Self-Regulated Strategy Instruction for Developing Speaking Proficiency and Reducing Speaking Anxiety of Egyptian University Students

Samah Mohammed Fahim El-Sakka[1]

[1] Faculty of Education, Suez University, Suez, Egypt

Correspondence: Samah Mohammed Fahim El-Sakka, Faculty of Education, Suez University, Suez, Egypt. E-mail: samah.alsakka@suezuniv.edu.eg

Abstract

The aim of this study was to investigate the effect of teaching some self-regulated strategies to Egyptian university students on improving their speaking proficiency and reducing their speaking anxiety. The design of the study was a one group pre-posttest quasi experimental design. Forty 3rd- year EFL university students were selected to form the experimental group of the study. This experimental group was tested using the pre-post speaking test and speaking anxiety scale before and after being exposed to the self-regulated strategy treatment. The experiment lasted for three months during the first term of 2015-2016 academic year. Paired- samples t-test revealed significant differences between the pre-test and posttest of speaking proficiency as well as speaking anxiety in favor of the posttests. Additionally, a negative correlation was shown between speaking proficiency and speaking anxiety. It was concluded that teaching self-regulated strategies to university students was effective in developing their speaking proficiency and reducing their anxiety considerably.

Keywords: EFL university students, self regulated strategies, speaking anxiety, speaking proficiency

1. Introduction

1.1 Background of the Study

In foreign language settings, speaking is considered one of the most important skills among the four language skills. Shabani (2013) as well as Bailey and Savage (1994) agree that speaking has always been the most demanding skill compared to the other skills such as listening, reading and writing. It is an important skill to everyday life. According to Tanveer (2007), a critical challenge of most FL learners in language classes is speaking a foreign language. What makes speaking more challenging than other skills is that speaker needs to have a quick access to all the relevant knowledge required to produce the appropriate language in short time, whereas in other skills the learner may have enough time to match the input with the existing knowledge (Shabani, 2013). Additionally, in the past the development of learners' speaking abilities is often neglected. It was thought that students would learn speaking while learning to write, read and listen. However, this assumption did not seem to produce the desired results of learning to speak a foreign language.

Recently, speaking anxiety is widely recognized as one of the most frequently observed problems in speaking classes (Humphries, 2011; MacIntyre, 1999; MacIntyre & Gardner, 1994; E. Horwitz, M. Horwitz, & Cope, 1986). MacIntyre and Gardner (1994) reveal that students with speaking anxiety have difficulty in expressing their own views and underestimate their abilities. Therefore, EFL students always cite speaking as their "most anxiety-producing experience" (Young 1990, p. 539), and "difficulty in speaking in class" as their most common worry (Horwitz et al., 1986, p. 126). Even university students are found to have problems in FL speaking (Abdullah and Abdul Rahman, 2010). In most universities, the oral part of speaking classes is taught mostly in reading and reciting activities. Therefore, investigating speaking anxiety and trying to reduce it is an important area of research.

In the Egyptian universities, the problem seems more serious. The researcher as a lecturer of TEFL notices that EFL university students in Suez Faculty of Education, after years of studying English either in primary, preparatory or secondary as well as university settings, are neither fluent nor confident English speakers. Surveying a number of studies that investigated speaking skills at the university level in the Egyptian context

(e.g., Salem, 2014; Diyyab, Abdel-Haq, & Aly, 2013; Hussein, 2001; Khater, 1997), the researcher revealed that EFL university students encounter different problems in their speaking skills. To ensure her observations, the researcher conducted a pilot study on thirty 3rd year English majors at Suez Faculty of Education (out of the sample of the study). The results of the pilot study revealed that the majority of students (78%) encountered difficulties in speaking and had a high degree of speaking anxiety.

1.2 Statement of the Problem

The problem of the present study was stated as follows: There was a low level of speaking proficiency among EFL university students at Suez Faculty of Education and they experienced high levels of foreign language anxiety while speaking. In an attempt to find a solution for this problem, the present study would train them to use some self- regulated strategies to develop their speaking proficiency and lower their anxiety.

1.3 Hypotheses of the Study

The present study included three hypotheses as follows:

a)   There would be a statistically significant difference in the mean scores of the experimental group exposed to the self-regulated strategy training, on the pre-post test of speaking proficiency.

b)   There would be a statistically significant difference in the mean scores of the experimental group exposed to the self-regulated strategy training, on the pre-post test of speaking anxiety.

c)   There would be a statistically significant correlation between the mean gain scores of the experimental group on the posttest of speaking proficiency and the posttest of speaking anxiety.

1.4 Significance of the Study

The significance of the present study lies in the following points:

a)   It would add to the growing body of research on the effect of self regulated strategy instruction on developing various language skills.

b)   The findings of this study can be helpful for both EFL teachers and learners in terms of the application of self-regulated strategies in classrooms in order to reduce anxiety in speaking, since foreign language anxiety has negative impact, not only on different aspects of language performance, but also on students' attitudes and perceptions of language learning in general.

c)   The findings of this study will hopefully help language teachers in making the classroom environment less stressful.

d)   Teaching self-regulation to pre-service teachers will enable them to transfer their knowledge of those strategies to their students.

1.5 Definitions

1.5.1 Self- Regulated Strategies

Self regulated strategies were operationally defined as a number of strategies the speakers use to control their speaking and reduce their speaking anxiety. They are specific strategies speakers apply to better perform orally in speaking classes such as: elaboration strategies, rehearsal strategies, planning strategies, monitoring strategies, evaluation strategies, reflection strategies, effort management strategies, help seeking strategies, goal orientation, and self-talk strategies.

1.5.2 Speaking Proficiency

In the present study, speaking proficiency was operationally defined as the progress participants achieved in their speaking fluency and accuracy as manifested by the participants' scores on the pre-post test of speaking proficiency.

1.5.3 Speaking Anxiety

In the present study speaking anxiety is operationally defined as participants' feelings of fear and apprehension of using the language orally as manifested in participants' scores on speaking anxiety scale developed by the researcher. Such feelings recur every time the participants attempt to use the foreign language in speaking.

1.6 Review of Related Literature

There is a consensus that self-regulation is neither a specific personality trait that students either do or do not possess, nor is it a mental ability or particular academic performance skill. Instead, it is a selective use of strategies by which learners transform their mental processes into academic skills adapted to individual learning

tasks (Zimmerman, 2002). This process of self-regulation motivates students to plan, monitor, and assess their learning independently (Zumbrunn, Tadlock, & Roberts, 2011). Therefore, the regulation of learning is considered one of the fundamental pillars of pedagogy, and one whose importance has increasingly been appreciated during the current century (Priego, Munoz, & Ciesielkiewicz, 2015). Also, Costa Ferreira, Veiga Simão and Da Silva (2015) assure that regulation of learning is a fundamental requirement for the successful attainment of skills in academic contexts and moreover, in life-long learning.

Several researchers and practitioners state that students should learn to regulate their own learning for many reasons. For example, self-regulation has a positive influence on the learning outcomes (Pintrich, 2000) as it helps students to apply better learning habits and improve their study skills (Wolters, 2011), use learning strategies to enhance academic outcomes (Harris, Friedlander, Sadler, Frizzelle, & Graham, 2005), monitor their performance (Harris et al., 2005), and evaluate their academic progress (De Bruin, Thiede & Camp, 2011). Consequently, self-regulation turns learners into independent ones.

Considering speaking skill, teaching self-regulation strategies and practicing them in class can create opportunities that help students manage and monitor their speaking (Priego et al., 2015). Mahjoob (2015) argues that students should be trained to use specific strategies to be able to self-regulate their speaking. To the researcher's view, training in self-regulation will increase students' understanding of their own capabilities and make learning to speak more enjoyable and fruitful. Therefore, it can be said that if a learner is a self-regulated one, he may use specific strategies and also a certain number of them, while speaking to control his speech and reduce his anxiety. For example, positive self-talk strategies, making meaning and joy out of the speaking task itself, managing stressors are sometimes used by learners to control negative affect and anxiety while speaking (e.g., "don't worry about criticism," "don't think about peers' reaction," "move on to defend your view", "you are doing well").

1.6.1 Theoretical Foundations of Self-Regulated Learning

Bandura's *social cognitive theory* presents the bases for self-regulated learning (Bembenutty, White, & Velez, 2015). This theory puts a model in which personal, environmental and behavioral factors play a central role in the understanding of human behavior. Accordingly, students are viewed not merely as reactive organisms acting on instinct and impulse, but as self-organizing, self-reflecting beings affected by the social conditions and cognitive processes they experience. Thus, this theory formed the basis for Zimmerman's enduring definition of self regulated learning (Salter, 2012).

The social cognitive theory is founded upon four core properties of human agency: Intentionality, forethought, self-reactiveness, and self-reflectiveness. Consistent with Bandura's four core properties of human agency, self-regulated learners are those who independently activate cognition, affect, and behavior in order to pursue goals and reflect on outcomes (Bembenutty et al., 2015). In addition, they exercise control over their learning experiences with their competencies, self-beliefs, and outcome expectancies. Zimmerman (2000) depended on those four properties in deciding the three phases of the cyclical model of self-regulation that will be explained afterwards. Consequently, Zimmerman (2000) has successfully applied the concept of self-regulation to academic contexts.

1.6.2 Phases of Self Regulation

Pintrich and Zusho (2002) as well as Zimmerman (2000) introduce three main phases of self-regulated learning cyclical model. Each phase includes sub-processes or strategies that the learners use during learning. The three phases of self-regulation are:

a) The *forethought phase (Planning phase):* In this phase learners are proactive agents. They set goals, identify strategies to pursue those goals, and assess their self-efficacy beliefs and intrinsic interest on those tasks as well as their goal orientation.

b) The *performance monitoring phase*: students use strategies to move forward on the learning task and monitor the effectiveness of using those strategies as well as their motivation towards continuing progress that leads to achieving the aims of the task. For example, learners engage in self-monitoring strategies and self-control of those goals, strategies, and motivation while seeking help from knowledgeable individuals and delay gratification when it is necessary for the sake of completing goals.

c) The *reflection on performance phase*: Learners engage in self-evaluation of tasks completed, examine their level of self-satisfaction and adapt to their circumstances by determining whether tasks need to be repeated or whether the learner will move on to a new task if the previous one is considered at a satisfactory level. These self-reflections then influence students future planning and goals, initiating the cycle to begin again.

1.6.3 Self-Regulated Strategies

To promote self-regulated learning (SRL) in classrooms, teachers must teach students the self-regulated strategies that facilitate the learning process. Depending on a combination of commonly used taxonomies and classifications, Many researchers and theoreticians (e.g., Dignath, Büttner, & Langfeldt 2008; Mayer, 2008; Pressley, 2002; Boekaerts, 1997; Weinstein & Mayer, 1986) have introduced four main categories of self-regulated strategies:

a) *Cognitive strategies:* they are categorized into repetition strategies, elaboration strategies, organizational strategies, and problem-solving strategies. Firstly, rehearsal or repetition strategies help the learners to store information in the memory by repeating the material. Elaboration strategies help create connection between new material and what is already known. As for organizational strategies, they help the learner to consolidate information in order to be processed and stored more efficiently. Finally, problem solving strategies help the learner to break a problem into smaller bits for easier solution to visualize the material to facilitate learning.

b) *Metacognitive strategies:* They help the learners control, monitor, and regulate cognitive activities (Papaleontiou-Louca, 2003). Metacognitive strategies include: Planning a learning task, monitoring comprehension, and evaluating the progress towards the completion of a learning task. That kind of strategies are used in the three phases of self-regulated learning previously described by Zimmerman (2002).

c) *Management strategies:* focus on the environment surrounding the learning process and how to create the optimal learning conditions. Those strategies may focus on the learner him/herself (e.g., effort management strategies that help learners persist in case of difficulties), on others (e.g., help-seeking strategies), or on the physical environment (e.g., using dictionaries and/or going t*o* the library).

d) *Motivational strategies:* That kind of strategies aims to enhance specific types of impetus. Examples of such strategies are the formulation of a learning objective, valuing the task, and the development of a positive feeling. As for the formulation of a learning objective, it enhances the goal orientation: the reason why one undertakes a task, which is either performance or mastery-orientation (Harackiewicz, Barron, Pintrich, Elliot & Thrash, 2002). Valuing the task enhances the task value beliefs: the degree to which the task is considered as relevant, important and worthwhile (Wigfield & Eccles, 2002). The development of a positive attitude towards task enhances the student's self-efficacy: That is the student's belief in his or her ability to successfully complete the task (Pintrich, 2003).

1.6.3 Self-Regulated Strategies and the Process of Speaking

From a psycholinguistic point of view, the process of speaking is analyzed through an information processing model of speech production, which was developed by Levelt (1989). According to that model speaking is seen as a productive and interactive skill in which the speaker is actively involved in communication (Carter & Nunan, 2002). Based on Level's model of speech production, Carter and Nunan (2002) introduce four main stages for speaking: Conceptualization, formulation, articulation, and self-monitoring. Conceptualization refers to a sort of pre-speaking stage in which the speaker plans what to say. This involves connecting background knowledge to the topic and the conditions in which the speech is made. This step is closely related to forethought phase of self-regulation where learners use planning, elaboration, and repetition strategies. In the formulation step of speaking, appropriate linguistic forms (words and phrases) are found and they are matched with the correct grammatical markers (affixes, articles, auxiliaries). In the stage of articulation, the speaker articulates every word by means of articulatory organs. Those two steps are closely connected to the second phase of self-regulation namely: Performance phase where learners engage in self-monitoring and self control strategies. In the last stage, the speaker checks the speech and correct mistakes by self-evaluation which is similar to the self-reflection phase of self-regulated learning. Consequently, there is a close relationship between the phases of self-regulated strategies and the stages of the speaking process.

Hence, the process of speaking should be completed in a very short time, the previously mentioned stages require automaticity on the part of the speaker and each stage must be accomplished in a limited time (Carter & Nunan, 2002). Therefore, using self-regulated strategies may help along the different stages of speech production and consequently improve the speaking proficiency.

Aregu (2013) found that self-regulated learning has had a significant effect on students' speaking performance. The results of the study show that students in the experimental group achieved significant improvement in their speaking efficacy. And such improvement seems to have resulted from the self-regulated learning intervention. Consequently, it seems that the knowledge and use of self-regulated learning strategies helped the experimental group students succeed in spoken communication and develop their speaking. On the contrary, students in the

control group made no significant change in speaking. On the contratry, Mahjoob (2015) found a weak relationship between self-regulation and Iranian EFL speaking proficiency. Sixty advanced female and male students studying in the adult section of the ILI, Shiraz, Iran participated in the study. Regarding the result of t-test for speaking, high achievers are found as self-regulated as the low achievers in speaking a foreign language. There are just minor differences between the students from the two groups in the order they used the self-regulation strategies. So, it can be said that there existed a relationship, although weak, between students' self-regulation and their speaking proficiency.

1.6.4 Self-Regulated Strategies and Speaking Anxiety

Reviewing the literature concerning self-regulated strategies and foreign language speaking anxiety, it is noticed that there exists a certain relationship in common between those two variables. Marwan (2007) revealed that there are four main strategies (i.e. preparation, relaxation, positive thinking, and peer seeking) learners use in order to reduce foreign language anxiety. In 2009, Noormohamadi found that learners with high levels of foreign language anxiety mostly use metacognitive and memory strategies while learners with low levels of anxiety mostly employ metacognitive and social strategies. Moreover, Liu (2013) pointed out that metacognitive strategies are among the most frequently used strategies by the learners with low level of anxiety. Furthermore, Liu and Chen (2014) found that social strategies relate strongly with language anxiety, while cognitive and metacognitive strategies follow. Additionally, Martirossian and Hartoonian (2015) investigated the relationship between foreign language classroom anxiety (FLCA) and self-regulated strategies. The findings revealed that there is a negative relationship between these two variables. Building on the above literature review and empirical studies the researcher assumes that teaching self-regulated strategies to EFL university students may reduce their speaking anxiety.

1.6.5 Speaking Proficiency and Speaking Anxiety

Speaking anxiety is one of the most frequently observed problems in relation to the affective domains in language learning process. This obstacle is mostly seen in speaking classes (Humphries, 2011; MacIntyre, 1999), where students need to process linguistic inputs and produce their thoughts at the same time (Harmer, 2004). It is such a complex issue that researchers have been unable to agree on a concise definition (Zhanibek, 2001).

Britannica defined speaking anxiety as an abnormal and overwhelming sense of apprehension and fear often marked by physiological signs (as sweating, tension, and increased pulse), by doubt concerning the reality and nature of the threat, and by self-doubt about one's capacity to cope with it. Pertaub, Slater, and Carter (2001) postulate that anxiety usually comes out when the speakers have a fear of being judged or humiliated by the other people. Although people are aware that this nervousness is irrational, they cannot help feeling the anxiety, which can result in depression, distress, and frustration (Pertaub et al., 2001). Horwitz et al. (1986) put forward that such an anxiety easily emerges in foreign language speaking process and might multiply when communicating with a native speaker of that language.

Speaking anxiety can simply be defined by Wilson (2006) as the feeling of fear occurring when using the language orally. In the same vein of thought, Balemir (2009) states that foreign language anxiety as a feeling of inhibition in using the foreign language. The definitions of anxiety that have been proposed by several scholars have some common characteristics: the state of apprehension, fear, tension and feelings of uneasiness (Brown, 1994). Hence, speaking anxiety is associated with negative feelings such as uneasiness, frustration, self doubt, apprehension and worry. Speaking anxiety, in the present study, is a situation specific anxiety. It is that kind of anxiety that occurs every time the learner attempts to use the language.

Since the ultimate aim of the speaker is to convey meaning successfully, it can be said that the demanding nature of speaking can be a source of anxiety. Several research studies have found a mutual relationship between speaking proficiency and speaking anxiety. In other words, each variable affects the other positively or negatively. In his study, Price (1991) found that speaking is a very anxiety provoking activity for the foreign language learners because they were ancious about making mistakes in their pronunciation and thus being laughed at. Koch and Terrell (1991) reached similar findings about students' speaking anxiety.

Dalkılıç (2001) examined the correlational relationship between students' foreign language anxiety levels and their achievement in speaking courses. The sample included 126 Turkish freshman EFL learners and used both qualitative and quantitative data. The results of the study revealed that there was a significant relationship between students' anxiety levels and their achievement in speaking classes. Additionally, Ay (2010) found that students showed anxiety in an advanced level in productive skills.

Moreover, Balemir (2009) investigated the relationship between proficiency level and degree of foreign language

speaking anxiety in a Turkish EFL context. The study revealed that Turkish EFL university students experience a moderate level of speaking anxiety in speaking classes. Furthermore, Saltan (2003) investigated EFL speaking anxiety from students' and teachers' perspectives. The results of her study indicated that although students experience a certain degree of EFL speaking anxiety, its intensity is not that high.

In view of above, it can be said that there exists a relationship between speaking anxiety and speaking proficiency. But the kind of this relationship (negative or positive) is not settled. Thus the present study aimed to find the correlation between speaking proficiency and speaking anxiety.

2. Method

2.1 Design

The present study is a one group pre-posttest quasi-experimental study. The researcher used one experimental group. The experiment lasted for 3 months during the first term of 2015-2016 academic year.

2.2 Participants

The participants of this study were forty 3rd year English majors from faculty of education, Suez University, Egypt. Those students were assigned to only one experimental group. All participants spent at least 14 years learning EFL.

2.3 Instruments

IELTS Speaking Test as a standard test of speaking was used in order to test the participants' speaking proficiency. The test was scored using IELTS speaking coding system. Accordingly, there are five grading criteria: a) fluency that assesses speech continuity, that is if learners are able to speak at normal rates, without having to stop or hesitate to find words or grammar, b) coherence which is the learners' ability to link sentences together in a logical sequence using appropriate cohesive devices, c) pronunciation that assesses learner's ability to produce understandable speech, d) lexicon which refers to the range and precision of the vocabulary learner use, e) accuracy refers to the accurate and appropriate use of grammatical structures. To reduce subjectivity in marking, two raters who are experienced in teaching speaking marked the oral responses of the test. The markers were, of course, oriented in advance to help them effectively apply the IELTS Speaking band descriptors (public version). Each grading criterion is assessed on a 9-point scale (9, 8, 7, etc with appropriate descriptions). Correlational analysis was run to find the relationship between the scores of the first rater and those of the second rater. The obtained value of the correlational analysis (0.83) indicated that there existed a significant correlation between the two raters' scores. The inter rater reliability was 0.89 indicating a high level of reliability.

After a detailed review of literature, a speaking anxiety scale was adapted, by the researcher, from various instruments used to assess foreign language anxiety scale, student motivation, cognitive strategy use, and metacognition (e.g., Eccles, 1983; Harter, 1981; E. Horwitz, M. Horwitz, & Cope, 1986; Weinstein, Schulte, & Palmer, 1987). Factor analysis was used to guide scale construction. Twenty items were chosen because they were directly related to speaking anxiety. The Cronbach's Alpha for these items was found as .89 suggesting internal reliability for the adapted scale.

Since the questionnaire is a 5-graded Likert scale (*strongly agree, agree, neutral, disagree, strongly disagree*), the total score ranged from 20 to 100. First, total scores for each student's speaking anxiety were calculated. A total score more than 75 showed a high level of speaking anxiety; from 50 to 75 presented a moderate level of speaking anxiety, and participants whose score was less than 30 presented a low level of speaking anxiety.

2.4 Materials of the Study

The topics of "ELT Methodology Course" were used as the main material of the speaking class. This course is taught to the participants by the researcher in the form of speaking classes handling the topics of the course.

2.5 Experimental Manipulations

2.5.1 Pretesting

Before being exposed to self-regulated strategy intervention, all participants were pre-tested on speaking proficiency as well as speaking anxiety using the speaking pre-test and the speaking anxiety scale, respectively.

2.5.2 Intervention

After pre-testing the participants in speaking as well as speaking anxiety, they were exposed to self-regulated strategy intervention. Each lesson in the intervention is divided into three main stages: Preparation, Performance, reflection. Each stage is divided into two sub-stages as follows:

1) *Preparation Stage* (*Pre-speaking stage*)

This stage is divided into two sub-stages:

A. *The explanation stage*: During this stage, the instructor explicitly teaches and models some self-regulated strategies that help learners prepare the topic for speaking (e.g., preparation strategies, rehearsal strategies, elaboration strategies, repetition strategies, help-seeking strategies, organizational strategies).

B. *The application stage*:

The teacher assigns the speaking topic to let the students apply the self-regulated strategies they have just taught. They set goals for their topic, generate ideas, organize the ideas, elaborate the ideas, use dictionaries, ask the peers, ask the teacher….etc.

2) *Production stage* (Performance stage, Speaking stage).

This stage is divided into two sub-stages:

A. *The explanation stage*: Here, the researcher explains some self-regulated strategies that help students organize and monitor their performance while speaking. Those strategies are such as self-monitoring, self-control, problem-solving and management strategies. She models to them how to control their speech and monitor it while speaking. She also models how to overcome problems affecting them during speaking.

B. *The application stage*: She divides the class into small groups of five to speak freely and held discussions about the topic exploiting the strategies they have just learned. During this stage the instructor goes round the groups to guide them and provide help if needed.

3) *Reflection stage* (Post speaking stage). It is also divided into two sub-stages:

A. *Explanation stage*: During this stage the teacher models to students the self-regulated strategies that help them self-evaluate and reflect on their speaking experience. Also, the instructor explains the strategies that help learners develop their positive attitudes towards speaking and reduce their speaking anxiety.

B. *Application stage*: In small groups the students start reflect on each other speaking as well as their own speaking using reflective journals and evaluation checklists made by the researcher. The researcher goes round the class and provides help if needed.

2.5.3 Posttesting

Having taught all the instructional sessions, speaking proficiency and speaking anxiety posttests were administered to the participants.

3. Results and Discussion

The paired samples t-test was used to investigate the first hypothesis of the study which stated that "There would be a statistically significant difference in the mean scores of the experimental group exposed to the self-regulated strategy intervention, on the pre/post test of speaking proficiency." The result of the paired samples t-test is shown in the following table:

Table 1. Paired samples t-test for the differences in the mean scores of the experimental group on the pre-post test of speaking proficiency

Pretest -posttest	Paired Differences		t	df	probability
	Mean	Standard deviation			
	9.002	1.316	29.668	39	Significant

As shown in Table 1, the difference between the mean scores of the pre-post test of speaking was significant (t=29.668, p≤0.05). Additionally, using Cohen's (1988) formula, effect size for this difference was 1.920. This effect size is large according to Feldt (as cited in Hinkle, Wiersma, & Jurs, 1994, p. 316). Therefore, it was concluded that the self-regulated strategy instruction significantly improved the speaking proficiency of participants. In light of this statistical result, the first hypothesis was accepted.

One of the possible explanations for the observed result is that the teaching of the self-regulated strategies raised the conscious awareness of the strategies taught and that awareness might have led to proficiency in using them during the speaking process. In turn, that proficiency in using strategies while speaking might have improved the

proficiency of speaking performance. As stated by different scholars (e.g. Zimmerman & Martinez-Pons, 2004), self-regulated learning strategies play a great role in improving one's performance. A second possible explanation is that self-regulated strategy instruction might have raised participants' motivation and interest in speaking. Teaching students how to self-monitor and self-evaluate their speaking performance might have been a third possible explanation for that result. Self-monitoring and self-assessment might have helped participants to identify the weaknesses in their speaking. Identifying their weaknesses was an important step towards the improvement of their speaking proficiency. This finding found empirical support in the study of Aregu (2013).

Paired-samples t-test was used to investigate the second hypothesis of the study which stated that "There would be a statistically significant difference in the mean scores of the experimental group exposed to the self-regulated strategy instruction, on the pre-post test of speaking anxiety." The findings of the paired-samples t-test was presented in the following table:

Table 2. Paired samples T-test for the differences in the mean scores of the experimental group between the pre/ post test of speaking anxiety

	Mean	Standard deviation	t	df	Probability
Pretest -posttest	8.522	1.316	15.28	39	Significant

As shown in Table 2, the paired samples t-test revealed that a statistically significant difference existed in the mean scores of the experimental group between the pre- posttest of speaking anxiety (t=15.28, p<0.05). Therefore, it was concluded that the self-regulated strategy instruction significantly affected the speaking anxiety of the participants. In other words, there is a negative relationship between strategy use and speaking anxiety, the frequent use of self-regulated strategies is related to less amount of speaking anxiety. Accordingly, the second hypothesis was accepted. A possible explanation of this finding may be attributed to using self regulated strategies. As students become able to self-regulate their speaking performance, this creates safe and supporting learning environments for students. Because self-regulated learning involves various strategies that learners use in order to manage their tasks, emotions and the like, it contributes directly or indirectly to the reduction of their speaking anxiety. For example, positive self-talk, managing stressors, making meaning and joy out of the speaking task itself, controlling negative emotions and so forth are viewed as very important elements of self-regulated strategies that reduce learner's anxiety. The findings corroborate previous studies that found there is a negative relationship between levels of language anxiety and strategy use (Shabani, 2015; Ghorban Mohammadi, Biria, Koosha, & Shahsavari, 2013; Noormohamadi, 2009; Woodrow, 2006).

There would be a statistically significant correlation between the mean scores of the posttest of speaking proficiency and those of speaking anxiety was the third hypothesis of the study. To test this hypothesis, the Pearson Correlation Coefficient was used. It was used to measure whether any improvement in speaking leads to a reduction in speaking anxiety or not. In other words, the two variables (speaking proficiency and speaking anxiety) were correlated using Pearson's Coefficient of Correlation. The result of the correlation was shown in the following table.

Table 3. Pearson correlation coefficient between the mean scores of speaking proficiency posttest and those of speaking anxiety

Post	M	SD	Pearson(r)	Significant
Speaking proficiency	17.771	2.617		
Speaking anxiety	14.171	2.001	- 0.704	0.007

The correlation coefficient for the speaking proficiency posttest and speaking anxiety posttest was - 0.704. This coefficient is significant at the 0.01 level. Thus, it was concluded that there is a significant correlation between improvements in speaking proficiency and reduction of speaking anxiety. In other words improvement in speaking proficiency led to reduction in speaking anxiety. This finding has empirical support in the study of Awan, Azher, Anwar, and Naz (2010) whose study show that language anxiety and achievement are negatively related to each other.

4. Conclusion

Within the delimitations of the study as well as the statistical findings, the researcher could conclude that:

a)   The self-regulated strategy instruction was effective on developing the speaking proficiency of EFL university students.

b)   The self-regulated strategy instruction was effective on reducing the speaking anxiety of EFL university students.

c)   Improvement of speaking proficiency led to reduction of speaking anxiety.

5. Recommendations and Suggestions for Further Research

In light of the findings of the study, the following recommendations have been formulated: a) Self-regulated strategies must be explicitly taught and intensively practiced by the students in speaking classes, b) Teachers should liberate themselves from the traditional ways of teaching and effectively apply the self- regulated strategy instruction in teaching speaking, c) University staff should be familiarized with new methods in reducing speaking anxiety. Moreover, the need for further studies in the following areas becomes apparent: a) The impact of using self regulated strategy instruction on the communication skills, b) Research is needed on the effect of self-regulation of learning on students' achievement, c) It seems worth doing further studies on the effects of self-regulated learning intervention on students' performances, attributions, apprehension, and the like in wider contexts, d) students' attitudes towards using self-regulated strategies in language classes.

References

Abdullah, K. I., & Abdul Rahman, N. L. (2010). A Study on second language speaking anxiety among UTM students. Retrieved: Jan 15th, 2016 from http://eprints.utm.my/10275/

Aregu, B. (2013). Enhancing self-regulated learning in teaching spoken communication: does it affect speaking efficacy and performance? *Electronic Journal of Foreign Language Teaching, 10*(1), 96-109.

Awan, R., Azher, M., Anwar, M., & Naz, A. (2010). An investigation of foreign language classroom anxiety and its relationship with students' achievement. *Journal of College Teaching & Learning, 7*(11), 33-40. http://dx.doi.org/10.19030/tlc.v7i11.249

Ay, S. (2010). Young adolescent students' foreign language anxiety in relation to language skills at different levels. *The Journal of International Social Research, 3*(11), 83-92.

Bailey, K., & Savage, L. (1994). *New ways in teaching speaking*. Alexandria, VA: Teachers of English to Speakers of Other Languages.

Balemir, S. H. (2009). *The sources of foreign language speaking anxiety and the relationship between proficiency level and the degree of foreign language speaking anxiety* (Unpublished master thesis). Bilkent University, Turkey.

Bembenutty, H., White, M., & Velez, M. (2015). *Developing self-regulation of learning and teaching skills among teacher candidates*. New York: Springer Dordrecht Heidelberg. http://dx.doi.org/10.1007/978-94-017-9950-8

Boekaerts, M. (1997). Self-regulated learning: A new concept embraced by researchers, policy makers, educators, teachers, and students. *Learning and Instruction, 7*(2), 161-186. http://dx.doi.org/10.1016/S0959-4752(96)00015-1

Brown, H. D. (1994). *Principles of language learning and teaching*. New Jersey: Prentice Hall Regents.

Carter, R., & Nunan, D. (2002). *The Cambridge guide to teaching English to speakers of other languages*. Cambridge: Cambridge University Press.

Costa Ferreira, P., Veiga Simão, A., & Lopes da Silva, A. (2015). Does training in how to regulate one's learning affect how students report self-regulated learning in diary tasks? *Metacognition Learning, 10*, 199-230.

Dalkılıç, N. (2001). *An investigation into the role of anxiety in second language learning* (Unpublished doctoral dissertation). Çukurova University, Turkey.

De Bruin, A., Thiede, K., & Camp, G. (2011). Generating keywords improves metacomprehension and self-regulation in elementary and middle school children. *Journal of Experimental Child Psychology, 109*(3), 294-310. http://dx.doi.org/10.1016/j.jecp.2011.02.005

Dignath, C., Büttner, G., & Langfeldt, H. (2008). How can primary school students learn self-regulatedlearning

strategies most effectively? A meta-analysis on self-regulatio ntrainingprogrammes. *Educational Research Review, 3*, 101-129. http://dx.doi.org/10.1016/j.edurev.2008.02.003

Diyyab, E.A., Abdel-Haq, E.M., & Aly, M.A. (2013). Using multimedia-based programs for developing student teachers' EFL speaking fluency skills. Retrieved December 27, 2015, from http://files.eric.ed.gov/fulltext/ED539987.pdf

Eccles, J. (1983). Expectancies, values, and academic behaviors. In J. T. Spence (Ed.), *Achievement and achievement motives: Psychological and sociological approaches* (pp. 75-146). San Francisco, CA: W. H. Freeman.

Ghorban Mohammadi, E., Biria, R., Koosha, M., & Shahsavari, A. (2013). The relationship between foreign language anxiety and language learning strategies among university students. *Theory and Practice in Language Studies, 3*(4), 637-646. http://dx.doi.org/10.4304/tpls.3.4.637-646

Harackiewicz, J. M., Barron, K. E., Pintrich, P. R., Elliot, A. J., & Thrash,T. M. (2002). Revision of achievement goal theory: Necessary and illuminating. *Journal of Educational Psychology, 94*, 638-645. http://dx.doi.org/10.1037/0022-0663.94.3.638

Harmer, J. (2004). *How to teach writing*. Harlow: Pearson Education.

Harris, K., Friedlander, B., Saddler, B., Frizzelle, R. & Graham, S. (2005). Self-monitoring of attention versus self-monitoring of academic performance: Effects among students with ADHD in the general education classroom. *Journal of Special Education, 39*(3), 145-156. http://dx.doi.org/10.1177/00224669050390030201

Harter S. 1981. A new self-report scale of intrinsic versus extrinsic orientation in the classroom: motivational and informational components. *Developmental Psychology, 17*, 300-312.

Hinkle, D., Wiersma, W., & Jurs, S. (1994). *Applied statistics for the behavioral sciences* (3rd Ed.). Boston: Houghton Mifflin.

Horwitz, E., Horwitz, M., & Cope, J. (1986). Foreign Language Classroom Anxiety. *The Modern Language Journal*, *70*(2), 125-132. http://dx.doi.org/10.1111/j.1540-4781.1986.tb05256.x

Humphries, R. (2011). Language anxiety in international students. *Griffith Working Papers in Pragmatics and Intercultural Communication, 4* (½), 65-77.

Hussein, H.A. (2001). *The effectiveness of some learning strategies on developing the speaking skills of student teachers of English* (Unpublished master thesis). Ain Shams University, Egypt.

Khater, A. E. (1997). *The effect of using student-made dialogues to develop the speaking skill of students at the English department* (Unpublished master thesis). Ain Shams University, Egypt.

Koch, A. S., & Terrell, T. D. (1991). Affective reactions of foreign language students to natural approach activities and teaching techniques. In E. K. Horwitz, & D. J. Young (Eds.), *Language anxiety: From theory and research to classroom implications* (pp. 109-126). Englewood Cliffs, NJ: Prentice Hall

Levelt, W. J. M. (1989). *Speaking: From intention to articulation*. Cambridge, MA: MIT Press.

Liu, H. J. (2013). Effects of foreign language anxiety and perceived competence on learning strategy use. *International Journal of English Linguistics, 3*(3), 76-87. http://dx.doi.org/10.5539/ijel.v3n3p76

Liu, H. J., & Chen, T. H. (2014). Learner differences among children learning a foreign language: Language anxiety, strategy use, and multiple intelligences. *English Language Teaching, 7*(6), 1-13. http://dx.doi.org/10.5539/elt.v7n6p1

MacIntyre, P. D. (1999). Language anxiety: a review of the research for language teachers. In D. J. Young (Ed.), *Affect in foreign language and second language learning: a practical guide to creating a low-anxiety classroom atmosphere* (pp. 24-45). Boston: McGraw-Hill.

MacIntyre, P. D., & Gardner, R. C. (1994). The subtle effects of language anxiety on cognitive processing in the second language. *Language Learning, 44*, 283-305. http://dx.doi.org/10.1111/j.1467-1770.1994.tb01103.x

Mahjoob, E. (2015). Self-regulation and speaking proficiency in Iranian EFL learners. *Journal of Language, Linguistics and Literature, 1*(6), 182-188.

Marwan, A. (2007). Investigating students' foreign language anxiety. *Malaysian Journal of ELT Research, 3*, 37-55.

Martirossian, A., & Hartoonian, A. (2015). Lowering foreign language anxiety through self-regulated learning strategy use . *English Language Teaching, 8* (12), 209-222. http://dx.doi.org/10.5539/elt.v8n12p209

Mayer, R.E. (2008). *Learning and instruction* (2nd Ed.). Upper Saddle River, NJ: Pearson Merrill Prentice Hall.

Noormohamadi, R. (2009). On the relationship between language learning strategies and foreign language anxiety. *Pan-Pacific Association of Applied Linguistics, 13*(1), 39-52.

Papaleontiou-Louca, E. (2003). The concept and instruction of metacognition. *Teacher Development, 7*(1), 9-30. http://dx.doi.org/10.1080/13664530300200184

Pertaub, D., Slater, M., & Barker, C. (2001). An experiment on fear of public speaking in virtual reality. In D. Stredney, J. Westwood, G. Mogel, & H. Hoffman (Eds.), *Medicine meets virtual reality* (pp. 372-378). IOS Press, Amsterdam.

Pintrich, P. R. (2000). The role of goal orientation in self-regulated learning. In M. Boekaerts, P. R. Pintrich, & M. Zeidner (Eds.), *Handbook of self-regulation* (pp. 451-502). San Diego, CA: Academic. http://dx.doi.org/10.1016/b978-012109890-2/50043-3

Pintrich, P. R. (2003). A motivational science perspective on the role of student motivation in learning and teaching contexts. *Journal of Educational Psychology, 95*, 667-686. http://dx.doi.org/10.1037/0022-0663.95.4.667

Pintrich, P., & Zusho, A. (2002). The development of academic self-regulation: the role of cognitive and motivational factors. In A. Wigfield, & J. S. Eccles (Eds.), *Development of achievement motivation* (pp. 249-284). San Diego: Academic Press.

Pressley, M. (2002). Comprehension strategies instruction: A turn-of the century status report. In C.C. Block & M. Pressley (Eds.), *Comprehension instruction: Research-based best practices* (pp. 11-27). New York: Guilford.

Price, M. L. (1991). The Subjective experience of foreign language anxiety: Interviews with highly anxious students. In E. K. Horwitz, & D. Young (Eds.), *Language anxiety: From theory and research classroom implications* (pp. 101-108*).* Englewood Cliffs, Nl: Prentice Hall.

Priego, C. M., Munoz, G. N., & Ciesielkiewicz, M. (2015). Blogs as a tool for the development of self-regulated learning skills: a project. *American Journal of Educational Research, 3*(1), 38-42. http://dx.doi.org/10.12691/education-3-1-8

Salem, R. M. (2014). *A web based program for developing EFL students' listening comprehension and critical speaking skills* (Unpublished doctorate dissertation), Suez University, Egypt.

Saltan, F. (2003). *EFL speaking anxiety: How do students and teachers perceive it?* (Unpublished master's thesis). Middle East Technical University, Turkey.

Salter, (2012). Developing self-regulated learning in secondary schools. *Joint AARE APERA International Conference, Sydney 2012.*

Shabani, M.B. (2013). The effect of background knowledge on speaking ability of Iranian EFL learners. *International SAMNM Journal of Marketing and Management, 1*, 25-27.

Shabani, M. B. (2015). On the relationship between foreign language anxiety and language learning strategies among Iranian EFL learners. *International Journal of Educational Investigations, 2*(2), 9-23.

Tanveer, M. (2007). *Investigation of the factors that cause language anxiety for ESL/EFL learners in learning speaking skills and the influence it casts on communication in the target language (* Unpublished master thesis). university of Glasgow.

Weinstein, C. E., & Mayer, R. E. (1986). The teaching of learning strategies. In M. Wittrock (Ed.) *The handbook of research on teaching* (pp. 315-327). NewYork: Macmillan.

Weinstein, C. E., Schulte, A., & Palmer, D. R. (1987). *The learning and study strategies inventory.* Clearwater, FL: H & H Publishing.

Wilson, S. T. (2006). *Anxiety in learning English as a foreign language: Its associations with student variables, with oral proficiency, and with performance on an oral test* (Unpublished doctoral dissertation). Universidad de Granada.

Wolters, C.A. (2011). Regulation of motivation: Contextual and social aspects. *Teachers College Record, 113*(2), 265-283.

Woodrow, L. (2006). Anxiety and speaking english as a second language. *RELC, 37*(3), 308-328. http://dx.doi.org/10.1177/0033688206071315

Young, D. J. (1990). An investigation of students' perspectives on anxiety and speaking. *Foreign Language Annals, 23*, 539-53. http://dx.doi.org/10.1111/j.1944-9720.1990.tb00424.x

Zimmmerman, B. J. (2000). Attaining self-regulation: a social cognitive perspective. In M. Boekaerts, M. Zeidner, & P. R. Pintrich (Eds.), *Handbook of self regulation* (pp. 13-39). San Diego, CA: Academic Press. http://dx.doi.org/10.1016/B978-012109890-2/50031-7

Zimmmerman, B. J. (2002). Becoming a self-regulated learner: An overview. *Theory Into Practice, 41*(2), 64-70. http://dx.doi.org/10.1207/s15430421tip4102_2

Zhanibek, A. (2001). *The relationship between language anxiety and students participation in foreign language classes* (Unpublished master thesis). Bilkent University, Ankara, Turkey.

Zumbrunn, S., Tadlock, J., & Roberts, E. D. (2011). Encouraging self-regulated learning in the classroom: A review of the literature. *Metropolitan Educational Research Consortium (MERC)*, Virginia Commonwealth University.

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