Exploring the Learner Attitude toward the Jigsaw Game-based Reading Method in a Communicative Learning Context

Abstract

This study has focused on one of the categories of cooperative learning methods vs. jigsaw game-based reading methods among foreign language EFL learners' challenges and problems in understanding English texts. The study investigated the influence of the jigsaw game-based reading method on the attitudes of Iranian intermediate adolescent and adult EFL learners toward an interactive learning context. To homogenize the participants' language proficiency, the Oxford Quick Placement Test was used. 100 intermediate learners were selected from both age groups. To gather the data, an attitude questionnaire by means of the cooperative learning method was used. The results showed that the participants had developed a positive attitude toward the jigsaw game-based reading method. Likewise, adults and adolescents have had similar outlooks on the basis of the benefits from the jigsaw reading technique. Thus, the jigsaw game-based reading procedure can be said to play a significant role in enhancing the learners' motivation and reading enjoyment when involved in doing reading tasks.

Keywords: *Jigsaw game-based method, Communication context, Learners' viewpoints, EFL adolescent, adult learners*

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1. Introduction

It is becoming increasingly difficult to ignore game-based teamwork and communication in reading. According to Mohammadpur and Ghafournia (2015), foreign language reading anxiety can affect both the reading performance and procedure. As a result, EFL learners have to cope with problems in a cooperative learning environment, feeling concerned and nervous while performing the reading tasks (Sabbah, 2016). Therefore, the issue of learners' interaction and collaboration has been a controversial subject within the field of foreign language learning and teaching. According to Tamah (2011), in the conventional reading methods, learners deal with the whole text and do not have a chance to discover themes and subjects. Likewise, learners do not face a challenging environment, in order to discover the topics via involvement with others. As a result, teachers should consider diverse kinds of reading texts to cover learners' interests (Dwiniasih & Nugraha, 2019). In this regard, teachers can consider and use combinations of reading methods such as teamwork, summarizing, etc. (Pang, 2003). However, far too little attention has been paid to the jigsaw game-based reading cooperative technique as a means of enhancing learning motivation and involvement. To this end, this paper has focused on intermediate Iranian adolescent and adult EFL learners' attitudes toward the jigsaw cooperative method. This game-based method is similar to the puzzle method. In this method, reading texts are separated into parts and distributed among the learners. A game and puzzle are assumed to decrease reading anxiety in an interactive practice. Thus, jigsaw cooperative activities give a chance for learners to fortify confidence and have an interaction with peers of diverse characters in class. The research to date mostly has tended to focus on general cooperative learning rather than a specific collaborative reading method. In addition, no research has been found to survey the learner attitude toward the jigsaw cooperative method across age groups. So far this method has only been applied to pre-intermediate learners without regarding their outlooks towards it. Thus, this study seeks to explore any positive change in the participants' attitudes, assurance, and confidence in favor of the jigsaw cooperative method. Therefore, the study has addressed the following question:

RQ. What are the learners' attitudes towards the jigsaw game-based cooperative reading method?

2. Review of the Related Literature

2.1. Cooperative Learning

Tran (2019) states that cooperative learning is a type of learning in which learners are dynamic and work with one another. Also, the class or environment is organized as a teamwork setting in which learners have a chance to negotiate their ideas via doing interactive tasks (Richards & Schmidt, 2010). According to Fu (2013), cooperative learning is believed to enhance learners' incentives and boost their interactive social abilities. Richards and Schmidt (2010) have introduced cooperative learning activities: 1) peer tutoring, 2) jigsaw, 3) cooperative project, 4) cooperative/individualized, and 5) cooperative interaction.

2.2. Jigsaw Game-Based Reading Method

Jigsaw supportive learning is a kind of learning activity in which groups of learners cooperate, separately (Johnson, 2000). Two groups are included in this interactive model: the original and expert groups. learners with dissimilar talents and backgrounds comprise the original group. The expert group

members read and find out the detailed information then complete the related tasks and elucidate themes to the other fellows in the original group. Jigsaw game-based reading derives from the common jigsaw cooperative approach. According to Rashtchi and Ghazi (2021), jigsaw game-based reading is similar to playing a jigsaw puzzle. Individuals read some pieces of text in a group. Individuals comprehend the theme and report it to the other members of the group. Subsequently, learners report the different parts of the text, they rearrange the parts of the text with one another to expand the original story. In other words, in the jigsaw reading method, pieces of a reading script are distributed among the learners to comprehend, reproduce and find out its proper arrangements. Since learners discuss together in terms of their decisions to find out the original order, this game-based method can lead to a great deal of interaction, teamwork, and achievement. Dwiniasih and Nugraha (2019) specified that not only jigsaw is manipulated in any reading text, but also it is used in writing and listening, as well. It can be understood that this method can be practiced in all four skills. Jigsaw game-based reading method is used in small groups of learners with four to six members. In the same way, learners are independent and have a high amount of communication with one another in the jigsaw game-based reading method. However, one question to consider is whether learners have satisfaction with this method or not. According to Kagan (1994), the jigsaw method is effective in facilitating and enhancing learners' authority as well as developing their concept improvement. It also increases discussion among learners and promotes teamwork and cooperation. Similarly, Suyanto (2012) claims that in the teaching-learning process, learners can be more responsible for the use of the jigsaw method. Thus, they participate and solve a problematic issue with one another in a group. It means that the jigsaw method may expand the learner's reading ability considerably. A serious weakness with this argument, however, is that it has not clarified various language proficiency levels and age ranges. Gocer (2010) states that in a group work learning class, learners sustained in-class communication, never feel bored, and learn the subjects well. It seems that Grocer's understanding of the framework of group work and communication is questionable (as cited in Amedu & Gudi, 2017). Based on Mengduo and Xiaoling (2010), the jigsaw game-based reading class not only decreases learners' unwillingness and apprehension but also increases their confidence and assurance. Learners' effective contribution and eagerness as well as their achievement of learning tasks are increased via the jigsaw game-based reading method. As a result, it improves collaboration and interactive learning among the learners. The key problem with this explanation is that they have not mentioned learners' probable outlook across different ages and language proficiencies in terms of the usefulness of communication and teamwork in light of this method.

2.3. The purpose of the Jigsaw Game-based Reading Method

The objective of this method is to inspire the learners to consider the theme of the reading text creatively and spontaneously. Moreover, it is meant to stimulate teamwork among members of the teams to solve problems and perform the tasks. If learners do not work together, they may not complete the task productively (as cited in Marleni, 2016). Consequently, the purpose of the jigsaw game-based reading method is to develop learners' confidence, duty, and teamwork in order to share thoughts and facts.

2.4. Pros of the Jigsaw Game-based Reading Method

According to Reese (2009), learners in the class of the jigsaw game-based reading method are considered as different personalities with noteworthy capacities to benefit from this structure. In the same way, learners' outlook showed that the jigsaw cooperative learning method increases their conception of themes as well as have efficient time in class. Also, learners confront different learning experiences. Based on Aronson (2008), the jigsaw game-based reading method develops learners' accountability. He also mentions that this method inspires teamwork, as well. It seems that Aronson's understanding of the framework of the jigsaw game-based reading method is questionable regarding increasing responsibility and teamwork because the question that arises here is whether responsibility and teamwork are increased among all types of learners or not. By the same token, Mengduo and Xiaoling (2010) state that it not only increases the ability to collaborate, communicate and understand but also diminishes learners' concerns and inspires confidence and self-assurance. One major criticism of Mengduo and Xiaoling's work is that they have not focused on learners' language proficiency levels and age groups. Likewise, Parmadyani (2013) argued that the jigsaw game-based reading method could be a method wherein the person's accountability as well as interaction and debate could be demonstrated by learners in team works. One of the limitations of this explanation is that it does not explain learners' viewpoints to see whether they have a positive attitude toward this method. According to Astane and Berimani (2014), constructing a teamwork class in groups is one of the main benefits of the jigsaw game-based reading method. Furthermore, the crucial more remarkable benefit of the jigsaw game-based reading method is that learners are capable to gain more reading conception in a shorter time, and permit learners to think through a main portion of the reading text, chiefly. The jigsaw game-based reading method is very upfront and a free of an anxious method to be considered and applied in class settings. It can be beneficial at any capability level through the teaching of reading ability in a cooperative

learning context. The key point with this explanation is that based on this method not only increases learners' interaction but also can decrease their probable anxious feeling during doing tasks.

Mengduo and Xiaoling (2010) studied the jigsaw game-based method to achieve the planned task successfully. They found it is the method an efficient way to inspire learners' involvement and enthusiasm in consort with an appropriate method for learners of language to attain learning responsibilities in the EFL settings. Similarly, Kazemi (2012) examined the impacts of the jigsaw game-based reading method on the success of Iranian EFL learners in their success of reading ability. The results indicated that this method improved the learners' reading ability. Tran and Melbourne (2012) studied the impact of the jigsaw learning method on the outlooks of the learners in a higher education classroom. The outcomes revealed the learners' enthusiasm and eagerness to work with one another and get support, discuss and involve the information, and instruct each other. Farzaneh and Nejadansari (2014) considered the attitude of the learners toward using cooperative learning for teaching reading in the Iranian cooperative learning context. The results revealed that the learners tended to support the frequent use of interactive methods in teaching and learning the reading comprehension ability. Moreover, Azmin (2016) scrutinized the impact of the jigsaw game-based cooperative learning strategy on learner accomplishments in psychology and their attitudes towards it. The members stated that they adored using the jigsaw game-based- cooperative learning method and after the participation, they accomplished meaningfully. Also, this investigation specified that the jigsaw game-based cooperative strategy can fortify the participants' reading ability. In the same vein, Nazari et al. (2016) explored the influence of the jigsaw strategy of the cooperative learning method on Iranian EFL learners' development of reading ability. The results confirmed its added usefulness in comparison with the conventional methods. Likewise, Sabbah (2016) confirmed the positive impact of the jigsaw cooperative learning method on ELS learners' success in reading ability. Moreover, Amedu and Gudi (2017) targeted the attitude of the participants toward the jigsaw cooperative learning method. The results demonstrated that the learners developed optimistic attitudes toward the use of this method. By the same token, Tahrun, Simaibang, and Iskandar (2017) investigated the impact of the jigsaw game-based cooperative technique and the conventional method on the ability to read business letters. The outcomes displayed a positive effect on the reading achievement of the business letters. Also, Dwiniasih and Nugraha (2019) studied the role of one of the cooperative learning approaches vs. the jigsaw method in developing the reading comprehension of the participants. The results showed that the jigsaw method enhanced the participants' reading comprehension achievement.

3. Methodology
3.1. Participants
In this study, the convenience sampling method was used. Approximately, 100 intermediate adults and adolescent learners of both gender participated in this study. The participants were studying English at an Institute in Zanjan, Iran. They had the same cultural and linguistic backgrounds. Since the participants were informed of the purpose of the study, they felt enthusiastic to contribute. To ensure the group homogeneity, the Oxford Quick Placement Test (OQPT) was applied to spot the subjects' language proficiency levels. Sixty intermediate learners were randomly selected as the final participants of the study. The jigsaw game-based cooperative reading technique was used to teach reading comprehension to the group. Finally, the attitude questionnaire was distributed among the participants to explore their attitudes toward the target teaching method.

3.2. Instrumentation
3.2.1. Oxford Quick Placement Test (OQPT)
For recognizing students' overall proficiency levels, the Oxford Online Placement Test (OQPT) is considered a rapid test. This tool performs as a swift and trustworthy instrument for allowing researchers and instructors to homogenize the contributors of research regarding students' L2 knowledge. Figure 3.1 illustrated a numerical scale of the OQPT system for each learner's language proficiency. Based on the OQPT system, a score of 40 to 47 was placed at level B2 which is considered the intermediate level. This study focuses on intermediate (B2) English language learners. As mentioned before, in order to select Intermediate English language learners and ensure their homogeneity, 100 students in both age groups and genders answered the OQPT (2001). 60 learners were identified as Intermediate learners.

3.2.2. The Attitude Questionnaire
In order to elicit the learners' attitudes toward the jigsaw reading method in cooperative language learning, a survey questionnaire consisting of 12 items was used. The questionnaire was developed by McLeish (2009). Based on this instrument, the participants rated each item on a five-point Likert scale ranging from strongly disagree (1 point) to strongly agree (5 points). To avoid any ambiguity in understanding the questionnaire items, the Persian version of this questionnaire developed and validated by Farzaneh and Nejadansari (2014) was employed.

3.3. Procedure
3.3.1.   The processes of training

First phase: 60 intermediate EFL learners selected and assigned to teams of jigsaw interactive learning by the teachers. An authentic English reading text with distinct parts was distributed among the learners in the teams. For each individual to have a part in reading, the members of the jigsaw interactive group read their own pieces of text silently and individually for 5 to 10 minutes. Second phase: the individuals who had read similar material gathered together in another new group and conversed with one another about what they had read about for 5 to 10 minutes. Third phase: the original jigsaw interactive team was recreated by the teacher in which each individual clarified the reading text's theme and content to the other members of the team. In this phase, regarding parts of the reading text that the members had read, they shared their understanding, thoughts, and opinions about the related theme. As a matter of fact, the learners felt responsible and took charge to inform other members about their understanding and information. As a result, they accessed the entire reading script piece by piece and were able to reorganize the original text. Regarding the content and the subject matter, the individuals had dynamic and interactive discussions with one another and with the other members of the teams. Individuals were in charge of each team so that they could learn from the other members of the team, as well. The last phase: in this phase, the learners answered some crucial questions by the teacher. The learners elaborated and explained more inferences of the themes of the text with the members of the teams or with the all students in the class. For it to be made sure that the members had obtained the whole theme and content of the text, several oral questions about the reading text were posed by the instructor, as well. In this phase, the individuals accessed all parts of the complete script.

4. Findings of the Study
4.1. The Results of the Attitude Questionnaire
The posed research question was meant to explore the participants' attitudes toward the jigsaw game-based reading method. The following table illustrates the learners' observations and attitudes toward the jigsaw reading method after the instruction by this method.

Table 1: Figures on Learner's viewpoints in the direction of the Jigsaw Method

Item	Attitudes towards jigsaw technique	SD		D		N		A		SA	
		F	%	F	%	F	%	F	%	F	%
1	I willingly participate in cooperative learning activities.	1	1.7%	2	3.3%	14	23.3%	23	38.3%	20	33.3%
2	When I work with other students I achieve more than when I work alone.	7	11.7%	8	13.3%	14	23.3%	15	25%	16	26.7%
3	Cooperative learning can improve my attitude towards work.	4	6.7%	7	11.7%	12	20%	21	35%	16	26.7%
4	Cooperative learning helps me to socialize more.	6	10%	0	0%	7	11.7%	16	26.7%	31	51.7%
5	Cooperative learning enhances good working relationships among students.	3	5%	3	5%	5	8.3%	25	41.7%	24	40%
6	Cooperative learning enhances class participation.	3	5%	3	5%	10	16.7%	26	43.3%	18	30%
7	Creativity is facilitated in the group setting.	4	6.7%	4	6.7%	25	41.7%	17	28.3%	10	16.7%
8	Group activities make the learning experience easier.	6	10%	6	10%	11	18.3%	26	43.3%	11	18.3%
9	I learn to work with students who are different from me.	9	15%	5	8.3%	14	23.3%	15	25%	17	28.3%
10	I enjoy the material more when I work with other students.	7	11.7%	9	15%	10	16.7%	35	10%	13	21.7%
11	My work is better organized when I am in a group.	9	15%	5	8.3%	13	21.7%	18	30%	15	25%
12	I prefer that my teachers use more group activities / assignments.	2	3.3%	7	11.7%	10	16.7%	26	43.3%	15	25%

SD: Strongly Disagree

D: Disagree

N: Neutral
A: Agree
SA: Strongly Agree

According to the above table, the overall results indicated a positive attitude of the learners toward the target method. However, both positive and negative assessments were observed in the learners' replies. Regarding item 4, 79 percent of the learners felt that through the application of the jigsaw method, interactive learning led them to be outgoing and sociable people. Likewise, in items 1, 3, 6, 8, and 12 more satisfaction can be seen. Learners' enthusiasm to contribute to interactive learning tasks, promoting learners' viewpoints concerning teamwork and cooperation, improving contribution, simplifying the experience of learning, and desiring more tasks of teamwork can be remarked. Regarding more attaining when collaborating with partners and having an enhanced association, similar outcomes can be realized. Conversely, the least evaluations can be seen in item 10, in which 10 and 21.7 percent of the learners rated strongly agreed and agreed correspondingly in order to delight in the resources more while collaborating with other learners in team works. The aforementioned items display that not all of the learners come to an agreement on promoting the inspiration and learning to have team or group works with various members through the jigsaw method. According to the perceived skewed status of positive evaluations, the learners' whole attitudes revealed an optimistic and helpful assessment as well as confident emotions on the way of interactive learning in the class settings. Helpful evaluations abound in the inquiry form and can approve the learners' agreement and satisfaction with the program. To sum up, in all the phases the learners endorsed positive outlooks in favor of the jigsaw game-based reading method. As a result, to enhance the learners' attitudes toward collaborative learning, this method can be considered a vital issue in the teaching and learning environment.

5. Discussion
The present study was designed to determine the impact of one of the cooperative learning methods vs. the jigsaw game-based reading method on learners' attitudes. The posed inquiry of the current investigation slanted toward the whole EFL learners' outlook in the direction of jigsaw the game-based reading method in an interactive learning context. A positive attitude toward the jigsaw collaborative learning was displayed by the statistical data. Most of the learners joined in the collaborative learning tasks enthusiastically. Moreover, their outlook was that the more they cooperated, the more they accomplished. This finding is in agreement with Barbosa et al.'s (2020) concept of collaborative learning which showed that learners' interaction was promoted due to the jigsaw reading method.

This outcome is also in line with Namaziandost's (2021) finding that learners' enthusiasm for cooperation is enhanced by using the jigsaw game-format method. The learners' outlook can turn into being optimistic in favor of collaborative tasks according to the learners' state in the inquiry form. The findings of the current study are consistent with those of Amedu and Gudi (2017), who found that learners developed optimistic attitudes toward the jigsaw cooperative learning method. As data analysis displayed, learners spend more time with one another through interactive learning, as well. Data analysis showed that beneficial interactions are promoted between learners. By the same token, they declared that the jigsaw game-based method increases contribution in class. Prior studies that have noted the importance of learners' contribution and interaction is the study of Siahpoosh et al.s' (2021) cooperative learning in which they demonstrated that after implementation of the jigsaw cooperative technique, the learners engaged to have more team works and cooperation with one another and similarly their reading comprehension enhanced. Several viewpoints of learners demonstrated stress-free learning and actions in teams. In the same way, learners' points of view accepted a chance to interact with diverse learners and have dissimilar characters. Besides, more learners' satisfaction indicated high pleasure based on the material when they collaborate with different learners. Equally, learners' outlook revealed that when they cooperate in a team their tasks are prearranged. Most of the learners intensely approve of a high amount of team accomplishments and tasks. The outcomes of inquiry of study also can be supported by Farzaneh and Nejadansari's theory of interactive learning (2014) based on which the contributors have a propensity for the implementation of jigsaw game-based method ordinarily in reading ability's teaching and learning. The jigsaw game-based method strengthens the involvement of the learners as well as their assurance (Mengduo & Xiaoling, 2010). These findings further support the idea of Azmin (2016), who found that the members stated that they adored using the jigsaw game-based cooperative learning method and after the participation, they accomplished meaningfully. Also, this investigation specified that the jigsaw game-based cooperative strategy can fortify the participants' reading ability, as well.

6. Conclusion
In a collaborative learning context, learners are more responsive to the jigsaw game-based method. For a dynamic and interactive environment, teachers and learners should observe and pay attention to some suggestions to facilitate

cooperation in classes. Regarding the essential feature of supportive learning, which is learners' communication and involvement, tutors should evoke and inspire learners to participate in teamwork. As a matter of fact, during the team interactive tasks, learners tend to exchange information and also gain an opportunity to collaborate with other characters and individuals. Furthermore, to make learners in charge of their particular responsibilities and activities, their assurance should be promoted by teachers. Concerning the teachers' roles, in the same way, instructors fortify the conceptions of learners regarding the entire theme and learners' apprehension is lessened by teachers in terms of organizing a proper situation through task working. Additionally, learners should consider some implications too. At the outset, numerous types of supportive methods are useful for learners and they can promote their abilities to be sociable, and the significance and benefits of cooperative learning are considered by them. Based on this method, learners have a chance to discuss and interact with different types of people in their particular team. Likewise, the higher interaction, the more learners take responsibility for the team's tasks. Last but not least, since learners cooperate in a stress-free setting, they can manage their anxious feeling and do the tasks assuredly. Further research might explore a gender-based jigsaw cooperative technique as well as other language proficiency levels. More research on other sub-categories and types of cooperative learning methods such as inside-outside circle, learning together, complex instruction, group investigation, constructive controversy, teams-games-tournaments, etc. needs to be undertaken.

Declarations

- **Competing interests**

The authors declare that they have no competing interests.

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