The Effect of Kagan's Cooperative Structures on Speaking Skill of Iranian EFL Learners

Hassan Soleimani
Ayda Ghajar Khosravi
(Corresponding Author)
Payame Noor University
Iran

ABSTRACT

Speaking is an important skill in language learning and EFL learners sometimes face difficulties when they want to speak. This study attempted to measure the effect of Kagan's cooperative structures on speaking skill of Iranian EFL learners. The participants were selected from EFL learners studying at Ideal Language Institute. The Cambridge English Language Assessment was administered in order to select homogenous participants. Forty eight adult female EFL learners were selected as intermediate learners based on their results of the language proficiency test. They were divided into two groups, 24 as the control group and 24 as the experimental group. A pre-test was administered to both groups at the beginning of the experiment then, the students participated in 90 minute classes two times a week for eight sessions. At the end of the experiment, a post-test was assigned to both groups to determine whether the Kagan's cooperative structures had positively affected the students' speaking skills. The normality of data was tested through Skewness, Kurtosis, and K-S. To make sure the participants were homogenous, the parametric statistical technique of independent -samples t-test was calculated between the pre-tests of both groups and they were homogenous. Independent-samples t-test between the post-tests of the experimental group and the control group was calculated and it showed that the participants of the experimental group outperformed the subjects of the control group. Moreover, paired-samples t-test between the pre-test and post-test of the experimental group was calculated and it was shown that the experimental participants progressed from the pre-test to the post-test. The study revealed that: (1) Kagan's cooperative structures had a positive effect on the students' speaking skills, (2) the experimental group obtained higher scores in the post-test than in the pre-test, making the difference between the pre-test and post-test scores statistically significant. Based upon the conclusion drawn from the study, Kagan's cooperative structures were recommended to English classes.

Keywords: *Kagan's Cooperative Structures, Speaking Skill, Cooperative Activities, EFL Learners*

1. Introduction

English speaking ability is one of the most important skills to be developed and enhanced in language learners, particularly in an academic setting (Morozova, 2013).It is one of the four macro skills necessary for effective communication in any language, particularly when speakers are not using their mother tongue. This skill is the verbal use of language and a medium through which human beings communicate with other (Fulcher, 2003). According to Harmer (2008) language learners use all language they know when they speak. In addition, speaking is an important skill in language learning that enable language learners to communicate not only in expressing view point but also in giving responses (Richard, 2008). Based on Luoma (2004), this skill is defined as a strategic process involving speakers in using language for the purpose of achieving a certain goal in particular speaking task.

It has been more than four decades that participating in English conversation classes and motivation theories in learning a foreign language have been considered as an important issue in language learning. It is believed that English oral communication is necessary in the professional world (Pattanapichet & Chinaokul, 2011). Traditional teaching foreign language theory puts emphasis on teachers' explanation of vocabulary, grammar and other points which are in text. Learners were unable to grasp new language quickly. Kayi (2006) indicates that "for many years, teaching speaking has been …valued and English language

teachers have been continuing to teach speaking just as a repetition of drills or memorization of dialogues" (p.1). Traditional teaching methods used in the classes makes learners feel bored (Lio, 2010).

There are four major problems in English teaching classes in Iran and they include: (Bagheri, Dabaghmanesh& Zamanian, 2013).

1. Teacher-centered classes
2. Competition rather than cooperation
3. Unfamiliarity of teachers with cooperative learning mechanism
4. Students minimum knowledge of English proficiency

So after some years of studying English, students can be able to tell the greeting and talk about the weather though they know a lot of words and rules of English language. A promising method to traditional speaking instruction is cooperative learning. It serves as an alternative way of teaching for promoting speaking and social interaction among students (Gomleksiz, 2007; Ning, 2011).

Cooperative learning is of great effect on developing students 'speaking skills (Liao, 2009; Pattanpichet, 2011). A review of the related literature has revealed that most previous studies involved investigating the application of cooperative learning in general and its general effect on student's ability rather than investigating the effects of specific structures on student's ability to produce and to understand communicatively meaningful messages (Alharbi, 2008; Bock, 2000; Dang, 2007; Ning, 2011; Ning & Hornby, 2010; Slavin, 1991; Slavin, 1995). So in this study some structures of Kagan were used to promote cooperation and communication in the class.

2. Review of Literature
2.1. The Cooperative Language Teaching Approach

Cooperation is the process of working together towards the same end. Cooperative learning is a teaching strategy in which small groups (4-6), each with students of different levels of ability, use a variety of learning activities to improve their own and each other's learning, while the teacher coaches the process (Johnson, Johnson & Holubeo, 1994). Kaur (2017) pointed out that cooperative classrooms represent a shift from traditional lecture-style classrooms to more brain-friendly environments that benefit all learners.

Research has shown that cooperative learning techniques: (Davis & Murrell, 1994; Philips, Smith& Modaf, 2004).

1. Promote student learning, and academic achievement.
2. Increase student retention.
3. Help students develop skills in oral communication.
4. Help students develop higher order thinking skills.
5. Create greater intrinsic motivation to learn, and provide equal participation and simultaneous interaction.

Cooperative learning (CL) first was used to organize group work to aid the understanding and practice of both language and subject content of limited English proficient students in North American settings (Kagan, 1992, 1995; Kessler, 1992). It was argued that CL would contribute to language development (Crandall, 1999; McCafferty, Jacobs & Iddings, 2006). Cooperative learning has been shown to be beneficial for students across a wide racial, ethnic, socioeconomic and disability spectrum, as well as those from differing academic skill levels (Millis, 2009; Salend, 2001).

Azmin (2016) investigated the effect of the Jigsaw cooperative learning method on student performance in psychology and their views towards it. Experimental data were obtained via pre-and-post tests and open-ended questionnaire from 16 conveniently selected students from college in Brunei. The results of this study showed that the participants enjoyed using Jigsaw method and performed significantly better after the intervention.

Akcay (2016) studied the implementation of cooperative learning model in pre-school. As a result of the obtained data, it was determined that cooperative learning model is more effective in the teaching the sense organs subject to the children compared to the traditional teaching method. Tesfamichael (2017) investigated the students' attitudes towards cooperative learning in EFL writing class and the findings of this study indicated that the writing lessons in the students' English textbook should be taught through CL.

2.2. Relationship of Cooperative Learning and Speaking

Many researchers have conducted studies to find out how better to use CL in developing students' speaking skills and attitudes in tertiary levels. Pattanpichet (2011) conducted an experimental study to

investigate the effects of using CL in promoting students' speaking achievement. Thirty five undergraduate students participated in the study. The students were enrolled in a main English course at Bangkok University to examine their speaking achievement on an English oral test before and after they had participated in provided instructional tasks based on cooperative learning approach. To explore the students' views on the use of the CL, they were asked to complete a student diary after finishing each task, fill in a four scale-rating questionnaire, and join a semi-structured interview at the end of the course. The data were analyzed by frequency, means, standard deviation, t-test, effect size and content analysis. The findings revealed the improvement of the students' speaking performance and positive feedback from the students on the use of collaborative learning activities. The study provided suggestions and recommendation for further investigations.

An experimental study carried out by Ning (2011) to find out the effect of CL in enhancing tertiary students' fluency and communication. It aimed to offer students more opportunities for language production and thus enhancing their fluency and effectiveness in communication. The test result showed students' English competence in skills and vocabulary in CL classes was superior to whole-class instruction, particularly in speaking, listening, and reading.

Al-Tamimi and Attamimi (2014) investigated the effectiveness of cooperative learning in enhancing speaking skills and attitudes towards learning English and the findings showed a remarkable development in the students' speaking skills and attitudes after the introduction of cooperative learning techniques. In fact, Ning (2011) asserted that CL approach can contribute to the improvement of student's speaking proficiency.

2.3. Kagan's Cooperative Learning Structures for Speaking

Different researchers might define cooperative learning in different ways. This study investigated the effects of Kagan's cooperative structures on speaking skill of Iranian EFL learners. Dr. Kagan developed the concept of structures; his popular cooperative learning and multiple intelligences structures like Numbered Heads Together and Timed Pair Share are used in classrooms word-wide (Kagan, 2008).

Different Kagan structures are designed to implement different principles or vision. Most Kagan structures involve cooperative interaction and are designed to efficiently produce engagement, positive social interactions, and achievement because they incorporate four basic principles, the PIES principles: Positive Interdependence, Individual Accountability, Equal Participation, and Simultaneous Interaction (Kagan, 2000).

2.3.1 Positive Interdependence: Positive interdependence occurs when there is a positive correlation among outcomes; negative interdependence is a negative correlation among outcomes. That is, we are positively interdependent when a gain for one is a gain for another and we therefore feel ourselves to be on the same side. We are negatively interdependent when a gain for one can be obtained only by a loss of another, in which case we feel ourselves to be in competition.

2.3.2 Individual Accountability: In the whole class question-answer structure, teachers call on volunteers, asking "Can anyone tell me…?" "Who would like to …?" Any students can avoid being called upon by simply not raising his/her hand, violating the principle of individual accountability. Because students know there is no required individual accountability, many do not put in their best effort.

2.3.3 Equal Participation: During whole class question-answer as we move beyond kindergarten and first grade where all students raise their hands, only a subset of the class always or almost always raises their hands. As we move up the grades, a larger and larger subset seldom or never does, violating the principle of equal participation.

2.3.4 Simultaneous Interaction: During whole class question-answer only student at a time is called on, leading to very little overall overt active participation, violating the principle of simultaneous interaction. The following Kagan strategies were used to investigate the effect of Kagan cooperative structures on speaking skill of Iranian intermediate EFL learners (Kagan & kagan, 2009).

a. Talking Chips (communication skill): This activity equalizes the opportunity for participation. It also helps the teacher to monitor individual accountability.

1. Students are asked to discuss a topic in groups.

2. As each student talks, he/she places his/her chip in the center of the table.

3. Once a student finishes talking, he/she cannot talk until every other chip has been tossed into the center. If a student does not have anything to share on this particular topic, they can place a chip in the center at the end.

4. When all chips are down, students retrieve their chips and start over.

b. One Stray (information sharing, mastery, thinking):   One teammate strays from his/her team to a new team to share information or projects.

1) Students are seated in their teams and share information on a topic.

2) Student one stands up. The remaining three teammates remain seated but raise their hands.

3) Teacher calls strays.

4) Student one strays to a team which has their hands up.

5) Teams lower their hands when a new member joins them.

6) Students work in their new teams to share information tested or to solve problems.

c. Telephone (mastery, communication): One student per team leaves the room during instruction. When students return, teammates provide instruction on the information missed.

1. One student is selected to leave the room.

2. Remaining students (the teacher) receive instruction.

3. The teachers plan how best to instruct the learner and who will teach each   part. Each takes part of the teaching.

4. Learners return to their teams.

5. The teachers each teach their part of the content (round robin style): teammates argue as necessary.

d. Number Head Together (mastery, thinking):   Teammates work together to ensure

1. Students count off numbers in their groups.

2. Teacher poses a problem and gives wait time (Example: " Everyone thinks about how rainbows are formed. [Pause] Now make sure everyone in your team knows how rainbows are formed.")

3. Students lift up from their chairs to put their heads together, discuss and teach.

4. Students sit down when everyone knows the answer or has something to share or when time is up.

5. Teacher calls a number. The students with that number from each team answer question individually, using: response cards, chalkboard response, manipulative.

e.   Spin-N-Review   (mastery, communication): Each team receives review questions, Spin-N-Review game board and game marker.

1) Teacher selects a spin maker.

2) Turn captain moves marker to "who asks the question?" and spins. The selected student reads a question to teammates.

3) Turn captain moves marker to "think time", direct teammates to think about their answers and silently counts five seconds, showing the count on her fingers.

4) Turn captain moves marker to "who answer the question?" and spins. The selected student answers.

5) Turn captain moves the marker to "think time" and silently counts out five seconds as students think about the answer given.

6) Turn captain moves the marker to "who checks the answer?" and spins.

7) The selected student leads the team in checking for correctness.

8) Turn captain moves the marker to "think time" and silently counts out five seconds as students think about how to help or praise.

9) Turn captain moves the marker to "who praises or helps?" and spins. The selected student leads the team in helping or praising the student who answered.

10) Turn captain passes the spinner clockwise one person. The process repeats starting with step 2.

f.   Three-step interview (participation, listening,   teambuilding,   thinking, Communication, information sharing):

1. Students interview each other in pairs, first one way, and then the other.

2. Students share with the group information they learned in the interview. It may be hypotheses, reactions to a poem or other reading, conclusions from a unit.

Kagan (1995) argued that the single greatest advantage of CL for the acquisition of language is the much greater language output allowed per student in comparison to traditional classroom organization.

2.4. *Empirical Studies on Cooperative Teaching in Iran*

Communicative Language Teaching (CLT) is advocated by many applied

linguists as one the effective approaches to English Language Teaching. In recent years CLT has expanded beyond English as the Second language (ESL) contexts to English as a Foreign Language (EFL) and EFL countries have shown an increasing interest in teaching of English by using of Western methodologies such as communicative language teaching (CLT) which represents a change of focus in language teaching from linguistic structure to learner's need for developing communication skills (Nikian, 2014).

Yarmohammadi (2000) found Communicative skills have been neglected in the educational system since in countries such as Iran the focus is on achievement and teachers have to prepare students for grammar-based exams. Nikian (2014) investigated the Iranian English teacher's perspective, on CLT. The participants in this study were 10 Iranian EFL teachers. The main instruments used to elicit data for the study was in depth interview. The results of this study indicated that Iranian EFL teachers have very good understanding of the communicative activities and the general principles of Communicative Language Teaching (CLT). Whereas findings from previous studies showed that EFL teachers in most cases only follow or try to hold on only traditional grammar practices (Nikian, 2014).

3. Methodology

3.1. Research Questions and Hypotheses

The aim of the study was to investigate a comparison between the effect of Kagan's cooperative strategy and individualistic learning strategy on speaking skill of Iranian EFL learners so this study attempted to find answers to the following questions:

1. Is there any significant difference between speaking skill of the two groups under study?

2. Do Kagan's cooperative structures have any effect on speaking skill of Iranian EFL learners?

In order to investigate the problem raised by the study and to answer the related questions, the following hypotheses were tested:

1. There is no significant difference between speaking skill of the two groups under study.

2. Kagan's cooperative structures have no effect on speaking skill of Iranian EFL learners.

3.2. Participants

The participants of this study were selected from EFL learners studying at Ideal Language institute. First the online language proficiency test was administered in order to select homogenous participants. Forty eight adult, female EFL learners were selected as intermediate learners based on their results of language proficiency test. They were divided into two groups, 24 as the control group and 24 as the experimental group. Their age was between 18 and 30 and ethnicity of the participants was not controlled. In the experimental group, participants were divided into six small groups and they were made to treat the speaking skill topics cooperatively using the speaking package.

3.3. Data Collection Instruments

In this study, some instruments were used to investigate the effect of Kagan's cooperative structures on speaking skill of Iranian EFL learners. They included online Language proficiency test, IELS test for pre-test and post-test. The online language proficiency test (Cambridge English Language Assessment) is 25 multiple-choice test and students choose the best option to complete the sentence or conversation. Students answered to the questions in 15 minutes, when students answered all of the questions then clicked the "Get Result" button at the end of the test to get their score. In this study, students who got accepted, had scores between 13 and 15 (PET).

IELTS test in Canada for general training (January, 2016) was conducted for the control group and experimental group before the treatment. The IELTS speaking test is 11-14 minutes long and is in three parts. It is a one-to-one interaction and close to a real-life situation. In part one, learners answered general questions about themselves and their family. It normally took 4-5 minutes. The second part began with a verbal prompt. The verbal prompt or written input was in the form of a general instruction on a cue card. Learners had only one minute to prepare themselves. They were allowed to make notes and jot down some key points to help themselves relate the main ideas while they were speaking. After a one-minute preparation time, they delivered a speech about a topic. This part took 3-4 minutes. In part three, learners had a longer discussion of more abstract issues and concepts that were thematically linked to the topic introduced in part 2. It required interactions between the tester and the learners. This part usually took between 4-5 minutes. The whole of testing session was

recorded for further analysis. After the treatment, IELTS test in Canada for general training (March, 2016) was chosen as the post-test and its instruction was like the pre-test.

3.4. Procedures

Forty eight female Iranian Intermediate EFL learners were chosen by online language proficiency test. After choosing the appropriate sample, they were randomly assigned to the control and experimental group for each group, before the treatment a pre-test was administered. The pre-test and post-test included speaking part of IELTS and this interview conducted face to face interaction in an isolated situation to minimize the degree of interference coming from unknown sources (i.e., interruption, making noise by other students, etc.).The allowed time for each oral interview was 15 minutes then the interviews were tape-recorded, and scored by the researcher and her colleague. In order to determine the reliability of oral interview, oral interviews were scored by two persons. Each rater gave a score to each student's fluency: the mean score of these two raters was considered the students final score .It is worth mentioning that rating process was done after recording the learner's speech according to the revised scoring rubric and validity of the test was established. The modified version of IELTS speaking band descriptors (public version) University of Cambridge as fluency scoring rubric was used in this study, which consisted of four subscales: fluency and coherence, lexical resource[twice], and pronunciation, each with 10 levels or bands, of which fluency was the subject to the study.

In the experimental group, there were 24 participants and they were divided into six groups to work together according to Kagan's cooperative structures. The students participated in 90 minute classes two times a week for 8 sessions. The experimental group learnt Kagan cooperative structures and the control group learnt the conventional and common practice in a speaking classroom environment. The following Kagan strategies were used according to Kagan and Kagan (1998) to investigate the effect of Kagan cooperative structures on speaking skill of Iranian EFL learners. These structures included Talking Chips, One stray, Telephone, Numbered Heads Together, Spin-N-Review, There-step interview. After the treatment the post-test was conducted.

The speaking procedures for the experimental group were:
1-The topic was chosen based on the book.
2-The students were encouraged to speak.
3-In each session, one Kagan's structure was used.
4-The students followed the instruction and then, they discussed about the topic and answered the questions which were in the book.

The speaking procedures for the control group were:
a. The topic was chosen based on the book.
b. The students were encouraged to speak.
c. They talked about the topic individually and answered the questions which were in the book.

3.5. Data Analysis

The data collected for analysis to examine the effects of Kagan cooperative structures in this study included (1) online language proficiency test, (2) the scores of two oral interviews. According to Burns (2000), data analysis means to "find meanings from data and a process by which the investigator can interrupt the data" (p. 430). Similarly, as noted by Marshall and Rossman (1999), the purpose of the data analysis is to bring meaning, structure, and order to the data. Interpretation requires acute awareness of the data, concentration, as well as openness to subtle undercurrents of social life.

To find out the effect of CL on speaking competence, descriptive statistics including mean scores, standard deviations of the pre-test and post- test were used. Inferential analysis was used in to find out if any significant differences were found between the control and experimental group in both the pre-test and post-test. A normality test was used to determine if a sample or any group of data fits a standard normal distribution.

An independent- sample t-test was utilized to check if there was any significant difference in their scores between two groups. In addition pair-sample t-test was used to check if there was any significant difference in their scores between the pre-test and post-test of the experimental group. Essential component to test reliability is that of inter-rater reliability. As it relates to the current study, inter-rater reliability is the degree of agreement between two scores. In this study, two raters made judgements about data and their judgments were same in the most cases and in some cases the average of two scores were calculated.

4. Results and Findings

The results of the study were presented in this section. First the normality of data was tested through two different ways. Then, the homogeneity of the subjects was examined. Next, based on the results of the normality tests, the appropriate statistical techniques were used to test the two null hypotheses.

Table 1:   Descriptive Statistics of the Experimental Group

		Pretest	Posttest
N	Valid	24	24
M		5.292	5.958
SD		.4872	.4872
Skewness		.360	-.130
SES		.472	.472
Kurtosis		-1.039	.089
SEK		.918	.918

Table1 shows the descriptive statistics of the experimental group. According to the table, Standard Error of Skewness (SES) of the pretest and the posttest is .47. Two times the SES is .94. Data have normal distribution and are not skewed at all if the absolute value of skewness is zero. But, according to the table, the skewness value of the pretest is .36 and of the posttest is -.13. As a matter of fact, the value of skewness for both tests is not zero. Since .94 is greater than .36 and -.13, the data were skewed but not significantly. As a result, they were normal to a large extent. Based on Table 1, the kurtosis value of the pretest is -1.03 and of the posttest is .08. Moreover, according to the table, the Standard Error of Kurtosis (SEK) of both tests is .91. If we divide -1.03 and .08 by .91, we get -1.13 and .087. Since these numbers (-1.13 & .087) are between the range of +1.96, the data are normal.

Table 2:   One-Sample K-S of the Experimental Group

		Pretest	Posttest
N		24	24
Normal Parameters	M	5.292	5.958
	SD	.4872	.4872
Most Extreme Differences	Absolute	.309	.242
	Positive	.309	.216
	Negative	-.191	-.242
Kolmogorov-Smirnov Z		1.512	1.188
Asymp. Sig. (2-tailed)		**.071**	**.119**

Table 2 shows the Kolmogorov-Smirnov (K-S) of the experimental group. Based on the table, Sig (2-tailed) is .07 and .11 for the pretest and the posttest respectively. These numbers are greater than the specified α

level of .05. Consequently, the data are normal.

Table 3:   Descriptive Statistics of the Control Group

		Pretest	Posttest
N	Valid	24	24
M		5.271	5.333
SD		.5103	.4815
Skewness		.279	.118
SES		.472	.472
Kurtosis		-1.083	-1.043
SEK		.918	.918

Table 3 shows the descriptive statistics of the control group. According to the table, SES of   According to the table, SES of the pretest and the posttest is .47. The absolute value of skewness is .27 for the pretest and .11 for the posttest. Two times of .47 is .94, which is greater than .27 and .11. Consequently, the data were skewed but not significantly. Thus, the data had normal distribution to a large extent. Based on the table, the kurtosis of the pretest and the posttest is -1.08 and -1.042 respectively. If we divide these numbers by their SEK (.91), we will have -1.18 for the pretest and -1.14 for the posttest. These numbers are between the range of +/- 1.96, therefore the data are normal.

Table 4:   One-Sample K-S of the Control Group

		Pretest	Posttest
N		24	24
Normal Parameters	M	5.271	5.333
	SD	.5103	.4815
Most Extreme Differences	Absolute	.286	.256
	Positive	.286	.256
	Negative	-.173	-.167
Kolmogorov-Smirnov Z		1.399	1.252
Asymp. Sig. (2-tailed)		**.060**	**.087**

Table 4 is the K-S of the control group. Based on the table, the Sig(2-tailed) is .06 and .08 for the pretest and the posttest respectively. Since these numbers are greater than .05, the data have normal distribution.

Table 5: Independent-Samples t-test between the Pretests of the Experimental Group and Control Group

		Levene's Test for Equality of Variances		t-test for Equality of Means					95% Confidence Interval of the Difference	
		F	Sig.	t	df	Sig. (2-tailed)	MD	SED	Lower	Upper
Homogeneity	Equal variances assumed	.067	.797	.145	46	**.886**	.0208	.1440	-.2690	.3107
	Equal variances not assumed			.145	45.90	.886	.0208	.1440	-.2691	.3107

According to Table 5, there are two rows. The obtained significant should be considered to identify which row to use for interpretation. The obtained significant is .79. Since .79 is greater than .05, the first row was used to interpret the data. Based on the table, since sig. 2-tailed is .88 and greater than .05, there is no significant and meaningful difference between the mean score of the two groups. Thereby, both groups were homogenous.

Table 6: Independent-Samples t-test between the Posttests of the Experimental Group and Control Group

| | | Levene's Test for Equality of Variances | | t-test for Equality of Means | | | | | |
| | | | | | | | | 95% Confidence Interval of the Difference | |
		F	Sig.	t	df	Sig. (2-tailed)	MD	SED	Lower	Upper
Speaking	Equal variances assumed	.654	.423	4.47	46	.000	.6250	.1398	.3436	.9064
	Equal variances not assumed			4.47	45.994	.000	.6250	.1398	.3436	.9064

To accept or reject the first null hypothesis, independent-samples t-test was calculated. Table 6 shows independent-samples t-test between the posttests of the experimental group and the control group. Based on the table, the obtained significant is .42. Since .42 is greater than .05, the first row was used. According to Table 6, the obtained Sig (2-tailed) is .000, which is less than .005. Consequently, there was a significant difference between the mean scores of the posttests of the experimental and control groups. As a result, the null hypothesis was rejected and it was shown that there was a significant difference between speaking skill of the two groups. According to Table 1, the mean of the posttest of the experimental group is 5.95 and based on Table 3, the mean of the posttest of the control group is 5.33. Accordingly, the participants of the experimental group outperformed the subjects of the control group.

Table 7: Paired-Samples t-test between the pretest and posttest of the experimental group

| | | Paired Differences | | | | | | | |
| | | | | | 95% Confidence Interval of the Difference | | | | |
		M	SD	SEM	Lower	Upper	t	df	Sig. (2-tailed)
Pair 1	Pretest - Posttest	-.6667	.3510	.0716	-.8149	-.5185	-9.305	23	.000

Table 7 shows the paired-sample t-test between the pre-test and post-test of the experimental group. Based on the table, the obtained Sig (2-tailed) is .000; this number is less than .05. It shows that there was a significant difference between the mean scores of the pretest and the posttest. According to Table 1, the mean of the pretest scores is 5.29 and the mean of the posttest scores is 5.95. Therefore, the experimental participants progressed from the pretest to the posttest. Thereby, the second null hypothesis was rejected. It was shown that using Kagan's cooperative structures were good to improve speaking skill of the participants and had some positive effects on it.

5. Discussion and Conclusion

In this study, two hypotheses were used. These hypotheses included (1): There is no significant difference between speaking skill of two groups under study, (2): Kagan's cooperative structures have no effect on speaking skill of Iranian EFL learners.

According to the results of this study the first hypothesis was rejected. To determine the participant's speaking ability, an oral interview (pre-test) was conducted for both groups and the pre-test results for both groups did not reveal any statistically significant difference between the two groups. This means that before the application of the experiment they both had nearly similar speaking levels. Based on table 5, both groups were homogenous by the results of Independent-sample t-test between the pre-tests of the experimental group and control group. Then the experimental group members were provided with Kagan's cooperative structures. In the control group, the class was conducted without cooperative learning. Finally, the students of both groups participated in the post-test which was an oral interview. After the treatment, the findings of the present study showed that the experimental group had higher scores on the post-test than students in the traditional classroom.

In other words, in a less threating context as that of cooperative learning, the students in the experimental group are able to demonstrate higher oral classroom participation, which is related to their statistical significant gain in the language proficiency (Zhou, 1991; Zhou, 2002).

In addition, the findings of this study showed significant improvement in the students' oral language skills. This also agrees with the findings of Green (1993), where he found that communicative activities rated as more enjoyable than non-communicative ones.

Similarly, Tuncel (2006), who used supplementary communicative and authentic

materials with his subjects, suggested, " The addition of a communicative element leads to higher students achievement in measuring their test scores, and later in their specialist studies" (p.2).

Based on the results of the present study, there was no statically significant difference between the control group's pre-test and post-test. One can argue that this was expected, since the control group most probably had no opportunities to do communicative activities. Practitioners (Berns, 1985; Woods, 2013) argue that traditional methods are untrustworthy and inadequate because they do not help students to use the target language as it is used in real-life situations, where they need to communicate effectively with others.

Since studying according to the traditional methods did not help students to cope with the target language in what Widdoson (1983) would describe as its normal communicative use, the control group could not improve their speaking skills. In the traditional classroom, much of the students' time is devoted to learning and memorizing language forms.

Based on the results, Kagan's cooperative structures had a positive effect on the student's speaking skills so the second hypothesis was rejected. The big differences between the experimental group and the control group could be attributed to many reasons, firstly during the experiment, the group work used for experimental group provided the students with opportunities to speak most of the duration of the English period. On the other hand the control group followed the traditional method. Secondly, because of the Kagan's cooperative structures in the experimental group, all of the students were encouraged to speak and tried to be active so they became more confident and more willing to speak more but in the control group, students who studied in the traditional classroom did not also have the opportunity to be responsible for their own learning and they were not very active in the class. Finally, such a student-centered teaching method helped improve the student's oral communicative competence of the target language because created a more friendly and supportive learning environment within which students had more opportunities and enjoyed freedom to practice the target language.

The significant gains of the experimental group on the interaction-based task supported Brown's (1994) and Kagan's

(1995) views that cooperative learning was actually a practice that could put the communicative approach into action. Such findings were congruent with Wei's (1997) claim that cooperative learning was considered the best instructional format enhancing learner's communicative competence. Yu (2004) stated in his research that one of the obstacles that hinder CL in the class is the classroom size, if the classroom size is big, students may get fewer opportunities to practice English.

The aim of this study was to investigate the effectiveness of Kagan's cooperative structures on speaking skill of Iranian EFL learners. In this study, after the treatment all of the data from the post-test indicated that learners in the experimental group achieved significantly higher scores than those in the control group. In addition, Kagan's cooperative structures had positive effect on speaking skill of Iranian EFL learners and these structures increased opportunities for students to produce and comprehend the target language and to obtain modeling and feedback from their peers as well as their teachers.

In order to complement the findings of the present study, some further research can be suggested:

1. Much empirical research is needed world-wide to further our understanding of the positive effects of the Kagan's cooperative structures on both receptive and productive skills.

2. Further investigation is needed to find ways to facilitate the adaptation of the Kagan's cooperative learning to the Iranian EFL classroom and thereby enhance student's opportunities to speak English fluently and accurately.

3. Future studies on more participants or more teachers implementing Kagan's cooperative structures in more classes are recommended in order to generate more evidence on the effects of Kagan's cooperative learning.

4. Another suggestion for further study is about the using of other Kagan's cooperative structures, because there are more than 200 structures and they might help students increase their skills.

5. Similar studies are critically needed in other parts of Iran and in other institutes in order to see whether the results will be the same as or different from the results of the present study.

References

Akcay, N. O. (2016). Implementation of cooperative learning model in pre-school. *Journal of Education and Learning, 5*(3), 83-93. doi: 10.5539/jel.v5n3p83.

Alharbi, L. A. (2008). The effectiveness of using cooperative learning method on ESL reading comprehension performance, students' attitudes towards CL , and student's motivation toward reading of secondary stage in Saudi public girls' schools. Ph. D Thesis, West Virgina University.

Al-Tamimi, N. & Attamimi, R. A. (2014). Effectiveness of cooperative learning in enhancing speaking skills and attitudes towards learning English. *International Journal of Linguistic, 6*(4), 27-45.

Azmin, N. H. (2016). Effect of the jigsaw-based cooperative learning method on student performance in general certificate of education advanced-level psychology: An exploratory Brunei case study. *International Education Studies, 9*(1), 91-106. doi: 10.5539/ies.v9n l p91.

Berns, M. S. (1985). Functional approaches and communicative competence : English language teaching in non-native context. *Dissertation Abstract International, 46* (07), 159. (UMI No. 824132).

Bock, G. (2000). Difficulties in implementing communicative theory in Vietnam. *Teacher's Edition, 2, 24-28.*

Brown, D. (1994). Teaching by principles : An interactive approach to language teaching methodology. *NY: Prentice-Hall Regents.*

Burns, R. B. (2000). *Introduction to research methods.* London: Sage.

Crandall, J. (1999). Cooperative language learning and affective factors. In J. Arnold (Ed.), *Affect in language learning* (pp. 226-307). Cambridge University Press, Cambridge.

Bagheri, M. S., Dabaghmanesh, T., & Zamanian, M. (2013). The Effect of cooperative learning approach on Iranian EFL students' achievement among different majors in general English course. *International Journal of Linguistics*, *5*(6), 1-11.

Dang, H. (2007). Implementing cooperative learning in foreign language classes. *Journal of Science and Technology*, *15*, 1-5.

Davis, T. M., & Murrell, P. H. (1994). Turning Teaching into Learning. The Role of Student Responsibility in the Collegiate Experience. ERIC Digest.

Fulcher, G. (2003). *Testing second language speaking*. Pearson Education.

Green, J. M. (1993). Student Attitudes Toward Communicative and Non-Communicative Activities: Do Enjoyment and Effectiveness Go Together?. *The Modern Language Journal*, *77*(1), 1-10.

Gomleksiz, M. N. (2007). Effectiveness of cooperative learning (jigsaw II) method on teaching English as a foreign language to engineering students (Case of Firat University, Turkey). *European Journal of Engineering Education, 32*(5), 613-625.

Harmer, J. (2008). How to teach English. *ELT journal*, *62*(3), 313-316.

Johnson, D. W., Johnson, R. T., & Holubec, E. J. (1994). *The nuts and bolts of cooperative learning*. Interaction Book Co.

Kagan, S. (1992). Cooperative learning. San Juan Capistrano, CA: Resources for Teachers. *Inc. Google Scholar*.

Kagan, S. (1995). When we talk : Cooperative learning in the elementary ESL classroom. *Elementary Education Newsletter, 17* (2), 1-6.

Kagan, S. (2000). Kagan structures—Not one more program. A better way to teach any program. *Kagan Online Magazine*. Retrieved from https://www.kaganonline.com.

Kagan, S. (2008). Kagan structures simply put. *Kagan Online Magazine*. Retrieved from https://www.kaganonline.com.

Kagan, S., & Kagan, M. (2009). *Kagan Cooperative Learning*. San Clemente, CA: Kagan Publishing.

Kaur, M. (2017). Cooperative learning: An effective teaching strategy. I*nternational Educational Journal, 4*(1), 9-20.

Kessler, C. (Ed.). (1992). *Cooperative language learning: A teacher's resource book*. Prentice Hall.

Kayi, H. (2006). Teaching speaking: Activities to promote speaking in a second language. *TESOL, 11*(12), 1-6. Retrieved from http://unr.edu/homepage/hayriyek.

Liao, H. C. (2009). Cooperative learning and EFL education: The past, the present, and the future. *Journal of National Taichung University: Humanities& Arts, 23*(2), 87-108.

Lio, X. (2010). Arousing the college motivation in speaking English through role-play. *International Education Studies, 1*(3), 136-137.

Luoma, S. (2004). *Assessing Speaking.* Cambridge : Cambridge University Press.

Marshall, C., & Rossman, G. (1989). B.(1999). Designing qualitative research. *Newbury Park/London/New Delhi*.

Mc Cafferty, S. G., Jacobs, G. M., & Iddings, A. C. D. (Eds.) (2006). *Cooperative learning and second language teaching*. Cambridge : Cambridge University Press.

Millis, B. J. (2009). Becoming an effective teacher using cooperative learning : A personal odyssey : *Peer Review, 11* (2), 17-21.

Morozova, Y. (2013). Methods of enhancing speaking skills of elementary level students. *Translation Journal, 17*(1), [online]

Available: http://translationjournal.net/journal/63learnin.htm.

Nikian, S. (2014). A Case study of Iranian EFL teachers perceptions of communicative language teaching approach. *European Academic research. 1* (10), 3438-3470.

Ning, H. (2011). Adapting cooperative learning in tertiary ELT. *ELT Journal, 65* (1), 60-70.

Ning, H., & Hornby, G. (2010). The effectiveness of cooperative learning in teaching English to Chinese tertiary learners. *Effective education*, 2(2), 99-116.

Pattanpichet, F. (2011). The effect of using collaborative learning to enhance students' English speaking achievement, *Journal of College Teaching& Learning, 8*(11), 1-10.

Pattanpichet, F., & Chinaokul, S. (2011). Competencies needs in oral communication in English among Thai undergraduate public relation students: A substantial gap between expectation and reality. *RELC, 42*(2), 187-202.

Philips, J., Bobbi Smith, B., & Modaf, L. (2004). Please Don't call on Me: Self–Esteem, Communication Apprehension and Classroom Participation. *Journal of Undergraduate Research. University of Wisconsin–LaCrosse*, 4.

Richards, J., C. (2008). *Teaching listening and speaking.* Cambridge : Cambridge University Press.

Salend, S. J. (2001). Differentiating large-and small-group instruction for diverse learners. *Creating inclusive classrooms: Effective and reflective practices.*

Slavin, R. E. (1991). Synthesis of research on cooperative learning. *Educational leadership, 48* (5), 71-82.

Slavin, R. E. (1995). *Cooperative learning : Theory, research, and practice* (2nd ed). Needham Heights, Ms Allyn and Bacon.

Tesfamichael, W. (2017). Students'attitudes towards cooperative learning in EFL writing class. *Arabic Language, Literature & Culture,* 2(3), 60-68. doi: 10.11648/j.allc.20170203.12.

Tuncel, E. (2006). An evaluative of the relationship between instructional differences and learning outcomes : A survey-based and experimental study of a more communicative approach to language teaching in a traditional setting. *Dissertation Abstract International, 67* (02), 483. (UMI No. 824132).

Wei, C. (1997). Collaboration in EFL classroom: An investigation of DFLL learners, perception of jigsaw cooperative learning technique in freshman English classes. Department of English, NTNU (Ed.), *Proceedings of the 14th Conference on English Teaching and Learning in the* R. O. C, 223-238. Taipei, Taiwan : Crane.

Widdowson, H. G. (1983). Direction in the teaching of discourse. In Brumfit &

Johnson, *The communicative approach to language teaching*. Oxford : Oxford University Press.

Woods, P. (Ed.). (2013). *Contemporary issues in teaching and learning*. Routledge.

Yarmohammadi, L. (2000). "Reflection on the Treatment and Contextualization of Pronunciation Practices and Language Functions in the Pre-university Text books in Iran." *Journal of Teaching Language, 1* (3), 1-21.

Yu, J. (2004). Problems and strategies of teaching English in large college classes. *Journal of Chongqing University of Post and Telecommunication (Social Science), 3*(1), 139-140.

Zhou, Y. (1991). The effect of explicit instruction on the acquisition of English grammatical structures by Chinese learners. In C. James & Garret (Eds.), *Language Awareness in the Classroom.* 254-277. London : London.

Zhou, W. (2002). Interactions between classroom activity, enjoyment, effectiveness, and oral participation. *English Teaching & Learning, 26* (3), 39-68.

Appendix A: Online Language Proficiency Test

Choose your test and click to start.

1. When can we meet again?
☐ When are you free?
☐ It was two days ago.
☐ Can you help me?

2. My aunt is going to stay with me.
☐ How do you do?
☐ How long for?
☐ How was it?

3. When do you study?
☐ At school
☐ In the evening
☐ In the library

4. Would you prefer lemonade or orange juice?
☐ Have you got anything else?
☐ If you like
☐ Are you sure about that?

5. Let's have dinner now.
☐ You aren't eating.
☐ There aren't any.
☐ Tom isn't here yet.

6. The snow was .... heavily when I left the house.
☐ dropping
☐ landing
☐ falling
☐ descending

7. I can't find my keys anywhere.
I .... have left them at work.
☐ can
☐ must
☐ ought
☐ would

8. When a car pulled out in front of her, Jane did well not to .... control of her bicycle.
☐ miss
☐ lose
☐ fall
☐ drop

9. According to Richard's .... the train leaves at 7 o'clock.
☐ opinion
☐ advice
☐ knowledge
☐ information

10. When you stay in a country for some time, you get used to the peoples .... of like
☐ habit
☐ custom
☐ way
☐ system

11. The builders are .... good progress with the new house.
☐ getting
☐ doing
☐ making
☐ taking

12. She is now taking a more positive ………….. to her studies and should do well.
☐ attitude
☐ behavior
☐ manner
☐ style

13. My father ……….. his new car for two weeks now.
☐ has had
☐ has
☐ is having
☐ had

14. What differences are there ………….. the English spoken in the UK and the English spoken in the US?
☐ among
☐ between
☐ beside
☐ with

15. At 6 p.m. I started to get angry with him because he was late ………..
☐ as usual
☐ in general
☐ typically
☐ usually

16. ………… you get your father's permission, I'll take you skiing next weekend.
☐ Although
☐ Provided
☐ As
☐ Unless

17. A local company has agreed to ………….. the school team with football shirts.
☐ contribute
☐ supply
☐ give
☐ produce

18. I really enjoy stories that are …………….. in the distant future.
☐ found
☐ set
☐ put
☐ placed

19. The old saucepan will come in when we go camping.
☐ convenient
☐ fitting
☐ handy
☐ suitable

20. Anyone ………….. after the start of the play is not allowed in until the interval.
☐ arrives
☐ has arrived
☐ arriving
☐ arrived

21. I didn't …………..driving home in the storm so I stayed overnight in a hotel.
☐ fancy
☐ desire
☐ prefer
☐ want

22. The judge said that those prepared to ………… in crime must be ready to suffer the consequences.
☐ involve
☐ engage
☐ undertake
☐ enlist

23. Marianne seemed to take …………. at my comments on her work.
☐ annoyance
☐ insult
☐ offence
☐ indignation

24. You should not have a dog if you are not ………….. to look after it.
☐ prepared
☐ adopted
☐ arranged
☐ decided

25. The farmhouse was so isolated that they had to generate their own electricity……..
☐ current
☐ supply
☐ grid
☐ power

Appendix B: Pre-test (IELTS test in Canada - January 2016)
Interview
1.What is your full name?
2. Can I see your ID?
3. Where are you from?
4. Do you work or study?
5. When did you start studying?
6. How is it helpful to you?
7. Do you watch sports?
8. Do you think people prefer to watch sports live or on TV?
9. Do you like mathematics? Why?
10. When did you start learning math?
11. Have you had a calculator when you were a child?
Cue Card
Describe a place where you go to read and write, that is not your home.
Please say.
1. What place is it?
2. When do you usually visit it?
3. How much time do you spend there?
Discussion
1. Do you think people like to read in public places or in libraries?
2. Will people that started studying as adults face more problems with learning compared to children?

Appendix C: Post-test (IELTS test in Canada-March 2016)
Interview
1. What is your full name?
2. Can I see your ID?
3. Where are you from?
4. Do you work or study?
5. Describe your hometown.
6. Is it a safe place for kids to grow up?
7. What is the government doing to make sure children can be raised in a better atmosphere?
Cue Card
Talk about someone who flies more often than normal due to some reasons. Please say.
1. When and where did you meet him/her?
2. What are his/her reasons for flying so much?
3. Does he/she like this job and the amount of flying involved?
Discussion
1. What steps should the government take to decrease the amount of air pollution due to air traffic?
2. Do you think business people fly more than others? Why?
3. Why do you think people prefer to travel by air rather than other means of transportation?
4. Do you prefer comfort over price?
5- Why is that?