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## Impact of Using the STAD Model of Cooperative Learning on Autonomy and Attitude of Iranian Secondary School EFL Learners

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#### Abstract

This quasi-experimental study investigated the impact of cooperative learning on Iranian secondary school EFL learners' Autonomy and attitude. To achieve the purpose of the study, 142 EFL students were selected based on their performance on the Oxford Quick Placement Test (OQPT). The students were divided into an experimental group receiving treatment through the STAD model of cooperative learning and a control group devoid of the stated treatment. To recognize the entry behaviors of the participants, pretests were run. The same educational content was taught to both EG and CG during an educational term. Furthermore, to disclose the effect of treatment, an autonomy posttest similar to the pretest but in rearranged order in options and items, and also an attitude posttest with the same characteristics were administered to the students in both groups at the end of the instruction. Moreover, the mean scores of autonomy and attitude questionnaires were compared via a one-way ANCOVA, and chi-square respectively. The outcomes showed the rejection of both null hypotheses consequently concluding that cooperative learning had a significant effect on the autonomy and attitude of Iranian EFL learners.

Keywords: Attitude; Autonomy; Cooperative Learning; Iranian EFL learners; STAD

#### **1. Introduction**

Cooperative learning is a useful teaching technique in which small teams, each with students of different levels of ability, use a variety of learning activities to improve their understanding of a subject matter and

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it can improve learners' autonomy and attitude as well. Numerous studies corroborate the effectiveness of working in small groups regarding their overall achievements, and social skills and also reported incremental changes in learners' progress. (Barkley, Major, & Cross, 2014; Johnson & Johnson, 1994; Strobel & Van Barneveld, 2009). In CL, the learners are expected to devise their activities to practice without the immediate intervention of the teacher. Thus, the crux of the matter is how to exercise autonomy in CL in the classroom environment and extend beyond it in a social setting.

In the context of foreign language learning, Holec (1981) defines autonomy as "the ability to take charge of one's own learning" (p.3). An autonomous learner is therefore a person who is capable of taking charge of his or her own learning.

The researchers noticed Iranian EFL students' deficiencies in autonomy and they must educate students to develop this essential skill. All in all, there may be a broad body of research on autonomy, but its relation to the CL is to some extent underemphasized, especially in the Iranian context, and particularly among secondary school EFL learners. The researcher's endeavor in this study was to improve autonomy through improved social relations in cooperative learning. Finally, by removing structural gradually, and decision-making elements shifting responsibilities to learners we can make learners more autonomous. But this retreat should be planned, and it must be a systematic withdrawal of support.

Another dependent variable that should be taken into account is attitude. Since in CL the teacher intervention in different stages including setting the goals, performing the tasks, designing the activities, and so on is not considerable; students can develop skills to facilitate positive teamwork experiences in cooperative learning, and due to low stress and non-threatening situation, their attitudes toward learning are strongly encouraged. Since CL makes learning more interesting, provides fun, does in satisfactory situations and students' socialization is enhanced; therefore, their attitude toward collective learning may be improved. Students notice that during the assigned work, they are responsible for work, and committed to the success of each member and their group. Eventually, the researcher hypothesizes that a less stressful situation in CL provides a positive attitude and lessens the number of school leavers.

All in all, in CL students work from beginning to end the assignment until all group members successfully comprehend and complete it. They work in a group to gain from each other's efforts; they share a common fate, work in cooperation and feel proud of group success. Through cooperative group work, the learners gain their goals and develop their communicative skills by practicing collective learning. Slavin (1990) defines CL as a kind of class technique that heartens students to perform all kinds of learning activities in groups or small teams, helps study some materials and rewards students for achievements or performance of the entire group, enhances teacher-student, and student-student interactions, promotes students to carry out cooperative learning efficiently.

Despite the fact that some studies have been done on the effect of autonomy on learning, the relationship between autonomy and cooperative learning has been underestimated. The majority of the studies in this field show that increased autonomy has an encouraging effect on EFL learning; on the other hand, also studies on CL and the attitude of Iranian secondary school EFL learners are not too many. It seems that more studies should be done to further illustrate it.

Last but not least; an effort was made to find appropriate and plausible answers to the following research questions:

- 1. To what extent does using the STAD Model of cooperative learning impact the autonomy of Iranian secondary school EFL learners?
- 2. What is the attitude of Iranian secondary school EFL learners towards using the STAD Model of Cooperative Learning?

#### 2. Literature Review

#### 2.1. The theoretical review of learner autonomy

The notion of autonomy in language learning started in the late 1960s through an adult movement in Europe and North America, and for many years it continued to be related to adult learners who had left formal education (Benson, 2004). Therefore, the earliest work on autonomy was chiefly concerned with learners who were learning on their own.

As mentioned above from the 1960s, with the alteration from teacheroriented to learner-oriented in education, learner autonomy has become a scorching topic in foreign language research. It has been verified by many scientists and educators (e.g., Broady & Kenning, 1996; Benson, 1997; Benson 2004; Allford & Pachler, 2007; Jiménez Raya & Lamb, 2008). They confirmed that one of the most imperative goals in education is to enhance learner autonomy. Little (1991) also strongly confirmed that developing learner autonomy has increasingly been regarded as the ultimate purpose of foreign language instruction, and it helps to develop effective teaching and learning.

Holec in the year 1981 published a book named Autonomy and Foreign Language Learning. This book suggested the primary attempt at learner autonomy. Since then, learner autonomy has gained momentum and become the focus of relevant research in the past four decades. Normally, autonomy can be understood as the capability of taking charge of one's own learning.

The definitions of learner autonomy have been changing with time, among which Holec's (1981) has remained the most widely cited definition in the world. "Ability" is often replaced by "capacity", while "take charge of" is often replaced by "take responsibility for" (Benson, 2011). It pays much attention to a characteristic of learners rather than learning conditions.

In the context of foreign language learning, Holec (1981) defines autonomy as "the ability to take charge of one's own learning". An autonomous learner is therefore a person who is capable of taking charge of his or her own learning.

Upon glancing at the different definitions and meanings of learner autonomy, based on what is presented by Shu and Zhuang (2008), Han (2013, 2014) devised an operational definition for the term as follows. Learner autonomy has the following three essential features. Firstly, learner autonomy refers to the motivation for learning and the language learner's attitude. Language learners are willing to take an active attitude and motivation toward their language study and take responsibility for the study. Secondly, learner autonomy is regarded as the capacity of learning. Through student training and teacher support, language learners can progress in the process of learning independently. Thirdly, the improvement of learner autonomy cannot be implemented without a supportive setting or cooperative context. Here setting includes the teacher's guidance in groups, teaching and learning facilities, and infrastructures.

Based on the above argument, we conclude that it is plausible to develop learner autonomy within a cooperative environment or context. The reason for a brief investigation of learner autonomy and its implications in language teaching and learning is the inquiry and analysis of promoting learner autonomy through cooperative learning in Iran. Finally, by removing structural elements gradually, and shifting decisionmaking responsibilities to learners we can make learners more autonomous. But this retreat should be planned, and it must be a systematic withdrawal of support. Dornyei and Murphey (2003) obviously discussed this argument:

"When the group matures and is ready to acquire more interpersonal and group skills, the teacher should further decrease his or her active presence in the group reaching what might seem a laissez-faire leadership style but of course, this is a well-prepared withdrawal of the scaffolding, rather than an abandonment of leadership responsibilities (p. 99)."

## 2.2. Empirical studies on cooperative learning and autonomy

Shi and Han (2019) in an investigation scrutinized how to promote learner autonomy through cooperative learning. The findings of this study revealed that cooperative group learning can promote and develop learner autonomy. They presented the following points as a result of their endeavor.

First, the awareness of learner autonomy should be further raised and increased. Language teachers should help students learn and increase their content knowledge, and learner autonomy. Afterward, students are supposed to be aware of how cooperative group learning assists to develop their learner autonomy.

What's more, learner autonomy should be an indispensable part of the teacher's professional understanding. The teachers are supposed to

understand well what learner autonomy is and how significant it is. If language teachers lack the knowledge or awareness to develop learner autonomy, how can they be expected to play their pivotal roles in promoting learner autonomy? Thus, the effectiveness of the development of learner autonomy depends heavily on teachers' ability to be competent enough to facilitate and focus on knowledge of learner autonomy.

Myskow et al. (2018) stated that both cooperative and collaborative Learning is helpful, and can play valuable roles in the advancement of collaborative autonomy. They discussed that highly structured Cooperative Learning activities should not be observed as an instructional goal but as a means for promoting more autonomous and collaborative group formations. Numerous cooperative learning activities were delivered to show how they can be revised and expanded to offer more opportunities for autonomous communication. They highlighted that group interactions should not be unstructured, but they may be increasingly de-structured over time to encourage more spontaneous interaction and greater control among students of their own learning.

Dafei (2007) conducted research to explore the relationship between learner autonomy and students' English proficiency. He recommends that teachers should stimulate learner autonomy "by cultivating positive attitudes, giving students more responsibility, teaching-learning strategies, and guiding reflection" (p. 16). The result of this study showed that learner autonomy and English proficiency were significantly and positively correlated.

In another study, Yahong (2009) illuminated how, as an English language teacher, she assisted her students improve learner autonomy. She could not evaluate the level of learning of each student but three particular students were evaluated and it was reported that they had a lot of growth in setting their goals, making decisions, working hard according to their plans, and even discovering new strategies.

# 2.3. Theoretical and empirical literature review of attitude and cooperative learning

2.3.1. Language attitude and attitude change

Attitude has been identified from different perspectives, varying in specificity and complexity. Eagly and Chaiken (1993) presented an agreed-upon definition and reported that attitude is a psychological tendency that is expressed by evaluating a particular entity with some degree of favor or disfavor. Considering this definition, attitudes are directed toward an entity, known as the attitude object, which can be anything distinguished by the individual (Eagly & Chaiken 2007). Thus, language can represent an object being seen as favorable or unfavorable (Baker, 1992). Nevertheless, the term language attitudes is an overarching term, which refers to numerous attitudinal objects, including languages, dialects, speech styles, speakers, communities, language learning, language use, etc.

Besides, language attitudes have been intensively investigated in the context of language learning, within the framework of the Socio-Educational Model of Second Language Acquisition (Gardner 1985) or the L2 Motivational Self System theory (Dörnyei, 2009). Gardner (1985) introduced the most used instrument which is the Attitude/ Motivation Test Battery (AMTB), which measures attitudes toward language learning, the learning situation, and the language community. Eventually, Sharp et al. (1973), and Baker (1992) devised research traditions focused on attitudes towards languages. Attitudes towards languages are regularly judged through questionnaires that consist of dichotomous or Likert scale items.

Furthermore, there is an agreed-upon belief among researchers that attitude is dynamic, and changes gradually (Bohner & Dickel, 2011; Crano et al., 2010; Petty et al., 2003; Wood, 2000). Petty and Wegener (1998) stated that attitude change means that a person's evaluation is modified from one value to another. On the other hand, Eagly and Chaiken (2014) hold a divergent view on this topic and claimed that strong attitudes are firmly crystallized and relatively resistant to change. Baker (1992) contended that language attitude change can be encouraged by personal experiences, important events (e.g., violent episodes, mass protests, and government-imposed policies), communities, families, peer groups, institutions, and mass media. Moreover, Mantle (1995) unveiled that specially designed language learning programs can enhance language

attitudes. Additionally, Gardner and his associates (2004) found that the classroom environment and students' academic results also determined changes in language attitudes.

## 2.3.2. Empirical review of attitude and cooperative learning

Van (2017) in Quasi-experimental research scrutinized the effects of STAD on student achievement, attitude, and motivation in economics education. Three research instruments, a Test of Economic Literacy (TEL); a Motivation Scale, and an Economics Modular Test were employed for the purpose of that study. Results revealed that STAD compared to direct instruction fostered positive attitudes, showed better achievements, and motivated students to learn in economics education.

In another study, Koos et al (2010) investigated the effects of cooperative learning on eighth-grade students' achievement and attitude toward science. A number of 68 students from two different eighth-grade classrooms in an elementary school participated in this study. The experimental group and the control group were selected randomly. Cooperative learning was employed as a treatment in the experimental group, while in the control group, traditional instruction was run in order to teach the unit "Reproduction and Development of Living Organisms." This study spanned a five-week period. In order to assess the treatment effects, Science Achievement Scale (SAS) and Attitude Scale toward Science (ASTS) were administered as pre-and post-tests to both groups. The statistical analysis demonstrated that the students in the experimental group had better performance on post-SAS and post-ASTS scores.

Additionally, Winston (2010) examined the effects of cooperative learning on the achievement in and attitudes toward mathematics of a group of 5th-grade students of color in a culture different from the United States (i.e., Bermuda). Students participated in 12 weeks of R. Slavin's (1978) Student Teams Achievement Division method of cooperative learning in mathematics. Students completed 2 measures: the computation and application sections of the California Achievement Test (1985) Form E (Level 14) and Penelope Peterson's Attitude toward Mathematics Scale for Grades 4-6 Students at 4 different intervals. The measures were completed as pretests at the beginning of the semester (before students were exposed to cooperative learning) and as posttests at the end of Weeks 5, 9, and 13. Data were analyzed with a 1-factor (4 levels) repeated measures analysis of variance design to determine whether there were important differences among the pre-and post-test scores. Results showed that there was a positive enhancement in attitudes and achievement.

Moreover, Akhtar et al (2012) set out a study to inspect the attitudes about cooperative learning in the domain of group projects of graduating students of the Departments of Statistics and Economics of Arid Agriculture University Rawalpindi. The data analysis presented that students had positive attitudes to do work in group projects along with associated cooperative learning methods. The results of that study recommended that students could be developing different attitudes toward teamwork from their learning experiences.

Furthermore, Reda (2015) investigated students' attitudes toward the cooperative learning method at Wolaita Sodo University. A number of 48 students participated in this study. After collecting the necessary data through semi-structured questionnaires and performing data analysis the results showed that the participants have a positive attitude towards cooperative learning methods and the difference between male and female participants regarding their attitudes towards the learning methods was meaningful that is, female participants had more positive attitude rather than their counterparts. The results of the study also provided insight for students to perceive cooperative learning more seriously and also offered to design some interactive activities to foster quality instruction.

## 3. Methodology

## 3.1. Participants

One hundred and forty-two EFL students who were chosen from Chaharmahal-and-Bakhtiari province took part in this study due to their availability. The researcher takes into account that stratified sampling is a valuable combination of categorization, and randomization, therefore; the participants were chosen based on stratified sampling. This sampling method is applicable when the population has mixed characteristics such as educational level, and you want to ensure that every characteristic is proportionally represented in the sample. All of the participants were at the senior high school, and they were male as well. The first language of all the students was Persian and they were all 16 years old. In order to make the groups homogeneous and also to identify the entry behavior of the students, the Oxford Quick Placement Test (OQPT) was administered. Eventually, the students were divided into two experimental groups receiving treatment through STAD and two control groups devoid of the stated treatment.

#### 3.2. Instrument(s)

#### 3.2.1 Oxford Quick Placement Test (OQPT, 2001)

OQPT which was a standardized test was used as a general proficiency test before embarking on the research. To meet the assumptions of the current research, it is essential to detect the level of proficiency of the participants. Thus, by administering OQPT we can identify the students' levels of proficiency, and their entry behavior, and then make heterogeneous sub-groups.

This test consisted of 60 items developed by the University of Cambridge Local Examinations Syndicate. The test is divided into two parts: part one contained 40 items: testing situations (five questions), cloze passages– testing prepositions, grammar, pronouns, and vocabulary– (15 questions), and completion items (20 questions). The second part contained 20 items; 10 questions on cloze passages and 10 completion-type items. All items were in multiple-choice format and their reliability and validity have already been established.

#### 3.2.2 Learner Autonomy Questionnaire (LAQ)

The learner autonomy questionnaire (LAQ) was designed by Zhang and Li (2004). It was administered for the purpose of self-assessment to see how autonomous the participants were in learning English as a foreign language. The questionnaire included eleven statements in a five-point Likert scale format and 10 multiple choice items. It shows whether learners will display a greater degree of control in learning or not.

Students' level of autonomy was investigated in both pre-test and posttest utilizing this questionnaire, and the questionnaire had been proved to have high content validity and high reliability. To avoid misunderstanding, the Persian version of the autonomy questionnaire was required. Additionally, Nematpour (2012) reported that the Persian version of the questionnaire had been proven to have high content validity and high reliability.

#### 3.2.3 Attitude Questionnaire by McLeish (2009)

A uni-dimensional survey questionnaire including 12 items developed by McLeish (2009) was distributed among the participants in order to determine their views about using cooperative techniques and its impact on their overall achievement. The questionnaire survey technique is a very effective tool since it enables large-scale numerical data to be obtained over a short period of time. It can also be easily administered. In this particular study, the researcher gained numerical data to indicate students' views on the cooperative learning STAD model.

Furthermore, in order to calculate the validity of translated version of the questionnaire, Waltez & Basal, (1981) method was adopted. This method explains that the experts determined the "relevancy", "clarity" and "simplicity" of each statement of the questionnaire, based on a four-point Likert scale. The content validity index was assessed by dividing the number of experts who scored the items 3 or 4 points by the total number of experts. Finally, the content validity index was 0.84. Besides, Cronbach's alpha reliability of the questionnaire was 0.78 for the attitude questionnaire. Thus, it became clear that the translated version was a valid and reliable instrument and it can be used in the main study.

All efforts were made to avoid personal bias and the nature of the study was explained to the participants and their consent was granted before recording the data. In order to avoid confusion, the Persian equivalent was administered to the learners. As for the reliability of the translated version, it was piloted with 30 students with comparable characteristics as the main participants of this study.

Cronhach's Alpha reliability coefficient was calculated to be .76 for this test which revealed a satisfactory level of reliability. This manifestation indicated that the translated version of the questionnaire was reliable. For the sake of internal validity, the participants were requested for feedback to recognize ambiguities and problematic questions. The analysis of the data gathered from the pilot study, using Principal Components Analysis, revealed that the questionnaire was internally valid and the implementation of it was practical.

## 4. Results

## 4.1. Autonomy

The first research question of the study addressed the issue of whether exposure to the STAD model of CL would lead to the significant augmentation of EFL learners' autonomy or not. To find an answer to this research question, the pre-experiment autonomy scores of the EG and CG learners were controlled for while their post-experiment autonomy scores were compared through a one-way ANCOVA, the results of which are provided in the following tables:

	N Mean Std. Skewness Kur		Kurto	rtosis			
			Deviation				
	Statistic Statistic Statistic Statistic Std. ErrorStatistic				icStd.		
							Error
EG Autonomy	75	40.28	9.62	.75	.27	08	.54
Posttest	15	40.28	9.02	.75	.21	08	.94
CG Autonomy	66	29.90	10.06	.36	.27	.14	.54
Posttest	00	27.70	10.00	.50	.21	.14	.54

Table 1. Descriptive Statistics for Comparing the Autonomy Posttest Scores of the EGand CG Learners

The mean score of the EG learners' autonomy posttest (M = 40.28) appeared to be larger than the autonomy posttest mean score of the CG learners (M = 29.90). The skewness and kurtosis values in Table 4.10 indicated that the distributions for autonomy posttest scores of the EG and CG learners were normal. Thus, one-way ANCOVA could be safely conducted. The results of this ANCOVA analysis are presented in Table 2:

Source	Type III Sum of	df	Mean	F Sig.	Partial Eta
	Squares		Square		Squared
Corrected Model	14090.59	2	7045.29	310.63.00	.81
Intercept	390.70	1	390.70	17.22 .00	.11
Pretest	10314.69	1	10314.69	454.78.00	.76
Groups	763.45	1	763.45	33.66 .00	.19
Error	3129.87	138	22.68		
Total	194171.00	141			
Corrected Total	17220.46	140			

Table 2. One-way ANCOVA Results for the Autonomy Posttest Scores of the EG and CGLearners

Table 2 shows a *p*-value (under the Sig. column and across the Groups row) less than the alpha level of significance (p < .05), indicating that there was a significant difference between the autonomy posttest mean scores of the EG and CG learners (40.28 > 29.90). This means that the EG learners' autonomy scores were positively affected due to the fact that they experienced the STAD model of CL in their English classes. The higher degrees of autonomy for EG learners than the CG learners level of autonomy could be spotted in Figure 1:



Figure 1. Autonomy Post-test Mean Scores Of The EG And CG Learners

It could be noticed in Figure 1 that the EG learners' autonomy was far greater than the CG learners' autonomy on the post-test, leading us to the conclusion that using the STAD model of CL had significant positive effects on EG learners' autonomy.

#### 4.2. Attitude

4.2.1 EG Learners' Attitudes towards STAD Model of CL

To investigate the EG learners' attitudes towards the treatment they received, a 12-item researcher-made Likert-scale attitude questionnaire was given to them to fill out. The results of the questionnaire were codified and tabulated, as shown in Table 3 below. Also, to examine the attitudes of the learners before and after the treatment, the frequencies obtained from the pre-experiment attitude questionnaire and those of the post-experiment attitude questionnaire were compared for each item, using chi-square.

No.	Pertest/Post- test	Strongly disagree	disagree	No opinion	Agree	Strongly Agree	Sig.
	Pretest/	18	19	22	8	7	
1	Posttest	12	14	15	13	21	.02
2	Pretest/	20	24	20	6	5	00
	Posttest	7	14	12	18	24	.00
	Pretest/	16	15	24	10	10	00
3	Posttest	7	12	10	18	28	.00
4	Pretest/	21	12	17	14	11	01
4	Posttest	8	10	14	21	24	.01
5	Pretest/	21	24	25	3	2	.00
5	Posttest	9	12	15	18	23	
6	Pretest/	19	24	15	8	9	.00
	Posttest	16	12	8	15	26	
7	Pretest/	23	21	16	11	4	.00
7	Posttest	12	9	15	20	29	
8	Pretest/	19	27	14	12	3	.00
	Posttest	2	13	10	18	33	
9	Pretest/	15	22	15	13	10	.00
	Posttest	2	8	12	22	31	
10	Pretest/	25	18	17	10	5	.00
10	Posttest	10	12	13	14	26	
11	Pretest/	24	21	10	11	9	.00
11	Posttest	7	11	10	18	29	
10	Pretest/	22	23	7	11	12	.00
12	Posttest	8	9	6	19	33	

Table 3. Results of the Attitude Questionnaire

In the questionnaire displayed in Table 3, item # 1 stated that the respondents willingly participate in cooperative learning activities. Prior to the treatment, many of the learners strongly disagreed (f = 18) or disagreed (f = 19) with this statement, while only 8 agreed and 7 strongly agreed with it. After the treatment, however, the obtained frequencies showed quite contrary results: 12 students strongly disagree and 14 students disagreed, while 13 students agreed and 21 students strongly agreed with the statement. The difference between the frequencies obtained in the pre-and post-treatment stages for the learners' attitudes was statistically significant as the *p*-value for this comparison was lower than the alpha level of significance (.02 < .05). This means that the learners' attitudes changed significantly after receiving the treatment.

This is true with all the other items in the questionnaire; that is, the differences between the pre-treatment attitudes and post-treatment attitudes of the learners were of statistical significance as all the p values lined up under the Sig. column was found to be lower than .05. To be more exact, the learners developed a positive attitude towards cooperative learning in the course of this experiment, while initially, their attitudes about CL were not that positive.

#### **5.** Discussion

#### 5.1. Addressing Research Question One

To answer the first research question, that is to what extent does using the STAD Model of CL had any impact on the autonomy of Iranian secondary school EFL learners the same procedures were followed, in the sense that paired-sample t-tests were run on the pretest and posttest scores of the EG. This investigation indicated that the EG learners' autonomy was promoted considerably from the pretest to the post-test. Also, it leads us to the conclusion that using the STAD model of CL had significant effects on EFL learners' autonomy. Thus, the fourth research hypothesis was rejected as well.

It is taken for granted that most of the students are interested in working in small groups and due to various reasons (such as positive interdependence, individual and group accountability, and enhancement of social skills), pointed out in the current study, most of students in EG groups stated that practicing autonomy in CL groups can facilitate their language learning as the findings of this endeavor showed statistical significance as well.

The researcher in this study concentrated on fostering autonomy via togetherness in small groups. Autonomous learners usually require an educational setting for implementation. In order to become autonomous learners, they are assumed to devise, monitor, and have feedback on their own performance. Benson (2001) stressed that the psychology of learning is extremely reinforced by constructivist approaches for the contention that "effective learning begins from the learner's active participation in the processes of learning" (p. 36).

This study is in sharp contrast to the study done by Benson (2001) who asserted that many students are capable of developing autonomy independently and without any educational efforts. The current study focused on fostering learners' autonomy by working together in a free-stressed educational setting (small groups). It was revealed in this attempt that when the students can take responsibility for their own learning, they will be autonomous learners.

The finding of this study is partly parallel with the study performed by Myskow et al. (2018). In that study, they stated that both cooperative and collaborative Learning is helpful, and can play valuable roles in the advancement of collaborative autonomy.

The previous studies on language learners' autonomy in the Iranian EFL context display that the concept has not been investigated holistically and has been usually narrowed down to one of its phases. (Nematipour, 2012; Nosratinia & Zaker, 2013; Ahmadi & Mahdavi-Zafarghandi, 2013).

This study is inconsistent with Dafei (2007) who researched to explore the relationship between learner autonomy and students' English proficiency. In that study Dafei recommended that teachers should encourage learner autonomy "by cultivating positive attitudes, giving students more responsibility, teaching-learning strategies, and guiding reflection"(p. 1). The result of that study eventually indicated that learner autonomy and English proficiency were significantly and positively correlated. By comparing and contrasting the procedures of this study with what Dafei has done we conclude that by providing students some responsibilities and strategies, learners' autonomy can be fostered.

In the same vein in another study, Yahong (2009) supported her students to improve learner autonomy in small groups. After evaluation, it was reported that they had a lot of growth in setting their goals, making decisions, working hard according to their plans, and even discovering new strategies. In this study, students' progress in autonomy was revealed based on designing their own instructional materials, monitoring, and problem-solving strategies.

This study is consistent with Teimourtash and Yazdanimoghadam (2018) who investigated the impact of fostering learner autonomy through implementing CL strategies on the inferential reading comprehension ability of Iranian EFL learners. The analysis of that endeavor confirmed that CL strategy training had a positive effect on the inferential reading comprehension ability of Iranian EFL undergraduates. All in all, as language learning is not confined to classroom walls and is a life-long endeavor, students should work within and beyond educational settings in order to be equipped with the necessary skills to deal with in the long run. So, in order to be competent enough during their educational and social lives, they are supposed to practice autonomy to become more autonomous. Moreover, autonomous learners can outperform the responsibilities they are given in their future life. That is why this study along with other studies emphasizes the notion of autonomy and autonomous behaviors, and to which a great deal of exploration has been dedicated as well. Eventually, the findings of the study showed that CL (STAD model) and the autonomy of students were greatly linked.

## 5.2. Addressing Research Question Two

To answer the second research question uncovering the impact of using the STAD Model of cooperative learning on the attitude of Iranian secondary school EFL learners, the results of the questionnaire were codified and tabulated. In order to inspect the attitudes of the learners before and after the treatment, the frequencies obtained from the preexperiment attitude questionnaire and those of the post-experiment attitude questionnaire were compared for each item, using chi-square. The outcomes showed that the learners developed a positive attitude towards CL in the course of this experiment, while primarily their attitudes about CL were not that positive.

language attitudes have been enormously investigated in the context of language learning, within the framework of the Socio-Educational Model of Second Language Acquisition (Gardner 1985) or the L2 Motivational Self System theory (Dörnyei 2009). Gardner (1985) introduced the most used instrument which is the Attitude/ Motivation Test Battery (AMTB), which measures attitudes toward language learning, the learning situation, and the language community. Also, Sharp et al. (1973), and Baker (1992) devised research traditions focused on attitudes towards languages. Furthermore, attitudes towards languages are regularly judged through questionnaires that consist of dichotomous or Likert scale items.

The findings of this study are in line with Amedu and Gudi (2017) who investigated the attitude of students towards CL in some selected secondary schools in Nasarawa State. In their study, the students were taught the jigsaw model of CL, and the 10-item JAQ questionnaire was used as an instrument to collect data. Also, the collected data were analyzed using percentages and the chi-square. The result of that study showed that students taught using the jigsaw model of CL developed positive attitudes toward the teaching strategy significantly.

The outcomes of the current research would agree with the endeavor done by Van (2017) who in research inspected the effects of the STAD model of CL on student achievement, attitude, and motivation in economics education. Three research instruments including a Test of Economic Literacy (TEL); a Motivation Scale and an Economics Modular Test were employed to fulfill the purpose of that study. The consequences unveiled that STAD compared to the traditional way of instruction enhanced positive attitudes among EG who received treatment.

The consequences of this study are in line with Koos, et al (2010) who investigated the effects of CL on eighth-grade students' achievement and attitude toward science. After collecting, and analyzing data, the statistical analysis of that investigation confirmed that the students in the experimental group had better performance on their post-scores. Moreover, Winston (2010) scrutinized the effects of CL on the achievement and attitudes toward mathematics of a group of 5th-grade students of color in a culture different from the United States. Like this investigation, the results of that study displayed that there was a positive enhancement in attitudes and achievement of the students after exposure to treatment.

Additionally, Akhtar et al (2012) set forth a study to check the attitudes about CL in the domain of group projects of graduating students of the Departments of Statistics and Economics of Arid Agriculture University Rawalpindi. The outcome of that study also presented that students had positive attitudes to do work in group projects rather than its counterpart individualized and competitive learning methods. The results of that study suggested that students could be developing different attitudes toward teamwork from their practicing in CL groups.

In another study, Reda (2015) scrutinized students' attitudes toward CL approach at Wolaita Sodo University. Contrasted to the current research with only male participants, male and female participants participated in that investigation. After collecting the required data through semi-structured questionnaires and performing data analysis, the outcomes revealed that the participants had a positive attitude towards cooperative learning approaches. Correspondingly, the difference between male and female participants concerning their attitudes toward the learning instructions was significant. Female participants had better performance regarding their attitudes rather than male participants.

The current study was in sharp contrast with the study done by Karali and Aydemir (2018) who concluded that CL did not have a significant effect on the attitudes of learners. In that study, they aimed to make known the effect of CL techniques on students' academic achievement and attitudes toward mathematics in primary school fourth-grade math classes.

The results of this effort showing an enhancement in students' attitudes toward learning in small groups are very similar to those of Gillies (2004) and Walmsley (2003). Those researchers indicated that there was much to be gained by encouraging the use of such a non-traditional pedagogical approach to teach in classrooms. They also mentioned that when schools are trying to encourage the development of positive attitudes toward learning, and other social skills; CL techniques could be beneficial.

#### 6. Conclusion

We can conclude from the results of this study that the learners generally had a willingness towards supporting the implementation of CL techniques in the process of teaching and learning. This study designated that the participants hold generally an optimistic view toward the implementation of CL in the educational environment. This is possibly the reason that when students work in small groups, they feel that they can rely on others for help and this gives them the confidence to solve learning troubles and enjoy their learning.

It can be concluded from the current study that walking around the learning autonomy and learning styles will contribute meaningfully to the Iranian secondary school EFL learners. Moreover, as autonomy plays a crucial role in language learning and acquisition, by knowing learners' degree of independence, teachers can devise instructional materials better. Similarly, such instructors who were attentive to learners' inclinations in learning styles are prosperous in their teaching. Leading students to be aware of their individual learning strengths and providing some challenges to fully comprehend their potential in instructional settings are required in the Iranian instructional environment. That's why, this study focused on learners' autonomy in order to enhance their responsibility in the learning and teaching context. Teachers may devise a variety of activities to provide their students with some chances to explore their learning styles and develop autonomy in their classes.

In sum, CL by creating a self-governing, peaceful, and non-threatening atmosphere, stimulate learners to be courageous enough to participate in group activities.

From the application of CL, it is inferred that CL can provide some astonishing enhancements concerning autonomy and enhanced positive attitudes among learners. As long as the students are delivered in a spoonfed fashion, they cannot make significant progress. For overall development, it is essential for learners to be able to monitor their own learning. With the implementation of CL, one can work out motivation as well. CL also inspires individuals to be motivated and prepared for reallife practices.

All in all, this study brings good news to teachers, learners, and curriculum developers interested in the potential of CL in secondary school EFL learners. However, the successful implementation of CL will necessitate substantial teacher planning. Likewise, Instruction of precise CL skills to students is significant. Eventually, it is indeed beneficial for EFL lower achievers to benefit from the small groups' capabilities.

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Appendix A: Persian Translation of Learners' Autonomy پرسشنامه بررسی استقلال یادگیرنده افراد

به منظور بررسی استقلال یادگیرنده ، لطفا با در نظر گرفتن شر ایط خود به سؤالات زیر پاسخ دهد. از همر اهی شما سپاسگزارم. ( <u>CL = یادگیری مشارکتی</u>)

قسمت اول: (A. هرگز B. به ندرت C. گاهی اوقات D. اغلب E. همیشه.)

- ۱. فکر می کنم با استفاده از CL توانایی یادگیری زبان انگلیسی را دارم. A B C D E .
- ۲. من از اوقات فراغت خود در تحقق اهداف تيم در CL استفاده مي كنم. A B C D E .
  - ۳. قبل از ورود به کار های تیمی در کلاس پیش مطالعه دارم.. A B C D E ...
- ٤. مي توانم كار خود را به موقع با كاركردن در CL به اتمام برسانم. A B C D E
- من یک سابقه از مطالعه خود را نگه می دارم ، مانند نگه داشتن دفتر خاطرات ، نوشتن
   نظر و غیره A B C D E
  - A B C D E . من خودم را با سوالات امتحاني كه خودم انتخاب كرده ام مى سنجم. ٦
  - ۷. هنگام اضافه کردن امتیاز به تیم ، به خودم پاداش می دهم مانند رفتن به خرید و غیره.
     A B C D E
    - ۸. با استفاده از CL در کلاس ، من برای فعالیت بیشتر در کلاس های خارج از کلاس شرکت می کنم. A B C D E
  - ۹. در حین کلاس مشارکتی و تیمی من سعی می کنم شانس شرکت در فعالیت هایی مانند بحث دو نفری ، گروهی، نقش بازی و غیره را بدست آورم. A B C D E

الف منتظر جواب ديگران باشيد ب فكر كنيد و آماده جواب دادن باشيد ب - در جستجوى كتابها ، فر هنگ لغت باشيد ت. سؤالات مربوطه را با همکاری معلم بیشتر باز کنید ث به بک بحث گر و هی بیبو ندید ١٧) وقتى يک كلمه اي را نمي داني چيكار مي كني: الف كارى با أن ندارم ب. از دیگران می پرسم <u>ب</u>. حدس می زنم ت فر هنگ لغت ر ا جستجو می کنم ث ب و ت ۱۸) وقتی در مطالعه کردن اشتباه می کنی ، معمولاً کدام یک از موارد زیر را برای اصلاح آنها دوست دارى: الف) اشتباهات را اصلاح نمى كنم ب معلمان ب همكلاسي ت دبگر ان کتاب ها با فر هنگ لغت ۱۹) وقتى از من خواسته مى شود از فناورى هايى كه قبلا استفاده نكردم استفاده كنم (به عنوان مثال بحث در اینترنت): الف معمولاً سعى مي كنم مهارت هاي جديد بياموزم. ب آنها را به تبعیت از دیگران می آموزم ب من احساس نگراني مي کنم ، اما به هر حال ت من آن را کنار می گذار م یا سعی می کنم جلو ی آن را بگیر م ث در مقابل استفاده از أنها مقاومت مي كنم ۲۰) فكر مي كنيد كدام روش زير در مطالعه انگليسي شما مفيد است: الف يادداشت برداري ب حافظه مكانبكي ب - انجام تمر بنات گر امر، ترجمه، کلمات و غبره ت طبقه بندی یا گر و ه بندی یا مقایسه ث بحث گر و هي

Appendix B: Persian Translation of Attitude Questionnaire

5				1		
مي شود.	ِ چندان م	گير ي دو	<sub>م</sub> لذت ياد	می گیرد	وقتی در گروهای مشارکتی با دیگر ان یاد	10
5	4	3	2	1		
ي روند.	ر پیش م	ترو بهتر	مان يافته	فتى ساز م	فعالیت های یادگیری در گروههای مشارد	11
5	4	3	2	1		
هند.	، ار ایه ده	بيشترى	، گرو هي	تكاليف	من ترجيح مي دهم كه معلمان فعاليت ها و	12
5	4	3	2	1		