The Effect of Different Cooperative Learning Strategies on EFL Students’ Foreign Language Classroom Anxiety

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Abstract
The purpose of the present study was to investigate the comparative effect of Fishbowl and Carousel Brainstorming strategies on EFL students’ foreign language classroom anxiety. To this end, 60 intermediate EFL learners were selected among 90 through their performance on a sample PET Test. The selected participants (n=60) were randomly assigned into two experimental groups, namely, Fishbowl (n=30) and Carousel Brainstorming (n=30). The Foreign Language Classroom Anxiety Scale (FLCAS) designed by Horwitz, Horwitz and Cope (1986) was administered to both groups to measure their level of foreign language classroom anxiety before the treatment. Both groups underwent the same amount of teaching time and same materials by the same teacher during 12 sessions of 90 minutes each. The treatment was quite straightforward as participants of the study in Fishbowl group received instruction on fishbowl strategy and those in Carousel Brainstorming group received instruction on carousel brainstorming strategies. At the end of the treatment, the same FLCAS was given to EFL students in both groups as their posttest and their mean scores on the pretests and posttests were compared through ANCOVA. The results led to the rejection of null hypothesis with the conclusion that those in the Carousel Brainstorming group who gained a lower mean bearing a significantly lower degree of foreign language classroom anxiety than those in the Fishbowl group. The results and implications of the study are discussed in more details in the paper.

Keywords: Cooperative Learning, Fishbowl, Carousel Brainstorming, Foreign Language Classroom Anxiety, EFL Students

INTRODUCTION
Although language learning seems to be an indisputably necessary element for daily interactions, anxiety is an obstacle to be overcome in learning a second language (Horwitz, Horwitz & Cope, 1986). In line with the previous claim, Woodrow (2006)
indicates that anxiety has a debilitating effect on the language learning process. According to Merriam-Webster's collegiate dictionary (2004), the word anxiety is described as “An abnormal and overwhelming sense of apprehension and fears 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”.

Affective variables such as anxiety (inhibition) seem to play a key role as an impediment in the development of speaking skills (Horwitz, et al., 1986, pp. 127). To clarify possible barriers that impede language learning, Krashen (1985, as cited in Hedge, 2001, p. 21) adopts the notion of affective filters such as attitude, anxiety, competitiveness, and other emotional responses. These filters can block processing input, which results in poor learning. According to Alpert and Haber (1960, as cited in He, 2011, p. 21), anxiety is divided into facilitating anxiety and debilitating anxiety as two ends of the anxiety continuum which interfere in three stages of: “input, process and output in different steps of learning” (Ellis, 2003).

Elsewhere Horwitz, et al. (1986, p. 128) define language anxiety as “a distinct complex of self-perceptions, beliefs, feelings, and behaviors related to classroom language learning arising from the uniqueness of the language learning process”. Moreover, Gardner and MacIntyre (1993, p. 2) refer to Foreign language anxiety (FLA) as apprehension in situations where they are expected to use the target language.

One of the most frequently cited concerns of the anxious foreign languages students, seeking help at the Language Skill Center (LSC), is the difficulty in speaking in class (Horwitz et al., 1986, P. 126). In this regard, Foreign Language Classroom Anxiety Scale (FLCAS) developed by Horwitz et al. (1986), can be employed to target three related performance anxieties: 1) communication apprehension; 2) test anxiety; and 3) fear of negative evaluation. Furthermore, this scale counts foreign language anxiety as a complex of self-perceptions, beliefs, feelings, and behaviors related to classroom language learning arising from the uniqueness of the language learning process.

Furthermore, EFL learners should improve communicative competence through classroom activities. Some activities like discussion, role-play, communication game, information gap, brainstorming, Storytelling, songs, dialogues, pictures describing, find the differences, and jigsaw activities (Kayi, 2006, as cited in Chahra, 2016) that can be used to improve speaking quality. According to the above-mentioned points, in order to control speaking anxiety, teachers might be willing to apply models such as cooperative techniques proposed by Johnson and Johnson (1987) that includes methods to facilitate student-student interaction in groups. Cooperative models not only emphasize collaborative skills but also, they provide environments that encourage students to use these skills.

Fishbowl Training for Group Discussion is a term coined by Kane in 1995. Kane states that this strategy provides learners with opportunities to be exposed to less structured therapeutically oriented groups (1995, p. 184). The basic structure is to have two groups; they take a turn in being the working group in the Fishbowl and the observing group who surround the Fishbowl, which can lead to a very dynamic teamwork while there is not
much physical activity involved. Young (2007) believes, a variety of social skills can explicitly be taught through this strategy; Fishbowl can move a discussion forward or shut it down. Additionally, Hensley and Priles (as cited in Wulandari, 2015) believed that Fishbowls could be effective teaching tools for modeling group processes. Carousel brainstorming is a strategy that requires students to access background knowledge by thinking about subtopics within a broader topic. The purpose of this activity is to activate students' prior knowledge of a topic or topics through movement and conversation. Elsewhere Ogle (1986) described Brainstorming as a way to assess and value prior knowledge and experience.

Some Researchers like Dutt (1997), Young (2007), and Cummings (2015) pointed that using Fishbowl technique can result in students-centered classes, which motivate critical thinking and better learning. Moreover, other researchers such as McKnight (2010) and Stix (2004) noted that Carousel Brainstorming is a technique to create an active learning process. In fact, observing the Promising results of using Carousel Brainstorming and Fishbowl strategies on students’ learning inspired the researcher of the present study to seek their possible positive effect on three problematic areas of classroom and speaking anxiety and speaking ability of the learners.

LITERATURE REVIEW

Anxiety

Many researchers believe that anxiety is one of the main factors that weakens the memory. This effectiveness is more noticed in situations that require decision-making, problem solving, judgment and selection, such as at the time of holding examination sessions (Svenson, 1990, 1991, as cited in Edland & Svenson, 1993). Anxiety as a disease is considered the source of failure, which covers disorders that range from cognitive and physical disorders to unpardonable fears and scary outbreaks and separates the person from his real abilities (Dadsetan, Anari, & Sedghpour, 2008).

Gover (2004) believes that anxiety will be resulted in the failure in comparative reasoning, slow decision-making process, surface processing, the decrease of memory, disturb in controlling the concentration, directing the recovery of memories and the tendency to reminding the negative events, lack of success, inability and weak performance. The behavioral aspect of anxiety is included in reactions such as the Sympathetic nervous system arousal and avoiding undesirable situations (Michaeli Manee, Ahi, Behnejad, & Ramazani, 2016). Anxiety is a type of excitement that has been studied more than the other disorders and many theories have been proposed on it.

First, from a ‘Psychoanalytic Perspective Theory’, anxiety is an important step in self-defense, when the individual expects not only a shocking state (distress and discomfort) but also anticipates it (Reiss, 1987). The second theory is ‘Theory of Behavior’, which indicates that through some intermediary mechanisms, the organism learns to avoid harmful stimuli; this mediator stimulus is usually anxiety (Fowles, 1987).

In the third theory, ‘Phenomenological and Existential Theory’, anxiety is considered as a natural event of life (Fischer, 1989). Fourth, in ‘Cognitive Theory’, one’s perception and
analysis of events and problems has been introduced as the cause of anxiety (Clark, et al., 1988). Finally, ‘Social Learning Theory’ that according to this view, fear, and anxiety are learned through thinking and reasoning (Mineka, & Zinbarg, 2006).

**Foreign Language Classroom Anxiety (FLCA)**

Foreign language classroom anxiety is defined by Horwitz et al. (1986, p. 125) as a “sense of tension, embarrassment, fear, apprehension, and anxiety about the negative evaluation of others, which sometimes has the ability to put him at risk in different learning situations and prevents him from making contact, direct communication and face-to-face conversation with a learner”. Park (2012) divided the components of foreign language classroom anxiety based on Horwitz et al. (1986) as the following: “Communication apprehension (CA)”, a verbal process, a sign or a series of actions that someone passes on to another person; Test Anxiety (TA), "Fear of Negative Evaluation" (FNE); and “English Classes Anxiety “(AEC). According to Horwitz (2001), learners have complete thoughts and ideas, but their rejection of the second language is not enough to express these thoughts. The inability to express ideas or to understand the ideas of the other party leads to fear. In fact, communication activities lead to a high degree of anxiety, which indicates that communication ability is directly related to anxiety.

"Test anxiety", time come to appear, and, of course, other factors such as time, the limitations of exam methods, exam length, test environment, and the transparency of test instructions also affect it. Negative assessment is not just a teacher's assessment, but also a classroom assessment. Since learners are unreliable about themselves and the correctness of what they say, they feel they are not able to have a proper social impact (Birjandi & Alemi, 2010). Fear of the language class also includes environmental factors. Some studies have reported a negative relationship between second language anxiety and its learning outcomes (e.g., Sparks & Gaschow, 2007), others have found a positive or neutral relationship between the two (Aida, 1994; Scovel, 1978; Elkhafaifi, 2005).

The contradiction in research results has been attributed to different concepts related to anxiety as well as multiple measurement tools (Lee, 2012). According to Horwitz (2001), many people succeeded in learning English skills, but when it comes to learning foreign language lessons, there is a "mental barrier." A number of researchers believe that this mental barrier is nothing but anxiety in language and its components (Khattak, Jamshed, Ahmed, & Baig, 2011). Having a positive image of low-level ability and anxiety is an important component of learning foreign languages.

Finally yet importantly, in Horwitz et al. (1986, p. 131) perspectives, there are two options for teachers to deal with anxious students. They can create either a provoking situation, which is to help them cope with their existing problems or a stress free context, in which the learners’ comfortably communicate. In this respect, the first step for the teacher is to spot the existence of foreign language anxiety.

**Cooperative Learning**

Some researchers consider cooperative learning to be a merit among instructional methods regarding social skills that can be employed from primary grades through
In the past few decades, cooperative learning has become a common instructional method in preschool as well as graduate school levels. It has been used in all subject areas, in all aspects of instruction and learning. In line with this claim Johnson, Johnson and Stanne (2000, p. 3) believe “the widespread use of cooperative learning is due to multiple factors. Three of the most important are that cooperative learning is clearly based on theory, validated by research, and operationalized into clear procedures educators can use”.

In this regard, variety of cooperative learning methods are available for teacher to use. These methods range from very authorized and rule-centered to very flexible and tangible. According to Johnson et al. (2000), Cooperative learning is generally referred to as various methods for ordering and managing classroom instruction. They believe that all teachers are capable of finding a way to use cooperative learning that best suits the ideology of their classrooms.

**Fishbowl**

“The Fishbowl is a teaching strategy that helps students’ practice being contributors and listeners in a discussion” (Yabarmase, 2013, p. 525). Dutt (1997, p. 143) also defines Fishbowl as “a strategy that holds students responsible for conducting a discussion about assigned tasks in large groups”. Fishbowl is a method that can be used across other skills such as reading rather than merely speaking. In fact, the purpose of Fishbowl strategy is to deepen and expand students’ reading comprehension (Lloyd, 2004, p.120).

By using this strategy, teacher can expect learners to understand more about the text or topic. Moreover, Fishbowl is an appropriate method to assessing reading (Sterling & Tohe, 2008, as cited in Kasdi & Auzar, 2016). Focusing on the aforementioned point, Fishbowl becomes a strategy to evaluate students’ comprehension of books. Among all common formats of Fishbowl, Rahma (2015) mentioned two very common types: 1) open Format Fishbowl, 2) and closed format Fishbowl. In the first version, there are some unoccupied seats available for the outer circle member to join the inner circle. Here one member of the inner circle voluntarily leaves his or her seat to let this change happen. The rules of the discussion are also determined by the teachers who is the facilitator or by the group themselves.

The second version suits the large groups with large number of participants. The inner circle will be given the necessary time by the facilitator to discuss their topic. When their time is up, the members of the outer circle can substitute the inner circle members and present their opinions (Elizabeth, et al., as cited in Rahma, 2015).

In either of the above versions, the students can sit in two circles while one is bigger and surrounds the smaller one and use similar opportunities to contribute.

Regarding the advantages of using this strategy, Kane (1995) indicated that learners viewed Fishbowl training as fruitful because they could observe how another group works and receives feedbacks from their classmates. Although, he found that the fact that other learners were watching their work was a source of discomfort in the first initial sessions, but after their first experience, most students also expressed relief.
Moreover, Jaya and Habibi in their 2016 paper concluded that exposure to Fishbowl technique students’ general performance improved. They added that different skills and subskills namely interaction, pronunciation, fluency and grammar comprehension were positively influenced possibly due to the students’ participation in phases of discussion.

**Carousel Brainstorming**

“Carousel Brainstorming is a graphic organizer that allows students to generate a lot of ideas in small groups and note their thoughts visually” (Latifeh, 2012, p. 2). Avisteva (2017, p.12) defines Carousel Brainstorming strategy as a physically active learning process in which students move around the classroom to generate ideas in their groups. Lipton and Wellman (1998, as cited in Lestari, 2016) Carousel brainstorm technique as “a powerful summarizing activity that engages all learners”.

Elsewhere, Lipton and Wellman (1998, as cited in Lestari, 2016) viewed Carousel Brainstorming technique as a powerful summarizing activity that involves all students. They pointed that in this technique, the students physically move around the class; in fact, they ‘Carousel’ from chart to chart, keep record of their, ideas, details, and some points on the posters that reflect their understanding of a specific concept. Besides, students can brainstorm together for a few minutes about a question or topic while they are standing at each station of the Carousel. That is so say that students collaborate and discuss in their groups, which results in brainstorming new thoughts for their task.

Furthermore, Edmund (1999; as cited in Hanton, cropley, Neil, Mellalieu & Miles, 2008) indicated that smaller focused groups seem to be able to generated more ideas and investigate them more deeply. According to Camacho and Paulus (1995), group brainstorming and individual brainstorming can both be productive in the case social anxiety is controlled. That is, the teachers should be aware of the negative role of elements like trait anxiety and fear of negative evaluation when using brainstorming to build an interactive environment in classrooms.

**RESEARCH QUESTION**

The present study set out to respond to this research question:

**RQ:** Is there any significant difference between the effect of using Fishbowl and Carousel Brainstorming strategies on EFL learners’ Foreign Language Classroom Anxiety?

In line with the above research question, the following null hypothesis was formulated:

**H0:** There is no significant difference between the effect of using Fishbowl and Carousel Brainstorming strategies on EFL learners’ Foreign Language Classroom Anxiety.

**METHOD**

**Participants**

The participants of the present study were 60 intermediate EFL students studying English in Tehran University English School, Department 3 in Tehran who were selected out of 90 EFL students based on convenient sampling procedure and their scores on a sample PET test. Their age ranged from 20-40 years. The participants were assigned into
two experimental groups, namely, Fishbowl and Carousel Brainstorming, each containing 30 intermediate EFL students.

**Instrumentations and Materials**

**Preliminary English Test (PET)**

In order to homogenize the participants' language proficiency, a sample of PET was administered. The Preliminary English Test consists of four main parts: It covers all four language learning skills, namely, writing, reading, speaking and listening. The rating scale used for different sections of PET in this study was the one presented by Cambridge: A guide to converting practice test scores to Cambridge English Scale scores. According to the reading section of the scale for all the five parts are worth one score each which probably result in thirty-five scores. In the writing section, each answer gets a score in the first part, the second part is marked using a short answer and the possible sum of marks is five. The third parts scores also range from 0-5. The total possible score for writing could be twenty-five. In the listening paper, each of the correct answers get one mark each which result in twenty-five scores for this section. For the speaking section, the participants take the test in pairs but their performance is assessed individually.

**Foreign Language Classroom Anxiety Scale (FLCAS)**

In order to assess the participants' foreign language classroom anxiety level, the Foreign Language Classroom Anxiety Scale (FLCAS) designed by Horwitz et al. (1986) was administered. This self-report instrument comprises 33 items and allocates specific items to communication apprehension, fear of negative evaluation and it tests anxiety as the basic components of foreign language anxiety. In other words, the FLCAS questionnaire is originally developed to capture the specific anxiety reaction of a learner to a foreign language situation. The FLCAS can be considered as a quantitative five-point Likert-scale questionnaire ranging from 5 point (strongly agree) to 1 point (strongly disagree). Horwitz et al. (1986) claims that the 33 items in this questionnaire have significant part-whole correlations with the total scale. Besides, the items were balanced for wording to reduce the effect of familiarity and negative response sets. It is worth noting that the FLCAS questionnaire in Farsi was retrieved from Sanaei, Zafarghandi and Khalili Sabet (2015) in order to prevent the impact of proficiency and promote understanding of the items.

**Contemporary Topics 1: Academic Note Taking and Listening Skills 3rd Edition**

For all the participants in the both groups, the *Contemporary Topics 1: Academic Note Taking and Listening Skills 3rd Edition* textbook was used as their course book during a period of one semester. Contemporary Topics 1: Academic Note Taking and Listening Skills 3rd Edition (Solorzano & Frazier, 2009) is a four-level book that prepares learners for academic challenges and lectures by university professors. In this book, learners practice conversation, listening, and note taking skills. Academic lectures in this book are collected from various and updated fields that reflect the true realm of colleges. Each section of the book covers the most challenging issues of the day. The books of this series are available at four levels (intro, level 1,2,3) in accordance with the American system.
with audio and video files for enhancement of listening skills and note taking techniques, and somewhat speaking skill for the academic period by Pearson Longman Publications. The vocabulary of this series is corpus-based and taken from the list of academic vocabulary.

**Teacher Made Posters**

In order to achieve the aim of the study, the researcher prepared posters made from the content of the course book-Contemporary Topics 1: Academic Note-Taking and Listening Skills, which was used in the implementation process of Fishbowl and Carousel Brainstorming strategies.

**Procedure**

Initially, 60 intermediate EFL students were selected based on PET Test. Afterwards the participants were assigned into two experimental groups, i.e., Fishbowl and Carousel Brainstorming, each containing 30 intermediate EFL students. Moreover, the Foreign Language Classroom Anxiety Scale (FLCAS) designed by Horwitz et al. (1986) was administered in order to measure the participants’ level of foreign language classroom anxiety before receiving any type of treatment.

During the course, the participants in the Fishbowl group were divided into groups of four or five members. They were instructed through Fishbowl strategy. In this group, the provided posters were set on the walls with the intention of allowing learners have richer input to form their notions. Then, the students listened to the audio of the session to aid them find the right questions. Then, the participants formed two circles, and the instructor played the audios of the session. Subsequently, the Fishbowl group read a question and discussed it. Before beginning the Fishbowl task, the educator reviewed EFL students studying English guidelines for having a respectful discussion. After that, the educator asked the learners to reflect on how they think the discussion went and what they learned from it.

However, the participants in the Carousel Brainstorming group received different techniques of Carousel Brainstorming. The students were divided into the groups and all the students were provided with some posters. The groups quickly brainstormed their answers to the issues cited in the posters. After few minutes, the Carousel Brainstorming groups were expected to replace to the next set of information. After each team rotated one full cycle, they read over what had been written on the provided posters and added their own notions.

At the end of the study, the Foreign Language Classroom Anxiety Scale (FLCAS) designed by Horwitz et al. (1986) was administered in order to measure the participants’ level of foreign language classroom anxiety after receiving their treatment.

**Statistical analysis**

A series of descriptive and inferential statistics were employed in this study. Since in this study the pretest was considered as the covariate of the study, the researchers run an ANCOVA in order to reject or maintain the null hypothesis of the study.
RESULTS

Descriptive Statistics of FLCAS Pretest

Once the two experimental groups were in place, the Foreign Language Classroom Anxiety Scale (FLCAS) was administered to them. Table 1 below shows the descriptive statistics for the FLCAS pretest.

Table 1. Descriptive Statistics of the Two Groups on the FLCAS Pretest

<table>
<thead>
<tr>
<th></th>
<th>N</th>
<th>Minimum Statistic</th>
<th>Maximum Statistic</th>
<th>Mean Statistic</th>
<th>Std. Deviation Statistic</th>
<th>Skewness Statistic</th>
<th>Std. Error Statistic</th>
</tr>
</thead>
<tbody>
<tr>
<td>Fishbowl</td>
<td>30</td>
<td>117.00</td>
<td>147.00</td>
<td>134.200</td>
<td>8.88004</td>
<td>-.519</td>
<td>.427</td>
</tr>
<tr>
<td>Carousel Brainstorming</td>
<td>30</td>
<td>106.00</td>
<td>152.00</td>
<td>130.533</td>
<td>12.36439</td>
<td>-.160</td>
<td>.427</td>
</tr>
<tr>
<td>Valid N (listwise)</td>
<td>30</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

The mean and the standard deviation of the Fishbowl group were 134.200 and 8.88, respectively, while those of the Carousel Brainstorming group stood at 130.53 and 12.36, respectively. Furthermore, the skewness ratios of both groups fell within the acceptable range (-0.519 / 0.427 = -1.215 and -0.160 / 0.427 = -0.374) thus running a parametric test was legitimized so far.

Descriptive Statistics of FLCAS Posttest

Following the termination of the treatment, the same Foreign Language Classroom Anxiety Scale (FLCAS) was administered to both groups as the posttest. Table 2 below shows the descriptive statistics for the FLCAS posttest.

Table 2. Descriptive Statistics of the Two Groups on the FLCAS Posttest

<table>
<thead>
<tr>
<th></th>
<th>N</th>
<th>Minimum Statistic</th>
<th>Maximum Statistic</th>
<th>Mean Statistic</th>
<th>Std. Deviation Statistic</th>
<th>Skewness Statistic</th>
<th>Std. Error Statistic</th>
</tr>
</thead>
<tbody>
<tr>
<td>Fishbowl</td>
<td>30</td>
<td>101.00</td>
<td>143.00</td>
<td>120.333</td>
<td>11.34820</td>
<td>.348</td>
<td>.427</td>
</tr>
<tr>
<td>Carousel Brainstorming</td>
<td>30</td>
<td>72.00</td>
<td>106.00</td>
<td>90.8667</td>
<td>8.81509</td>
<td>-.232</td>
<td>.427</td>
</tr>
<tr>
<td>Valid N (listwise)</td>
<td>30</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

The mean and the standard deviation of the Fishbowl group were 120.33 and 11.34, respectively, while those of the Carousel Brainstorming group stood at 90.86 and 8.81, respectively. Furthermore, the skewness ratios of both groups fell within the acceptable range (0.348 / 0.427 = 0.814 and -0.232 / 0.427 = -0.543) thus running a parametric test was legitimized so far.

Testing the Null Hypothesis

In order to test the second null hypothesis, a set of ANCOVA was run on both groups’ scores on FLCAS pre- and posttests. The test and its preconditions are discussed in the following sections.
All sets of scores, of course, enjoyed normalcy as demonstrated earlier (Tables 1, and 2); hence, this prerequisite need not be discussed. With the first assumption of normalcy in place, the second procedure was testing the homogeneity of variance for which the Levene's test was run; as is shown in Table 3 below, the variances were not significantly different ($F(1,58) = 2.528, p = 0.117 > 0.05$).

**Table 3. Levene’s Test of Equality of Error Variances**

<table>
<thead>
<tr>
<th></th>
<th>$F$</th>
<th>df1</th>
<th>df2</th>
<th>Sig.</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>2.528</td>
<td>1</td>
<td>58</td>
<td>.117</td>
</tr>
</tbody>
</table>

a. Design: Intercept + Group + FLCA pretest

As one covariate is being investigated (the pretest), the third assumption of the correlation among covariates did not apply in this case. The fourth assumption is that of homogeneity of regression slopes. Table 4 below shows that the interaction (i.e. Group* FLCA Pretest) is 0.488 which is larger than 0.05 thus indicating that the assumption of homogeneity of regression slopes has not been violated.

**Table 4. Tests of Between-Subjects Effects (1)**

<table>
<thead>
<tr>
<th>Source</th>
<th>Type III Sum of Squares</th>
<th>df</th>
<th>Mean Square</th>
<th>$F$</th>
<th>Sig.</th>
<th>Partial Eta Squared</th>
</tr>
</thead>
<tbody>
<tr>
<td>Corrected Model</td>
<td>13082.587</td>
<td>3</td>
<td>4360.862</td>
<td>41.183</td>
<td>.000</td>
<td>.688</td>
</tr>
<tr>
<td>Intercept</td>
<td>3794.595</td>
<td>1</td>
<td>3794.595</td>
<td>35.835</td>
<td>.000</td>
<td>.390</td>
</tr>
<tr>
<td>Group</td>
<td>2.135</td>
<td>1</td>
<td>2.135</td>
<td>.020</td>
<td>.888</td>
<td>.000</td>
</tr>
<tr>
<td>FLCA pretest</td>
<td>.032</td>
<td>1</td>
<td>.032</td>
<td>.000</td>
<td>.986</td>
<td>.000</td>
</tr>
<tr>
<td>Group * FLCA</td>
<td>51.514</td>
<td>1</td>
<td>51.514</td>
<td>.486</td>
<td>.488</td>
<td>.009</td>
</tr>
<tr>
<td>Error</td>
<td>5929.813</td>
<td>56</td>
<td>105.890</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Total</td>
<td>688094.000</td>
<td>60</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Corrected Total</td>
<td>19012.400</td>
<td>59</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

R Squared = .688 (Adjusted R Squared = .671)

With the above assumptions in place, running an ANCOVA was legitimized. According to Table 5 below, the pretest scores (the covariate in the model) came out not to be significant ($F = 0.065, p = 0.800 > 0.05$) thus demonstrating that prior to the treatment, there was no significant difference between the two groups in terms of their foreign language classroom anxiety. With the eta squared of 0.001, the pretest covariate accounted for almost zero percent of the overall variance.

**Table 5. Tests of Between-Subjects Effects (2)**

<table>
<thead>
<tr>
<th>Source</th>
<th>Type III Sum of Squares</th>
<th>df</th>
<th>Mean Square</th>
<th>$F$</th>
<th>Sig.</th>
<th>Partial Eta Squared</th>
</tr>
</thead>
<tbody>
<tr>
<td>Corrected Model</td>
<td>13031.073</td>
<td>2</td>
<td>6515.536</td>
<td>62.091</td>
<td>.000</td>
<td>.685</td>
</tr>
<tr>
<td>Intercept</td>
<td>4595.841</td>
<td>1</td>
<td>4595.841</td>
<td>43.797</td>
<td>.000</td>
<td>.435</td>
</tr>
<tr>
<td>Group</td>
<td>12745.158</td>
<td>1</td>
<td>12745.158</td>
<td>121.457</td>
<td>.000</td>
<td>.681</td>
</tr>
<tr>
<td>FLCA pretest</td>
<td>6.806</td>
<td>1</td>
<td>6.806</td>
<td>.065</td>
<td>.800</td>
<td>.001</td>
</tr>
<tr>
<td>Error</td>
<td>5981.327</td>
<td>57</td>
<td>104.936</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Total</td>
<td>688094.000</td>
<td>60</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Corrected Total</td>
<td>19012.400</td>
<td>59</td>
<td></td>
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</table>

R Squared = .685 (Adjusted R Squared = .674)
Furthermore, there was a significant relationship between the covariate (the FLCA pretest) and the dependent variable (the FLCA posttest) while controlling for the independent variables ($F = 121.457, p = 0.000 < 0.05$). Hence, the null hypothesis of the study which stated that there was no significant difference between the effect of using Fishbowl and Carousel Brainstorming strategies on EFL learners' foreign language classroom anxiety was rejected with those in the Carousel Brainstorming group who gained a lower mean bearing a significantly lower degree of foreign language classroom anxiety than those in the Fishbowl group. Additionally, the difference between the two aforementioned groups in their FLCA posttest is depicted in the Figure 1 below.

![Figure 1. Marginal Means](image)

**DISCUSSION**

The primary purpose of this study was to examine the comparative effect of Fishbowl and Carousel Brainstorming strategies on EFL students' foreign language classroom anxiety. The results of ANCOVA showed that there was a significant difference between the effect of Fishbowl and Carousel Brainstorming strategies on EFL students' foreign language classroom anxiety. That is the participants in the Carousel Brainstorming group outperformed their counterparts in the Fishbowl group concerning having lower level of foreign language classroom anxiety.

In other words, Carousel Brainstorming strategy had a more significant positive effect in reducing foreign language classroom anxiety of EFL learners. Needless to say, as no study was conducted previously on the comparative effect of Fishbowl and Carousel Brainstorming strategies on EFL students' foreign language classroom anxiety, it was not feasible to compare this finding with those of other studies.
One possible justification for the findings of the present study might be the fact that “brainstorming provides a free and open environment that encourages everyone to participate (AlMutairi, 2015, p. 137), as a result, the participants’ level of foreign language classroom anxiety decreases. Moreover, the positive effect of Carousel Brainstorming strategy in reducing the level of foreign language classroom anxiety of language learners might be attributed to the advantages of Carousel Brainstorming strategy that are accepted among learners. As aptly pointed out by AlMutairi (2015), “some of those advantages are the preparing element and making students ready to participate in the sessions as well as joy environment that provide students with a free climate that doesn’t contain any critics and interference” (p. 144).

CONCLUSION AND IMPLICATIONS

This study tried to investigate the comparative effect of two different cooperative leaning strategies, namely, Fishbowl and Carousel Brainstorming strategies, on intermediate EFL students’ foreign language classroom anxiety. The results of an ANCOVA revealed that the null hypothesis was rejected with those in the Carousel Brainstorming group who gained a lower mean bearing a significantly lower degree of foreign language classroom anxiety than those in the Fishbowl group. In other words, Carousel Brainstorming strategy instruction had a more significant positive influence in reducing the EFL students’ foreign language classroom anxiety than Fishbowl strategy instruction.

In conclusion, it seems that our EFL teachers in Iran need to include some strategies, which are influential in their students’ oral performance and level of anxiety, in their curriculum, elevates their students’ knowledge about them, and recommend that their students use the opportunities provided by Carousel Brainstorming strategy. Consequently, by encouraging the learners to use these opportunities in the process of speaking, teachers will assist in creating less anxiety provoking atmosphere in speaking courses. Furthermore, through studying the results of the present study, EFL learners should realize if they play an active role in the process of Carousel Brainstorming Strategy, they can reduce their level of foreign language classroom anxiety and consequently develop their language skills. Finally, based on the findings of this study, EFL syllabus designers are encouraged to prepare EFL materials in a way that learners are given the chance to engage in cooperative learning strategies like Carousel Brainstorming.

REFERENCES


