sig	X^2	df	Sig
Circumlocution	.76	1	.38	7.01	3	.072	27.97	5	.00
Appeal for Help	.63	1	.42	19.56	8	.012	9.29	4	.05
Time-stalling Devices	14.84	3	.002	5.09	2	.078	9.4	2	.009
Message Abandonment	3.32	2	.19	.75	1	.38	.28	2	.87

Table 6 presents the Chi-square analysis of the CSs employed by the treatment groups in the pre and post tests of picture description activities. The findings show that the students employed significantly more circumlocution (X^2=35.45, p<0.00), appeal for help (X^2=12.40, p<.015), and time-stalling devices (X^2=12.27, p<.002) after the instruction. Table 6 also reveals that there is not a significant difference between the results of the pre-test and the post-test regarding the frequency of message abandonment.

Table 6

Chi-square Analysis on the Frequency of Four Types of CSs Employed by the Treatment Groups in the Pre-test and Post-test Picture Description Task (N=27)

	X^2	Df	Sig
Circumlocution	35.45	5	.00
Appeal for Help	12.40	4	.015
Time-stalling Devices	12.27	2	.002
Message Abandonment	.25	2	.87

Taken together, the findings of the present study demonstrate the teachability of circumlocution, appeal for help, and time-stalling devices. This finding is in line with the findings of Dornyei (1995), Gallagher Brett (2001), Lam & Wong (2000), Rossiter (2003), Lam (2006), and Maleki (2007) who demonstrated that CS training is pedagogically effective.

Conclusion

The present study was motivated by the controversies regarding the frequency of the use of communication strategies across proficiency levels, the differential use of strategy among extroverts/Introverts, and the teachability of communication strategies. The findings indicated that the most frequent CSs employed by Iranian EFL students without any instruction were asking for repetition, self-repair, message reduction, and restructuring; and the least frequently used strategies were mumbling, use of similar sounding words, and foreignizing. It was found that the frequency of the CSs used by the Iranian EFL students was independent of language proficiency. The One-way ANOVA analysis of the data collected through the CS questionnaire across three levels of language proficiency revealed that the students employ different types of CSs almost equally regardless of their level of language proficiency. Thus, as Dornyei (1995) noted, the researchers concluded

that CS training has similar effects in elementary, pre-intermediate, and intermediate courses.

As for the frequency of CS use among extraverts/ introverts, no significant difference was found between the frequency of different types of CSs employed by the extraverts and introverts. The t-test analysis of the data indicated that the introverts use as many CSs as the extraverts do; they differ from the extraverts just in using a few CSs (using mime, word coinage, approximation, comprehension check, and interpretive summary). Since, no significant difference was found between extraverts and introverts in the use of CSs except in a few, it can be concluded that extravert and introvert students will benefit CS instruction equally.

With respect to the teachability of the CSs, the present study confirms the effectiveness of teaching circumlocution, appeal for help, and time-stalling devices. The findings showed that the CSs employed by the students in the treatment groups significantly outnumbered those used by the students in the control group. In addition, the analysis of the results of the pre-test and post-test indicated a significant change in the students' oral performance after the treatment in using circumlocution, appeal for help, and time-stalling devices. Therefore, language teachers suggested to integrate CS training into EFL curriculum. By teaching CSs through examples and tasks, teachers can make learners aware of communicative problems and of the importance and advantages of using CSs. In addition, Since CSs are manifestations of strategic competence - one of the major components of communicative competence - EFL learners could be guided to a greater communicative success through teaching CSs. Therefore, it is recommended that EFL course books present different types of CSs and their applications and provide opportunities for practicing CSs; for example, by presenting problematic situations which require use of CSs in order to maintain the stream of conversation.

It should also be noted that although the students employed more CSs after the instruction, the extent to which these strategies were effective were not examined in the present study. In addition, the results of the present study with respect to the teachability of CSs are not conclusive; only four types of CSs were employed with a limited number of participants. Therefore, the generalizability of the results to the other contexts is in dilemma. Besides, future studies need to examine the effect of cultural variables, gender, and task on the use of CSs.

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Appendix
Questionnaire

سن: سطح دوره:

لطفاً سؤالات زیر را به دقت خوانده و با توجه به پنج گزینة:
همیشه، اکثر مواقع، بعضی اوقات، به ندرت، هیچوقت در مربع
مربوطه علامت ضربدر بگذارید.
لازم به ذکر است این پرسشنامه صرفاً برای تحقیق در امر آموزش
زبان تهیه شده و هیچ تاثیری در نمرات شما نخواهد داشت لطفاً
سؤالات را به دقت بخوانید و با صداقت پاسخ دهید.

هیچوقت	به ندرت	بعضی اوقات	اکثر مواقع	همیشه	
					۱) وقتی هنگام صحبت کردن کلمه مورد نظر را نمی دانم، با گفتن "I don't know" و ... از ادامه گفتگو صرف نظر می کنم.
					۲) وقتی گفتن جمله ای به زبان انگلیسی برایم دشوار و پیچیده است، منظورم را با استفاده از جملات ساده تر و کوتاه تر بیان می کنم
					۳) اگر نتوانم در صحبت کردن واژه مورد نظرم را پیدا کنم واژه جدیدی از خود ابداع می کنم (مثلا کلمه Flouriest به معنی گلفروش را نمی دانم و به جای آن کلمه Flower seller را از خود ابداع می کنم).
					۴) وقتی منظور مخاطب خود را متوجه نمی شوم، با تغییر دادن چهره ام به مخاطب نشان می دهم که منظورش را نفهمیده ام.
					۵) اگر کلمه ای (اعم از شی ، مکان، حیوان، ...) را بلد نباشم، از کلمات هم خانواده آن استفاده می کنم (مثلا کلمه Bowl را نمی دانم و به جای آن از کلمه Plate استفاده می کنم).
					۶) اگر کلمه ای را ندانم به

						جای آن از کلمـاتـی مثـل thing استفاده مـی کنم.
						۷) اگـر کلمـه ای را نـدانـم معادل فارسی آن را می گویم.
						۸) اگـر کلمـه ای را نـدانـم مـعادل فارسی آن را با لهجه انگلیسی می گویم.
						۹) اگر در هنگام صحبت بـه جمـله ای بـرخورد کنم که گـفتن آن بـه زبان انگلیسی بـرایم مـشکل با شد، آن جمـله را بـه فارسی گفته و بـقیه صحبتم را بـه انگلیسی ادامه می دهم.
						۱۰) اگر کلمه ای را فراموش کـرده باشـم، و فقـط وزن و بـرخی از حروف آن را در خاطر داشته با شم، از کلمه ای کـه هم وزن و یـا هم قافیه آن است، استفاده مـی کنم (مثلا کلمه Pan را بـه خاطر نمی آورم کلمه Cap را می گویم.
						۱۱) اگر کلمه ای را نـدانـم، واژه ی نـامفهومی را زیـر لـب زمـزمه مـی کنم و بـقیه صحبتم را ادامه می دهم.
						۱۲) اگر کلمه ای را نـدانـم، جای آن را خالـی گذا شته، و جمله را ادامه می دهم.
						۱۳) اگر کلمه ای را (اعم از شـی ء، مکـان، حیـوان ...) نـدانـم، سعی مـی کنم بـا تـوصیف کردن کـاربـرد آن مـذظورم را بیان کنم.
						۱۴) وقـتی هنگام صحبت کردن دچار مـشکل مـی شوم، بـه طور غیر مـستقیم، از مخاطبم کـمک مـی خواهم.
						۱۵) اگر کلـمه ای را متوجه نـشوم، از مخاطب مـی خواهم آن را تـکرار کند.
						۱۶) وقـتی هنگام صحبت کردن، کلمـه مـورد نظـرم را بلـد نیـستم، با تـکان دادن سر و دست از ادامـه ی گفـتگو صرف نظر مـی کنم.

					۱۷) اگر فرم درست کلمه ای (صفت، قید، اسم، ...)را ندانم، آن کلمه را به فرم های مختلف (گذشته، حال، صفت، قید، ...(بیان می کنم تا در بین یکی از آنها کلمه مورد نظرم پیدا شود.
					۱۸) وقتی که به زمان بیشتری برای فکر کردن نیاز دارم، کلمه یا جمله قبلی خود را تکرار می کنم.
					۱۹) وقتی منظور مخاطب خود را متوجه نمی شوم. از مخاطبم می خواهم که بیشتر توضیح دهد.
					۲۰) وقتی برای گفتن کلمه ای دچار مشکل می شوم، بلافاصله از مخاطب کمک می خواهم
					۲۱) با تکرار خلاصه مطالب گفته شده، منظور خود را بهتر می رسانم.
					۲۲) درک مطلب خود را با پرسیدن سوالاتی مثل " do you mean" یا "do you say" چک می کنم.
					۲۳) با پرسیدن سوالاتی چون "آیا منظورم را متوجه می شوید؟ درک مطلب مخاطبم را ارزیابی می کنم.
					۲۴) وقتی هنگام صحبت کردن کلمه مورد نظرم را نمی دانم سکوت می کنم
					۲۵) وقتی منظور مخاطب را نمی فهمم، از جملاتی مثل "what do you mean? یا "what does it mean?" استفاده می کنم.
					۲۶) وقتی کلمه ای را نمی دانم از مخاطبم می پرسم: "What do you call it in English?"
					۲۷) با تغییر دادن آهنگ صدایم، از مخاطب می خواهم کمکم کند.
					۲۸) وقتی در صحبت کردن دچار مشکل می شوم، با حرکات دست و صورت از مخاطب کمک می

						خواهم
						۲۹) با تغییر آهنگ صدایم، درست بودن گفته ام را از مخاطبم جویا می شوم.
						۳۰) هنگامی که متوجه شوم جمله یا کلمه ای را اشتباه گفته ام، سعی می کنم آن را اصلاح کنم.
						۳۱) وقتی مخاطبم کلمه یا جمله ای را اشتباه بگوید، آن را اصلاح می کنم.
						۳۲) اگر کلمه ای را ندانم، با در آوردن ادای آن منظور خود را می رسانم.
						۳۳) در هنگام گفتگو، سخنان مخاطبم را تایید می کنم.
						۳۴) اگر در هنگام گفتگو معنی کلمه ای را ندانم، از مخاطبم معنی آن کلمه را می پرسم.
						۳۵) وقتی که به زمان بیشتری برای فکر کردن نیاز دارم، کلمه یا جمله قبلی مخاطب را تکرار می کنم.
						۳۶) وقتی می خواهم سخنان یا پیشنهادات مخاطبم را رد کنم، بدون هیچ توضیحی تنها به گفتن کلمه " نه" اکتفا می کنم.
						۳۷) با گفتن جملاتی چون "Is it correct?" یا "Am I right?"، درستی مطلبم را از مخاطب می پرسم.
						۳۸) اگر کلمه ای را (اعم از شیء، مکان، حیوان ...) ندانم، سعی می کنم با توصیف کردن شکل آن منظورم را بیان کنم.
						۳۹) وقتی به مدت زمان بیشتری برای فکر کردن نیاز دارم، از کلماتی مثل "er" "em" یا "خب" استفاده می کنم.
						۴۰) وقتی در گفتن گرامر درست دچار مشکل می شوم، یا گفتن "I don't know" از ادامه ی

						گفتگو صرف نظر می کنم.
						۴۱) اگر کلمه ای را ندانم، با کمک دستانم شکل آن را ترسیم می کنم.
						۴۲) وقتی هنگام صحبت کردن کلمه مورد نظرم را ندانم، سکوت می کنم.
						۴۳) وقتی نتوانم منظور خود را برسانم، جملاتم را تغییر داده و از کلمات ساده تر استفاده می کنم.
						۴۴) مطالبی را که گفته ام، دوباره با گفتن جملات و کلمات دیگر تکرار می کنم.
						۴۵) وقتی قادر به رساندن منظورم نیستم، با استفاده از کلمات مختلف توضیح بیشتری می دهم.
						۴۶) اگر منظور مخاطب را متوجه نشوم، تظاهر می کنم آن را فهمیده ام و به صحبت ادامه می دهم.
						۴۷) در هنگام صحبت کردن، از جملاتی مثل: "It is a kind of" ، "It is like" ، "I do not know it in English" یا "we call them" استفاده می کنم.
						۴۸) سعی می کنم کلمه درست را، از بین کلمات مختلف، حدس بزنم.