

## Student Teams-Achievement Divisions (STAD) as a Teaching Strategy in EFL Classrooms: A Critical Review

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### Abstract

*Student Teams-Achievement Divisions (STAD) is a Cooperative Learning (CL) strategy that requires learners to work together in small groups to comprehend the given material. The current study is a review of the past studies on STAD's effects in different areas of language in an EFL context. Initially, 39 studies were selected for the review. After applying the inclusion and exclusion criteria of selecting the more recent, relevant and generalizable ones, seventeen studies were identified. Though the review was not limited to quantitative studies, most of the review studies that came in focus are quantitative. The review suggests that most of the previous studies found support for the use of STAD. However, in some previous studies, STAD could not prove better or worse than the traditional teaching method, and in some studies, other CL strategies outperformed STAD. The study concludes that STAD is an effective teaching strategy, but it may have different results in different contexts, subjects, and participants. The study has opened many areas in the field of CL for future researchers to explain and explore the use of STAD and other CL strategies in EFL and ESL contexts.*

**Keywords:** Cooperative Learning (CL), Effective, Quantitative, Review, Strategy, Student Teams-Achievement Divisions (STAD).

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### Introduction

Cooperative Learning (CL) has long been regarded as a solution to many academic problems, such as enhancing critical thinking skills, improving and enhancing learning, and preparing learners to be collaborative human resources in future (Slavin, 2010). In CL, learners feel that their roles are essential in their teams and their teams' progress depends on their performance. In traditional teaching methods, the entire class is overshadowed by the instructor or some very efficient learners (Storch & Aldosari, 2013). On the contrary, in CL, learners cooperate with one another to reach a common goal set by their teachers. According to Haydon, Maheady, & Hunter (2010), learners feel responsible for their own learning; therefore, they help one another accomplish the given task. They can develop their English language proficiency by working together in cooperative groups, listening, and responding to their teammates, and sharing their ideas and learning experiences.

CL gives learners a chance to work cooperatively, ask one another, share ideas, help, and encourage one another to accomplish some common academic goals. There is a lot of cognitive and interpersonal progress when students help, support, and encourage each other (Laal, 2013). Learners' interpersonal and communicative competence is enhanced when they try to explain something to others, check others' understanding, and discuss the problems and concepts to learn. This interaction, known as promotive interaction, engages students in actions that help provide efficient and practical help in exchanging information (Johnson, 2003). Perhaps, promotive interaction is the fundamental element of both the formal and informal CL strategies.

Vygotsky's (1930) social constructivist theory is one of CL's most dominant theories (as cited in Churcher, 2014). According to this theory, social interaction is an essential learning element that can enhance learners' understanding and improve their communicative skills. Thus, CL can help teachers create a learning atmosphere where learners work together and develop their ability to interact with one another. Richards and Rodgers (2000) claim that when learners work in cooperative groups in their classrooms, this cooperation helps trigger a lively atmosphere, which boosts their motivation (as cited in Nair & Sanai, 2018). Therefore, CL strategies not only provide learners with an opportunity to interact with one another, but they are also a source of motivation.

CL strategies can be divided into two groups: formal group CL strategies and informal group CL strategies. Formal group learning is also known as Structured Team Learning (STL). In STL, every individual is deemed responsible for his/her learning, and teams are rewarded based on the improvement of individual members. In Informal group strategies, the focus is on discussions, projects, and learners' social development (Slavin, 2010). STL tries to ensure that every team member understands his/her role in the team. Learners cooperate to achieve a common goal while being in the same teams for several weeks (Heath, 2010). This cooperation develops a social bond among the team members. STL can be divided into four strategies: Student Teams-Achievement Divisions (STAD), Cooperative Integrated Reading and Composition (CIRC), Team Assisted Individualization (TAI), and Teams-Games-Tournament (TGT) (Slavin, 2010). Informal group strategies include group investigation, jigsaw, and learning together.

Student Teams-Achievement Divisions (STAD) is a formal CL strategy that requires learners to work in small groups to comprehend the given material. According to Ghaith (2004), there are four stages of STAD: teaching, teamwork, individual quizzes to students, and recognizing the best team (as cited in Jalilifar, 2010). Several studies have been conducted on the use of STAD since its first conception. G. N. Khan and Inamullah (2011) argue that STAD is needed in the classrooms that have seen an excess of lecture method. Therefore, STAD may prove to be an alternative teaching strategy in EFL classrooms. According to Tiantong and Teemuangsai (2013), the use of STAD is more suitable in subjects where there are discrete items such as language use, geography, and mathematics. However, Alijanian (2012) emphasizes that STAD can be used in several subjects and with different grade levels.

The main principle of STAD is that it holds learners responsible for their own learning, shifting the responsibility of learning from teachers to learners. Yeung (2015) argues that STAD has been one of the most predominantly used strategies because it is practical in nature, compatible with teaching practices, and embedded in different psychological theories. Students in STAD develop a positive attitude towards the subject, develop critical thinking skills, and understand that they will win only if their teams win (Tiantong & Teemuangsai, 2013). This attitude may develop some positive changes in learners. G. N. Khan and Inamullah (2011) argue that STAD enhances learners' interpersonal skills, helps them develop self-esteem, changes their attitude toward the subject, and inculcates a sense of achievement in them. Thus, there is a need to investigate STAD as a CL strategy in EFL classrooms.

STAD has been applied in various subjects and on a variety of students from primary to tertiary level students (Tiantong & Teemuangsai, 2013). Though inconsistent results have been reported in different contexts, most previous studies have found support for its use in class. Slavin (1995) investigated 22 studies out of which 17 supported STAD's effectiveness (as cited in Alijanian, 2012). However, Alijanian (2012)

argues that most of the past studies were not conducted in an EFL context, and STAD is still under-researched. For example, Wyk (2012) investigated STAD's effects on economic students' motivation towards learning; G. N. Khan and Inamullah (2011) conducted a study on the effects of STAD on academic achievement of chemistry students in an ESL context; Balfakih (2003) studied the effects of STAD in a chemistry class; Zain, Subramaniam, Rashid, and Ghani (2009) studied the effects of STAD in an economics class, and Nichols (1996) investigated the effects of STAD in a geometry class.

Thus, the studies mentioned provide evidence that there is a scarcity of studies on the effects of STAD in an EFL context. A few studies are available on STAD, but the majority of them are quantitative. Moreover, far too little attention has been paid to mixed method designs or qualitative designs. Furthermore, no critical review on STAD has been undertaken in the EFL context. Only Yeung (2015) initiated a review on STAD, but it did not focus on EFL. The current study reviews the studies applying STAD as an instructional strategy in an EFL context.

This review follows a specific inclusion and exclusion criteria and is organized in the following way.

- First, there is a review of STAD studies in English language teaching at the school level.
- Next, it discusses the studies conducted to find the effects of STAD on vocabulary learning and reading comprehension at the adult level.
- After that, some studies have been reviewed that investigate the effects of STAD on listening comprehension and communication skills at the adult level.
- Finally, it discusses the studies conducted on the role of STAD in enhancing EFL learners' motivation at the tertiary level and singles out two studies that compared STAD with another CL strategy, i.e., CIRC.

### **STAD at Elementary to Secondary Level**

CL strategies have been used in different class settings with different subject areas, though most of the earlier studies on CL were conducted in science and mathematics. It was very late when language researchers paid attention to CL strategies. Over the last few years, nevertheless, the role of CL strategies has received considerable attention in language teaching. However, limited studies have been found on STAD as a CL strategy, and STAD has yet to be explained and explored in future studies.

Some of the previous studies that have been conducted at school levels claim that STAD has been effective in teaching English at the primary and secondary levels. For example, Alijanian (2012), Faramarz and Mowlaie (2017), S. A. Khan, Javaid, and Farooq (2015), and A. Khan and Akhtar (2017) conducted quantitative studies and Al-Munawwarah (2013), Endeshaw (2015), and Nair and Sanai (2018) conducted mixed-method studies at the school level. These studies concluded that STAD has positive effects on teaching English to primary and secondary level students.

Alijanian (2012) investigated the effectiveness of STAD on Iranian EFL learners' achievement in English. The study was conducted for eight (8) weeks in a private school in Iran. A learning style preference questionnaire (translated in Persian) was administered at the beginning of the experiment to form heterogeneous groups containing learners from different learning styles. Two achievement tests were conducted before and after the treatment. The findings revealed that the STAD group significantly outperformed the control group at the 0.01 level. Moreover, Both the intragroup and the intergroup comparisons revealed that the STAD strategy had significant effects on Iranian EFL learners' achievement in English.

Faramarz and Mowlaie (2017) carried out research to find the effects of the STAD on reading comprehension of Iranian elementary EFL learners. Fifty-one male students participated in this quasi-experimental study. The treatment lasted for twenty sessions of 90 minutes each. The results showed that

the STAD group scored significantly higher than the control group. The study concluded that STAD is instrumental in enhancing social interaction as it tries to involve every member of the team in class discussions instead of imposing some students' views on other students.

Likewise, Khan et al. (2015) investigated STAD's effectiveness versus the traditional teaching method in teaching writing skills to 8th class students. One hundred twenty-eight (128) students were randomly allocated to two groups; the STAD group (N=64) and the control group (N=64). Pre-test, post-test equivalent group design was used. The study lasted for eight (8) weeks. The results illustrated that the STAD group performed significantly better than the control group on the post-test in writing skills. The study surmised that STAD is effective in teaching English as contrasted with the traditional methods of teaching.

A. Khan and Akhtar (2017) conducted a study on CL methods' effectiveness in teaching grammar to school students. This was quasi-experimental research that used a pretest-posttest control group design. The study lasted for twelve (12) weeks. Ninety-three (93) students participated in the experimental group and 91 in the control group. The findings exhibited that the STAD group performed significantly better than the control group on the post-test in grammar achievement test. The effect size showed that the students in the STAD group achieved very high scores as opposed to the ones in the control group. Only quantitative data were collected in the study.

The studies that used a mixed-method design at the school level also found support for the use of STAD. For example, Al-Munawwarah (2013) investigated the STAD technique's effect in teaching reading comprehension and the students' responses toward implementing the STAD technique in a public school in Indonesia. The author used an intact class of grade 8 students. It was a case study that used interviews, observations, and written documents. The findings support the evidence that STAD is an effective strategy for teaching reading comprehension to Indonesian school students. The students' responses also suggest that STAD is a useful technique for teaching reading comprehension.

Similarly, Endeshaw (2015) carried out a research study on STAD's effects on reading comprehension of EFL students in a high school in Ethiopia. Eighty (80) students of grade 9 participated in this quasi-experimental study that used a non-equivalent pretest-posttest control group design. The treatment lasted for eight weeks. Three students—one high achiever, one medium achiever, and one low achiever were selected from the experimental group for open-ended questions at the end of the treatment. The instructor was contacted at the end of the treatment to reflect his experience with both the groups. Results suggest that the STAD group performed significantly better than the traditional group ( $p=0.00<0.05$ ). Both the students and the instructor declared CL strategies as a source of interaction. They also found them mutually beneficial to the students and the teachers. Only students from the experimental group were interviewed.

In the same vein, Nair and Sanai (2018) investigated the effects of using STAD in enhancing students' descriptive writing skills. The authors used a mixed-method approach. The study used a one-group pretest-posttest design for collecting quantitative data, and later qualitative data were collected using students' interviews, teachers' reflections, and observations. The sample consisted of twenty students in grade 6 in an international school in Malaysia. Both the quantitative and qualitative data revealed that STAD was an effective CL strategy. The authors conclude that the STAD strategy provides learners with an opportunity to work collaboratively, which helps them improve their learning.

Alijanian (2012), A. Khan and Akhtar (2017), and Khan et al. (2015) employed quantitative designs. In comparison, Al-Munawwarah (2013), Endeshaw (2015), and Nair and Sanai (2018) used mixed-method designs. Endeshaw (2015) interviewed instructors and students from the STAD group. However, the control group students were not given a chance to share their views about STAD or the traditional methods of teaching. Interviewing the students in the control group might have given more insight into the issue. A



review of Al-Munawwarah (2013) mixed-method study reveals that the author used a single group design, making it difficult to refer to the findings in the absence of a control group. Moreover, the author did not mention the sample size and the time period of the intervention given in the study.

### **STAD with Vocabulary Learning and Reading at Adult level**

Some of the previous empirical studies on the effects of STAD on vocabulary learning and reading achievement with adult learners also found support for the use of STAD in EFL classrooms. For example, Ishtiaq, Ali, and Salem (2017) conducted an experimental study to find the effectiveness of STAD on vocabulary learning, Jalilifar (2010) investigated the effects of CL on college reading comprehension of tertiary level students, Warawudhi (2012) undertook a research study on the effects of STAD on English reading achievement, and Zarei (2012) conducted a study on the effects of STAD on reading achievement and vocabulary learning. All of these studies found support for the use of STAD.

Ishtiaq et al. (2017) investigated STAD's effects on EFL adult learners' vocabulary learning. This quasi-experimental study was conducted in Saudi Arabia using the pretest-post-test control group design. Thirty-three students were taken in the STAD group and 32 in the control group. All the participants were males. The treatment lasted for two weeks. Findings indicated a significant difference between the STAD group and the control group in favor of the experimental group at 0.05 level.

Jalilifar (2010) conducted an experimental research in a female college in Iran. Ninety female college-level students of General English course were randomly selected from among 140 students. Based on the proficiency test, three homogeneous groups were formed, N=30 in each group (the STAD group, the Group Investigation (GI) group, and the control group). The study lasted for two months. In total, 16 sessions were carried out. Findings indicated that the STAD group outperformed the other two groups, second in rank was the GI group, and the control group scored the least. STAD group also performed better than the GI group. However, no significant difference was found between them. The author concluded that CL strategies, like STAD and GI, can be a solution for the teachers who are faced with large heterogeneous classes.

Warawudhi (2012) investigated the effects of the STAD vs. lecture method on EFL learners' English reading achievement. This experimental study was carried out in Thailand. There were 154 students—82 in the STAD group and 72 in the traditional learning group. A multiple-choice-item test, seen and unseen passages, an open-ended questionnaire, and a teacher's diary were used to collect the data. Findings indicated that students participated more in the STAD group as compared to the lecture method. The teacher's diary and the students' questionnaire also revealed that they were more satisfied with STAD than the lecture method of instruction.

Zarei (2012) undertook an experimental study on STAD and CIRC's effects on reading achievement and vocabulary learning of Iranian EFL learners. One hundred thirty-two (132) female language learners of EFL at elementary and advanced levels took part in the study. Four experimental groups were taught with STAD and CIRC for one semester, while control groups used the traditional teaching method. Data were collected using vocabulary post-test and reading comprehension. The results indicated a statistically significant difference between CL strategies and the traditional teaching method on vocabulary learning and reading comprehension, especially at the elementary level.

Ishtiaq et al. (2017), Warawudhi (2012), and Zarei (2012) compared STAD with the traditional method of teaching, whereas Jalilifar (2010) compared STAD and GI with the traditional method of instruction. However, there are some differences between these studies. Ishtiaq et al. (2017) conducted the study for two weeks. Zarei (2012) conducted it for one semester, and Warawudhi (2012) conducted it for five weeks. Moreover, Ishtiaq et al. (2017) employed only male students, Zarei (2012) employed only female students, and Warawudhi (2012) employed both male and female students as participants of the study. Interestingly, all these studies met similar results and concluded that STAD strategies had significant effects on EFL learners' achievement.

### **STAD with Listening and Speaking Skills at Adult Level**

The review also found a scarcity of studies on the effects of STAD on listening and speaking skills. Only two studies were found investigating the effects of STAD on listening comprehension and communication skills at adult levels. However, both of them found support for the use of STAD. For example, Glomo-Narzoles (2015), and Khansir and Alipour (2015) inquired about STAD's effects on listening comprehension and communication skills. Glomo-Narzoles (2015) investigated the effects of STAD on academic achievement (communication skill) of EFL learners at AMA University, Bahrain. The study used a quasi-experimental design. Fifty-four students, 28 in the STAD group and 26 in the traditional learning group, took part in the study. Two instruments— a test and a questionnaire were used in the study. The findings indicated that the STAD group performed significantly better than the control group on the post-test.

Khansir and Alipour (2015) investigated the effects of STAD on Iranian EFL adult learners' listening comprehension in a language institute. Sixty students were divided randomly into the experimental group (N=30) and the control group (N=30). A syllabus-based listening comprehension test was used before and after the treatment. The findings suggest that the STAD group significantly outperformed the traditional learning group on the post-test at 0.05 level. The authors concluded that STAD could be more effective in teaching listening skills at different levels.

Both of these studies by Glomo-Narzoles (2015) and Khansir and Alipour (2015) concluded that STAD effectively improves listening comprehension and communication skills. The difference between these studies is that Glomo-Narzoles (2015) used a quasi-experimental design, whereas Khansir and Alipour (2015) used a classic experimental design. Besides, Glomo-Narzoles (2015) also investigated the students' attitudes towards English and their academic performance and concluded that the students' attitudes toward English and their academic performance in the course are significantly correlated.

### **STAD and Motivation at Adult Level**

A few empirical studies investigating the effects of STAD on EFL adult learners' motivation could not prove it better or worse than the traditional teaching method. For example, Ishtiaq, Ali, and Salem (2015) in Saudi Arabia and Ning and Hornby (2014) in China found no support for STAD as a teaching strategy.

Ishtiaq et al. (2015) investigated the effects of STAD on Saudi EFL adult learners' motivation. The study used a quasi-experimental design where two intact groups served as the STAD group and the control group. A forty-item questionnaire was conducted before and after the treatment. The independent samples t-test was used to analyze the data. Findings revealed that the difference between the STAD group's motivation and that of the control group was not statistically significant on the post-questionnaire. The authors found no support for the use of STAD strategy than the traditional teaching method in enhancing motivation.

In the same vein, Ning and Hornby (2014) examined the effect of STAD and Numbered Heads Together (NHT) on EFL learners' motivation at the tertiary level. The authors declared that both groups (the CL group and the comparison group) were similar in five aspects of motivation, namely identified regulation, integrated regulation, introjected regulation, external regulation, and amotivation on the post-test. The authors met similar results as those reached by Ishtiaq et al. (2015). Only on one variable, intrinsic motivation, the CL group significantly outperformed the comparison group. There was no statistically significant difference between the CL group and the comparison group in all the other variables. Though the study lasted for 18 weeks, the authors concluded that more extended and more intensive interventions were needed for CL strategies to succeed in EFL classrooms.

Though these studies had little in common, both of them met similar results. Ishtiaq et al. (2015) conducted the study for two weeks and employed only male students. Ning and Hornby (2014) conducted their study

for 18 weeks and employed both male and female students. Both of these studies found no significant difference between the STAD group and the control group. However, both of them attributed the findings to the time period allocated for the intervention.

### **Recent Studies on STAD**

More recent studies conducted in Iran met different results compared to those studies discussed so far. Ghasemi and Baradaran (2018) compared STAD and CIRC's effects on EFL learners' speaking complexity. The authors selected 60 female learners out of 90 female EFL learners and randomly assigned them to two groups—a STAD group (N=30) and a CIRC group (N=30). One group was taught with STAD and the other with CIRC for ten sessions. The authors concluded that the CIRC group performed significantly better than the STAD group in speaking complexity on the post-test.

Similar findings were reached by Jahanbakhsh, AliAsgariZamani, and Garman (2019). Jahanbakhsh et al. (2019) conducted a study on CIRC and STAD in Iran. The authors used a mixed-method sequential design—collecting quantitative data first and qualitative data later. A pretest-posttest comparison group design was used in the quantitative phase. Sixty homogeneous learners were equally divided into a STAD group (N=30) and a CIRC group (N=30). Both the test and the interviews suggested that the CIRC group significantly outperformed the STAD group.

There are some interesting commonalities in both of these studies. Both of these studies were conducted in Iran, and both of them compared CIRC with STAD. The number of participants was also the same. Interestingly, both of them met the same results. However, Ghasemi and Baradaran (2018) employed only female participants, whereas (Jahanbakhsh et al., 2019) employed both male and female participants.

The current review attempted to answer the following two questions:

1. What are the trends in the previous studies on the use of Student Teams-Achievement Divisions in an EFL context?
2. What is a major gap in the previous studies that have been conducted on the use of Student Teams-Achievement Divisions in an EFL context?

### **Methodology**

The current study focused on a single strategy—STAD. Some studies have been included in the review that have investigated other strategies, but they have basically compared STAD with other CL strategies. Moreover, the review focused on those STAD studies that were conducted in English language teaching. Though the review did not focus on the experimental studies, most of the studies reviewed are either experimental or quasi-experimental. The search terms used for the review include 'CL', 'STAD', and 'STAD and EFL'. The terms 'CL' and 'STAD' did not give the required results; therefore, full terms 'Cooperative Learning' and 'Student Teams Achievement Division' were used in search engines. Only those STAD studies were included in this review that were written in English and conducted in the last two decades. Moreover, only published articles were included in the review.

Search methods included computer searches, relevant bibliographies, and the researchers' universities' databases. Initially, 39 studies were found between the years 2000-2019. After applying the inclusion and exclusion criteria, 17 studies were identified for the review. Studies conducted on using STAD on subjects other than English language teaching were not included in this review. Similarly, an attempt was made to include only those studies that compared STAD with the traditional teaching method or other CL strategies. Five studies have been included in the review that used STAD with other CL strategies. Three studies (Ghasemi & Baradaran, 2018; Jahanbakhsh et al., 2019; Zarei, 2012) used CIRC, one study (Ning &

Hornby, 2014) used NHT, and the other one (Jalilifar, 2010) used GI in addition to using STAD. Figure 1 illustrates how the review was carried out in the current study.

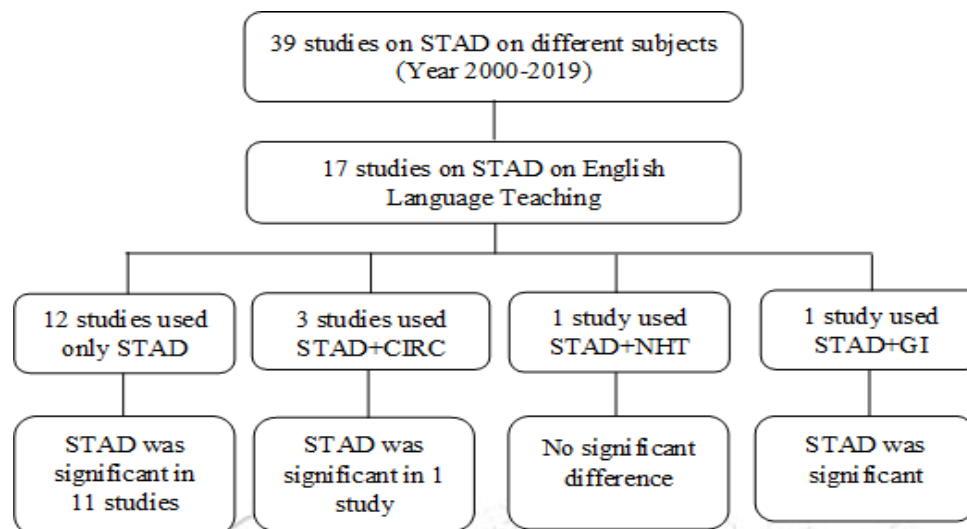


Figure 1: The process of review in the current study

## Discussion

The review of studies presents a general trend about STAD studies. The review suggests that most of the previous studies have been conducted using a quasi-experimental design; there is a lack of conclusive experimental studies. Only Ghasemi and Baradaran (2018), Jalilifar (2010), S. A. Khan et al. (2015), and Khansir and Alipour (2015) conducted actual experimental studies. The rest of them used quasi-experimental designs. Moreover, there is a lack of studies using mixed-method designs; only four studies (Al-Munawwarah, 2013; Endeshaw, 2015; Jahanbakhsh et al., 2019; Nair & Sanai, 2018) were found in the review that used a mixed-method design. Surprisingly, no qualitative study was found on STAD.

There is a general tendency in the reviewed studies that most of these studies have compared STAD with traditional teaching methods. Only two studies (Ghasemi & Baradaran, 2018; Jahanbakhsh et al., 2019) compared STAD with CIRC, and one study (Jalilifar, 2010) compared STAD with GI and traditional method of teaching. The results of the studies that compared STAD with CIRC are somewhat counterintuitive. These studies found that the CIRC strategy significantly outperformed STAD. In all the other studies, STAD either outperformed other instruction methods or was not proved better or worse than the other instruction methods.

The majority of the studies reviewed in this review have been conducted in Asia. Only one study (Endeshaw, 2015) has been found in this review that is from Africa. Moreover, the review also reveals that there is a lack of studies investigating the effects of STAD on the motivation of EFL learners; only two studies were found in this respect: Ishtiaq et al. (2015) and Ning and Hornby (2014). Both of these studies found no significant difference between STAD and the traditional teaching method. Besides, the review suggests that there are limited studies of STAD's effects on listening and speaking skills. Only two studies (Glomo-Narzoles, 2015; Khansir & Alipour, 2015) were found that investigated the effects of STAD on learners' communicative skills. Finally, it was found that there is a lack of attitudinal studies using STAD as a classroom strategy.



## **Limitations**

The study has been confined to the last two decades. It is beyond this study's scope to review all the studies conducted on STAD over the last a few decades. Due to practical constraints, this paper is limited to review only those studies that used STAD strategy in the EFL context. This study is unable to encompass all the studies undertaken in different contexts using the STAD strategy.

## **Recommendations and Implications**

### **Recommendations**

From the studies reviewed, it can be inferred that the majority of the previous studies have reached similar results. They claim that STAD has been an effective instructional strategy in an EFL paradigm. However, it has also been observed that STAD has met inconsistent results compared with traditional teaching methods in some contexts and compared with some other CL strategies in some other contexts. Following are the recommendations in the light of this review:

1. Considerably more work needs to be done to determine the effectiveness of STAD and other CL strategies as STAD may have different results in different contexts, with different participants, different subject areas, and different time periods of intervention.
2. Educational administrators need to promote research culture inviting practitioners in the English language teaching field to use STAD and other CL strategies in their classes and write reflective reviews and research papers at the end of the academic session or semester.
3. Further researches are recommended to see the effectiveness of STAD and other CL strategies at all levels in general and at the tertiary level in particular taking into account variables like males vs. females.
4. Young Learners (YLS) vs. Adult Learners (ALS), social classes, regional and linguistic backgrounds of the teachers and students, teacher motivation and learning and learner's motivation are some of the other variables that are recommended to be explored while using STAD and other CL strategies in EFL classes.

### **Implications**

Notwithstanding the relatively limited sample, this review work offers valuable insights into the field of cooperative learning. The current inquiry aimed to review the studies that used STAD as a teaching strategy in an EFL context. To date, no such review was available in an EFL context. Following are the implications of this review:

1. The current review has opened many research areas in the field of CL for future researchers and researches. Future researchers may explain and explore the use of STAD in different contexts and different subject areas.
2. A greater focus on qualitative studies, mixed-method studies, and attitudinal studies on STAD and other CL strategies could provide more definitive evidence.
3. An in-depth exploration of different CL strategies, namely Team Assisted Individualization (TAI), Teams-Games-Tournament (TGT), and Cooperative Integrated Reading and Composition (CIRC) would be useful for EFL learners and teachers.
4. Also, there is a need to conduct longitudinal studies to compare and contrast STAD with other CL strategies in an EFL paradigm.

## Conclusion

There are five elements of CL—promotive interaction, positive interdependence, interpersonal skills, individual accountability, and group processing (Jahanbakhsh et al., 2019). Promotive interaction or face to face interaction is an essential component of CL strategies. STAD can provide learners an opportunity to interact with mixed ability students in their groups, which can help improve their communication skills. This will positively affect their language proficiency in the long run. Surprisingly, however, this review could not find much research on STAD's effects on learners' communication skills. More research on STAD's effects on learners' listening and speaking skills would help us establish a higher degree of accuracy.

Writing is an essential skill for language learners in general and EFL learners in particular. Especially at the tertiary level, EFL learners are expected to be proficient in this skill. However, to date, the problem has received scant attention in the research literature. There has been no detailed investigation of the effects of STAD on the writing skill of EFL learners at the tertiary level. This review could find only two studies, but both of them were conducted at the school level. Therefore, future researchers may conduct a comprehensive study of STAD's effects on EFL adult learners' writing skills. In short, continued efforts are needed to investigate whether STAD and other interactive teaching strategies can supplement traditional teaching methods and are more or less conducive to learning than traditional instruction methods.

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