



The Effect of Jigsaw Technique on Improving Grammar Achievement among the Impulsive and Reflective Iranian EFL Learners

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Abstract

The following research studies the effect of using jigsaw technique(one of the cooperative learning techniques) on the improving the grammar achievement of Iranian impulsive and reflective (I/R) EFL learners. The research was conducted on 60 female EFL learners (at the intermediate level) who mainly were university students. The study adopted a quasi-experimental design with two groups assigned as experimental group one (Impulsive group) and experimental group two (Reflective group). To this end, three instruments were used in the study to gather the needed data: **1)** The Persian version of the Impulsivity/Reflectivity questionnaire of Barratt in 1995(BIS-11), after performing questionnaire the participants were divided to two groups: Impulsive Learners group and Reflective Learners group. **2)** The Oxford Placement Test (OPT) in 2007, was used for measuring the level of the participants' language proficiency(only grammar) and assuring homogeneity of two groups **3)** The Grammar Knowledge Test that was devised by the teacher-researcher and included forty items as the pre-test and the post-test. For this reason, the reliability and validity of which had been established by her, prior to the main study to two groups. Jigsaw technique was exposed to two classes (I/R) for teaching grammar. The treatment lasted for 10 sessions, after the participants of both groups separately were evaluated on their grammatical knowledge. The data collected were analyzed through a combination of descriptive and inferential statistics. The results of statistical analysis indicated that jigsaw technique led to an enhancement on the grammar achievement of reflective learners. However, the use of jigsaw technique did not prove effective for the impulsive learners.

Keywords: Cooperating Learning, Jigsaw Technique, Grammar Teaching, Impulsivity, Reflectivity.



1. Introduction

Importance of grammar teaching in second language learning is well known. Long ago from the fifteenth century there had been a long debate on the problems of teaching grammar effectively. For centuries, language has been synonymous with language teaching then the role of the grammar declined with the introduction of communicative language teaching (Thompson 1996). At the beginning of 1970, the interest of 'real language' teaching emerged and more interest was taken in social and cultural teaching of language. Consequently, it proved to be a shift from audio-lingual and grammar- translation methods(GTM) to the exploration to communicative teaching of language. Hence, integrative tasks were focused instead of discrete structures.

Within the recent few decades, many researchers have focused on the different methods of English teaching as an international language to find the appropriate methods and techniques to perform in language classrooms in particular to teach grammar. The linguistic theorists and researchers found out that the role of grammar in the foreign language learning was neglected (Batstone, & Ellis, 2009).

As Jeremy Butterfield (2008), stated, linguistically, grammar is the set of structure rules that control our speaking, writing, all clauses, and words in any natural language. Grammar is one of the important aspects in learning language, that helps us to understand what makes sentences and paragraphs clear and remarkable which it makes possible for us to communicate. Grammar means that all languages and dialects follow grammatical patterns (Harmer, J. 2001, 2011, 2012; Wang, F., 2010). Using wrong grammar, sentences become meaningless and their message is unclear; this means that you are not able to communicate effectively.

Grammatical competence or knowledge as base of language is one of communicative competences. Communicative knowledge involves knowing how to use the grammar and vocabulary of a language to achieve communicative goals, and to know how to act this in an appropriate social situation (Richard, & Rodgers, 2005). Nowadays, Communicative aims are the learners' purpose that are studying English language. Therefore, grammar teaching is necessary for getting these goals (Harmer, 2001).

Despite all of researches and language teachers, the truth is that the grammar syllabus and approach still are traditional rules in this world. Most of native or non-native learners, each day observe grammar by using repeating limitless lines of correct grammar and keep by using the boring repetitive drills. In the traditional teaching grammar as inductive or deductive not communicative, looks so boring; learners have to learn some rules and structure which impose to them without any motivation and the grammar classes cannot be very effective for learners. Therefore, Teachers need to do language instruction effectively in their classrooms or change their teaching style (Byrd, P. & J. M. Reid, 1998; Galloway, & Labarca, 1991).

In teaching grammar effectively, learners need to be equipped with effective strategies to help them improve all their skills specially their grammar skills. *Cooperative learning* is one strategy that English teachers should use in their grammar classes. Cooperative learning has been considered as a successful strategy against traditional classroom instruction, and it will be promoted through the application of students, students' creativity, their awareness of grouping and cooperation (Kessler, 1992).

Slavin (1994, 2011, 2013), defined cooperative learning as an instructional program in which learners work in small groups to discuss one another master academic content. In addition, he cited in cooperative classrooms, teachers expect from their learners to help, to discuss and argue with each other, and to evaluate materials and to find their problems and to understand current lessons



materials. One of cooperative learning techniques that appropriate to teach both grammar and Integrated-skills is *Jigsaw Technique*.

The jigsaw technique has been used for over thirty years. During eliminating segregation period, Elliot Aronson and his students from University of Texas created the new technique in 1971, due to rising enmity among students in Austin, Texas. The idea behind the Jigsaw technique is this: Just as in a Jigsaw puzzle – each student is as each piece in puzzle – is essential for the ending and perfect understanding of the ending product (Aronson, 2008; Aronson & Patnoe, 2011).

Students in the jigsaw technique are active and teacher is not the only provider of knowledge or the center of the learning (Chen, 2011). According to some researchers such as Lucas (2000), Doymus (2007), and Liu and Shi (2007) that discussed the advantages of applying the jigsaw technique. They expressed the advantages of the jigsaw technique as follows:

- The jigsaw technique allows the students to actively teak part in learning process (Liu, & Shi, 2007).
- It enhances cooperative learning (Lucas, 2000).
- It leads to more comfortable about learners' roles (Liu, & Shi, 2007).
- It can give a sense of responsibility of performance (Lucas, 2000).
- It can improve retention of brain in learning vocabulary (Doymus, 2007).

Similarly, Schul, J.E. (2012), listed some advantages of applying jigsaw technique in cooperative learning. These advantages are as follows:

- The jigsaw technique is a useful way to learn a great amount of the materials.
- The jigsaw technique makes a depth of knowledge.
- The jigsaw technique also extends conceptual knowledge like grammar,
- And it improves cooperative work among learners.

In addition, Longman dictionary (2002) listed some advantages of group work activity in the jigsaw technique that it is able to improve learners' learning:

- Group work generates interactive languages.
- Group works offers an embracing affective climate.
- Group word promotes learner responsibility and autonomy.
- Group word is a step toward individualizing instruction.

Other important issues that has been discussed in this study is the role of individual differences in language learning and teaching are *Impulsivity* and *Reflectivity* (I/R). Among different learning styles, impulsivity /reflectivity (I/R) have rarely been seen on the lists of learner factors and worked on by the teachers. According to Santrock (2011), there are two different areas, which related to cognitive style and individual differences are concerned with the impulsiveness and the reflectivity. The impulsivity and the reflectivity are two learning styles in cognitive domain. An impulsive person, as Brown (2007), stated “is a person who tends to make a quick or gambling guess at an answer to a problem and a reflective person tends to make a slower, more calculated decision”(p. 127).

Moreover, Most of the scholars and practitioners in the language today agree, “both the degree of success of second language learning is affected by individual learner differences” (Ellis, 2005: p.99).). Many researchers maintain that learner's factors such as age, aptitude, attitude, motivation, personality, cognitive style (individual differences; I/R), and preferred learning strategies need to be considered in second language acquisition (Hadley, 2003). In addition, Ellis (2005), emphasized that in the second language acquisition (SLA) researchers may acknowledge the importance of such



factors in their approaches to specific tasks. The impulsivity/reflectivity factors that deserves many considerations are of the cognitive style being responsible for decision-making while approaching a grammar workout. Ellis (1985) emphasized that SLA researchers may admit the importance of such factors in their approaches to specific tasks.

This research tried to apply the jigsaw technique in it that aimed to cultivate students' awareness and ability of cooperation, change their learning attitude and behavior of learning and improve their grammatical knowledge achievement. Therefore, according to extensive researches in most countries have been performance about teaching of grammar and the jigsaw technique as a modern technique and the role of individual differences (I/R) in language learning in particular grammar learning, it is a clear point; researches that have been done in Iran about these issues are not enough. Hence, this research tried to take advantages of jigsaw technique on teaching grammar among the reflective and impulsive Iranian EFL learners that were at intermediate level to show to what extent this technique make significant difference in outcome.

1. Research Questions

This study was an attempt to answer the following questions:

- Q.1.** Does exposure to the jigsaw technique's tasks have any significant effect on the learning grammar to the Iranian reflective learners?
Q.2. Does exposure to the jigsaw technique's tasks have any significant effect on the learning grammar to the Iranian impulsive learners?
Q.3. Are there any significant differences on the learning grammar between the Iranian intermediate reflective and impulsive learners due to exposure to the jigsaw technique's tasks?

The hypotheses stated in line with the questions are as follows:

- H01:** Exposure to jigsaw technique does not have a significant effect on the learning grammar to the Iranian reflective EFL learners.
H02: Exposure to jigsaw technique does not have a significant effect on the learning grammar to the Iranian impulsive EFL learners.
H03: There is not any significant difference on the learning grammar to the Iranian reflective and impulsive EFL learners due to exposure to jigsaw technique's tasks.

2. Method

Since pure randomization was not possible in the study, the researcher made use of two intact classes. One class was used as the first experimental group as the impulsive group and the other as the second experimental group as the reflective group. So the present study adopted a quasi-experimental design with two groups assigned as experimental group one (Impulsive group) and experimental group two (Reflective group).

2.1. Participants

The participants of the current study were 60 students in one of the language institutes in Tehran. The participants ranged in age from 18 to 26. They were female participants that were mainly university students and studying English for Special purposes. Initial the researcher performed the impulsivity/reflectivity questionnaire. After, the researcher divided them into two groups: the impulsive learners and the reflective learners. There were thirty students in each class (I/R).



2.2. Instruments

Three instruments were used in the present study a description of which follows:

2.2.1. Impulsivity/ Reflectivity Questionnaire

This questionnaire was originally developed by Patton, Stanford and Barrat (1995, cited in Ekhtiari et al, 2008, See Appendix B). The Barratt Impulsiveness Scale or BIS-11 is a widely used measure of impulsiveness. The BIS-11 questionnaire is used as a self-report measure of impulsive personality traits.

2.2.2. Oxford Placement Test (OPT)

Having selected the 60 participants in terms of impulsivity and reflectivity, the researcher administered an OPT (2007) the results of which were drawn upon to assure that the participants in the two groups were not significantly different in terms of the grammar of language proficiency. Moreover, the results of OPT were also used to identify those grammatical structures that learners were unfamiliar with for the purpose of treatment.

The OPT used contained 100 items. The participants had to answer to the questions for 90 minutes. Results were reported instantly as an overall score on a scale of 0-100. The researcher placed learners that obtained 61 to 100 scores as intermediate learners.

2.2.3. Grammar Knowledge Test

The teacher-researcher devised this test and included forty items (See Appendix A). The items of the grammar test were borrowed from different grammar tests such as different versions of OPT and Intermediate Grammar in Use (The grammar Test Section). This test was devised to focus on those grammatical structures which were unknown by the participants. This grammatical structure was related to use Active and Passive Voice in the sentences, which served as both the pre-test and the post-test.

First, it deemed important to establish the validity and reliability of this grammar test. After, the test was conducted in a group of thirty people who were not linked to the researcher's desired items.

Table 3.1. Results of Independent Samples T-test for Comparing Pre-Intermediate and Upper-Intermediate Learners' Scores on the Grammar Test for Validation Purposes

	Group	Mean	S. D.	T	Sig.
Grammar Test Scores	Pre-intermediate	14.9667	2.59287	1.386	0.003
	Upper-intermediate	31.8000	3.28424		

Note, N=30

Table 3.2. Correlation Coefficient between the Scores of the Upper – Intermediate Learners on the First and Second Administration of the Grammar Test

		First Administration of the Grammar Test
Second Administration of the Grammar Test	Pearson Correlation	0.961**
	Sig. (2-tailed)	0.000
	N	30

Note, Correlation is significant at 0.01**



3.3. Procedure

Initially, the researcher gained the approval of 60 female learners in a language institute in Tehran to take part in the study. Following that, she gave them the Persian version of Barratt's impulsivity and reflectivity (BIS-11) questionnaire (1995). The results of this questionnaire were used to divide the participants into two groups. Then, an OPT was administered to the participants to identify the grammatical structures that they did not know very well. This information was necessary since the researcher intended to teach the grammatical structures that the participants did not know very well. The results of OPT were also drawn upon to assure that the two groups were not significantly different in terms of overall language proficiency prior to the main study.

Afterwards, the treatment was carried out on the grammatical structures which were identified as unknown to the participants based on OPT results. To this end, there were an impulsive class and a reflective class of female intermediate EFL learners, the researcher made them for teaching grammar to two groups by using the jigsaw technique. In this research, the researcher in the implementation of jigsaw technique, needed to do every step of this study from the beginning to end in both the impulsive and the reflective groups separately. Following that, the treatment in both groups unfolded as follows:

In each group' learners were divided into five groups of six for performing the jigsaw technique. Every group took responsibility for a piece of information about the grammatical point under instruction. A topic (Passive Voice) in the grammar was broken to different pieces and then the researcher repeated this technique for another subject (Active Voice) in the grammar. In addition, presentation of subject among students was alternatively, so each of individual learner had chance to communicate.

In details, every group in the class took responsibility for a piece of information about the grammatical point (Passive Voice) under instruction. As for the passive voice, the groups had the following responsibilities:

Group 1: Definition of Passive Voice and its key terms.

Group2: Utilizing Passive Voice in different sentences through some examples.

Group 3: Finding Examples of using Passive Voice in a text.

Group 4: writing a paragraph by using Passive Voice.

Group 5: Making a test (5 items) using Passive Voice.

In each group, a leader checked and reported the group's progress to the whole class. Finally, all the groups came together as a class, swapped the information, and completed the task, and then the teacher gave to learners additional notes. The whole groups' activities were conducted under the auspice of the researcher. The treatment lasted for 10 sessions. Having finished the treatment, the researcher gave the participants of two groups (I/R) the grammar knowledge test as the posttest, to find the results of which were used to explore the research questions.

3.4. Data Analysis

In the present study, the researcher used both descriptive and inferential statistics. As for descriptive statistics, means and standard deviation were employed. Regarding inferential statistics the researcher made use of independent and paired samples t-test to explore the null hypotheses formed for the purpose of this study. In addition, the data obtained were analyzed by SPSS version 19.

4. Results



As the level of significance in Table 4.1 is 0.001, which indicates that the difference is statistically significant. Thus, it can be concluded that the reflective group has performed better on the post-test compared with the pretest of grammar. Therefore, the first null hypothesis of the study is rejected.

Table 4.1. Paired Samples T-test Results of the Pretest and Posttest Grammar Scores of the Reflective Group

	Paired Differences					t	df	Sig. (2-tailed)
	Mean	Std. Deviation	Std. Error Mean	95% Confidence Interval of the Difference				
				Lower	Upper			
Grammar Pre-test and Post-test Reflective Group	-3.71875	3.14422	.55582	-4.85236	-2.58514	1.244	29	0.001

Table 4.2. Paired Samples T-test Results of the Pre-test and Post-test Grammar Scores of the Impulsive Group

	Paired Differences					t	df	Sig. (2-tailed)
	Mean	Std. Deviation	Std. Error Mean	95% Confidence Interval of the Difference				
				Lower	Upper			
Grammar Pretest & Posttest Impulsive Group	-0.78125	.94130	.16640	-1.12063	-.44187	-4.695	29	0.220

As shows that there has been a slight improvement concerning grammar for the impulsive group. However, the level of significance as shown in Table 4.2 is **0.220**, which is higher than the confidence level of 0.05. Therefore, it can be concluded that the performance of the impulsive group on the pre-test and post-test is not statistically significant. Thus, the second null hypothesis of the study fails to be rejected.

Table 4.3. Independent Sample T-test Results of the Impulsive and Reflective Group for the Post-test of Grammar

	Levene's Test for Equality of Variances		t-test for Equality of Means							
	F	Sig.	t	df	Sig. (2-tailed)	Mean Difference	Std. Error Difference	95% Confidence Interval of the Difference		
								Lower	Upper	
Grammar Pre-test Reflective and Impulsive	Equal variances assumed	4.776	.033	-3.7	58	0.002	-3.40625	.91786	-5.24102	-1.57148
	Equal variances not assumed			-3.7	56.567	0.002	-3.40625	.91786	-5.24525	1.56725

As the level of significance in Table 4.3 is **0.002**, which indicates that the difference is statistically significant. Thus, it can be concluded that the two groups have performed differently on the post-test of grammar with the reflective group outperforming the impulsive group. Therefore, the third null hypothesis of the study was rejected.

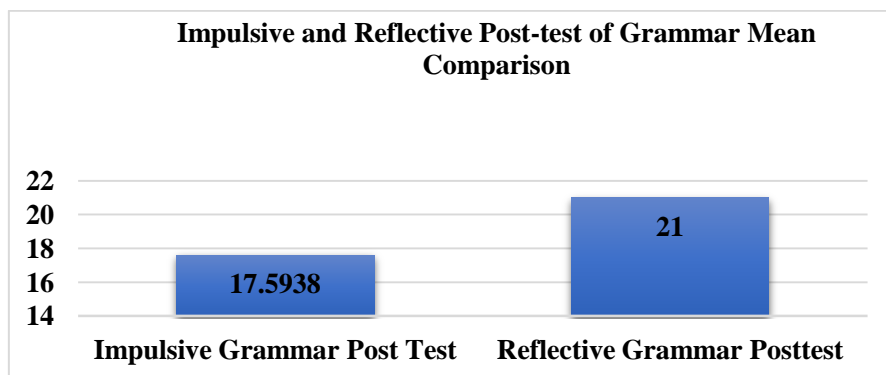


Figure 4.1. Mean Comparison of the Reflective and Impulsive Participants on the Post-test of Grammar

In addition, Figure 4.1 displays the mean of the two groups' on the posttest of grammar. It shows the result of the graphic representation of the means that the difference between the post-test scores of the impulsive group, and the reflective group was statistically significant.

5. Conclusion

In the current study the researcher attempted to explore the effect of using jigsaw technique on the grammar achievement of the Iranian impulsive and reflective learners (In this study were only female). Therefore, the present study was carried out to investigate the effect of using the jigsaw technique on the leaning grammar to the Iranian female impulsive and reflective learners.

In conclusion, the results of statistical analysis illustrated that jigsaw technique led to an enhancement on the grammar achievement of the reflective learners. Therefore, the use of the jigsaw technique was not effective for the impulsive learners. Additionally, it was found out that the reflective participants of the study benefited more in terms of grammar achievement due to exposure to the jigsaw technique.

The findings of this study indicate that educators need to gain awareness of different factors significant in learning in order to address individual educational needs of learners. Based on the findings, it can be inferred that the improvements in the reflective learners' grammar achievement because of using the jigsaw technique might have emerged because learners have possibly employed the maximum amount of cognitive repertoires in their possession that has consequently led to enhancement in their grammar achievement. In other words, the use of the jigsaw technique might have paved the way for the reflective learners to accomplish the goals set by the tasks. However, more studies need to be carried out to further investigate the issue and possibly shed more light on different ways the reflective and impulsive learners approach various tasks in general and the jigsaw technique in particular.

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**Appendix A :The researcher-teacher's conducted-test. (Active Voice and Passive Voice)**

DIRECTIONS: You have to choose one correct answer (a, b, c or d), then write the correct answer on the answer sheet.

1. You must obey your parents.
 - a) Your parents must obeyed by you.
 - b) Your parents must been obeyed by you.
 - c) Your parents must be obeyed by you.
 - d) Your parents must being obeyed by you.
2. He has shown good performance.
 - a) Good performance has shown by him.
 - b) Good performance has been shown by him.
 - c) Good performance had been shown by him.
 - d) Good performance has be shown by him.
3. The school has announced the result.
 - a) The result has announced by the school.
 - b) The result has been announced by the school.
 - c) The result has be announced by the school.
 - d) The result has being announced by the school.
4. She will invite me.
 - a) I shall be invited by her.
 - b) I will invited by her.
 - c) I shall being invited by her.
 - d) I will been invited by her.
5. Have you taken a rest?
 - a) Have a rest been taken by you?
 - b) Have a rest taken by you.
 - c) Had a rest taken by you?
 - d) Have a rest be take by you?
6. Why did you oppose her?
 - a) Why she opposed by you?
 - b) Why was she opposed by you?
 - c) Why is she opposed by you?
 - d) Why she opposes by you?
7. Why do you tell a lie?
 - a) Why a lie told by you?
 - b) Why is a lie be told by you?
 - c) Why is a lie told by you?
 - d) Why is a lite being told you?
8. The boys will have taken an exam.
 - a) An exam would taken by the boys.
 - b) An exam would have taken by the boys.
 - c) An exams will had been taken by the boys.
 - d) An exams will have been taken by the boys.
9. Why does an officer neglect the duties?
 - a) Why the duties neglected by an officer?



- b) Why are the duties neglected by an officer?
 c) Why is the duties neglected by an officer?
 d) Why are the duties neglect by an officer.
10. Are they playing match against them?
 a) Is a match being played against our team by them?
 b) Is a match be played against our team by them?
 c) Is a match played against our team by them?
 d) Is a match been played against our team by them?
11. My father did not buy a new car.
 a) A new car was not be bought by my father?
 b) A new car is not bought by my father.
 c) A new car was not bought by my father.
 d) A new car is not be bought by my father.
12. You will praise her very much.
 a) She will praised very much by you.
 b) She will be praised very much by you.
 c) She will being praised very much by you.
 d) She will been praised very much by you.
13. I take exercise daily.
 a) Exercise are taken daily by me.
 b) Exercise is taken daily by me.
 c) Exercise is being taken daily by me.
 d) Exercise is been taken daily by me.
14. Did you visit a zoo?
 a) Was a zoo being visited by you?
 b) Was a zoo be visited by you?
 c) Was a zoo been visited by you?
 d) Was a zoo visited by you?
15. Will you save my secrets?
 a) Will my secrets saved by you?
 b) Will my secretes be saved by you?
 c) Would my secretes save by you?
 d) Would my secrets be saved by you?
16. You have to finish this work as soon as you can.
 a) This work has been finished by you as soon as you can.
 b) This work has be finished by you as soon as you can.
 c) This work had to finished by you as soon as you can.
 d) This work has to be finished by you as soon as you can.
17. This surprised me.
 a) I surprised by this.
 b) I was surprised by this.
 c) I was be surprised by this.
 d) I was being surprised by this.
18. Had he lent me new books?
 a) Had I been lent new books by him?
 b) Had I be lent new books by him?



- c) Had I lent new books by him?
d) Had I being lent new books by him?
19. Am I helping him?
a) Is he helped by me?
b) Is he be helped by me?
c) Is he been helped by me?
d) Is he being helped by me?
20. The teacher asked me to learn the lesson by heart.
a) I asked by my teacher to learn the lesson by heart.
b) I am asked by my teacher to learn the lesson by heart.
c) I am being asked by my teacher to learn the lesson by heart.
d) I was asked by my teacher to learn the lesson by heart.
21. Did he not listen to his teacher?
a) Was his teacher not being listened by him?
b) Did his teacher not listened by him?
c) Was his teacher not listened by him?
d) Was his teacher not be listened by him?
22. Will they have beaten us?
a) Will we have been beaten by them?
b) Will we have beaten by them?
c) Will we has being beaten by them?
d) Will we had been beaten by them?
23. Please switch on the light.
a) It is requested to you to switch on the light.
b) It has requested to you to switch on the light
c) It is requested to you to switch on the light.
d) It is being requested to you to switch on the light.
24. Why does she always make lame excuses?
a) Why lame excuses always made by her?
b) Why is lame excuses always made by her?
c) Why do lame excuses always made by her?
d) Why are lame excuses always made by her?
25. Can a police restore peace in city?
a) Can peace be restored in a city by a police?
b) could peace restored in a city by a police?
c) Can peace restored in a city by police?
d) could peace be restored in a city by police?
26. When I saw her, she was crossing the road.
a) When she seen by me, she was crossing the road.
b) When she was being seen by me, she was crossing the road.
c) When she was seen by me, she was crossing the road.
d) When she saw by me, she was crossing the road.
27. I cannot reply you because I am busy in exam.
a) You cannot be replied by me, because I am busy in exam
b) You could not replied by me, because I am busy in exam.
c) you could not be replied by me because I am busy in exam.



- d) You cannot be replied by me, because I am busy in exam.
28. Why are the crowd raising the slogans against him?
- a) Why the slogans raised against him by the crowd?
- b) Why are the slogans being raised against him by the crowd?
- c) Why are the slogans been raised against him by the crowd.
- d) Why are the slogans be raised against him by the crowd?
29. He did not give up the fight even though he was badly bruised.
- a) The fight did not give up by him even though he was badly bruised.
- b) The fight had not given up by him even though he was badly bruised.
- c) The fight was not given up by him even though he was badly bruised.
- d) The fight was not being given up by him even though he was badly bruised.
30. We should avoid tranquilizer in order to have a good health.
- a) Tranquilizer should avoided by us in order to have good health.
- b) Tranquilizer should been avoided by us in order to have a good health.
- c) Tranquilizer should be avoid by us in order to have a good health.
- d) Tranquilizer should be avoided by us in order to have a good health.
31. His wife upbraided him for his irresponsible handling of the family finance.
- a) He upbraided by his wife for his irresponsible handling of the family finance.
- b) He was upbraided by his wife for his irresponsible handling of the family finance.
- c) He has upbraided by his wife for his irresponsible handling of the family finance.
- d) He ere upbraided by his wife for his irresponsible handling of the family finance.
32. She never understood me, whenever I said something.
- a) Whenever I said something, I never understood by her.
- b) Whenever I said something, I had never understood by her.
- c) Whenever I said something, I was being never understood by her.
- d) Whenever I said something I was never understood by her.
33. When I am alone, I hear the footsteps of my friend in my imagination.
- a) The foot steps of my friend heard by me, when I am alone.
- b) The foot steps of my friend is heard by me when I am alone.
- c) The foot step of my friend are heard by me when I am alone.
- d) The foot steps of my friend was heard by me when I am alone.
34. Why did you think negatively? Always see the positive side.
- a) Why is thought negatively by your? The positive side was always seen.
- b) Why it was thought negatively by you? The positive side is always seen.
- c) Why though negatively by you? The positive side is always seen.
- d) Why were thought negative side is always seen.
35. Will the new local election system satisfy the people of the country?
- a) Will the people of the country be satisfied by the new local election system?
- b) Will the people of the country satisfy by the new local election system?
- c) Will the people of the country been satisfied by the new local election system?
- d) Will the people of the country being satisfied by the new local election system?
36. What I can say about him? He does not keep his words.
- a) What can said about them by me? His works are not kept by him.
- b) What could be said about him by me? His works are not kept by him.
- c) What can be said about him by me.? His words were not kept by him.
- d) What can be said about him by me? His words are not kept by him.



37. Many people were asking for merciless accountability of corrupt politicians.
- It was asked by many people for merciless accountability of corrupt politicians.
 - It asked by many people for merciless accountability of corrupt politicians.
 - it was be asked by many people for merciless accountability of corrupt politicians.
 - It was being asked by many people for merciless accountability of corrupt politicians.
38. Many politicians usually disown the promises when they win the election.
- The promises are being disowned by many politicians, when the election is won by them.
 - The promises are disowned by many politicians, when they election is won by them.
 - The promises disowned by many politicians, when they election is won by them.
 - The promises are been disowned by many politicians, when they election is been won by them.
39. Which book had you read last days?
- Which book had been read by you last days?
 - Which book has been read by you last days?
 - Which book had being read by you last days?
 - Which book was being read by you last days?
40. They have informed me, about their late arrival.
- I have informed by them, about their late arrival.
 - I had informed by them, about their late arrival.
 - I have been informed by them, about their late arrival.
 - I had been informed by them, about their late arrival.

The Researcher-Teacher Test: Answer keys

1. c	11. c	21. c	31. b
2. b	12. b	22. a	32. d
3. b	13. b	23. c	33. b
4. a	14. d	24. d	34. b
5. a	15. b	25. a	35. a
6. b	16. d	26. c	36. d
7. c	17. b	27. a	37. d
8. c	18. a	28. b	38. b
9. b	19. d	29. c	39. a
10. a	20. d	30. d	40. c



Appendix B: BIS-11, Original version

Barratt Impulsiveness Scale-11(1995); Original version

DIRECTIONS: People differ in the ways they act and think in different situations. This is a test to measure some of the ways in which you act and think. Read each statement and put an X on the appropriate circle on the right side of this page. Do not spend too much time on any statement. Answer quickly and honestly.

	1 O Rarely/Never	2 O Occasionally	3 O Often	4 O Almost Always/Always
				1 2 3 4
1 I plan tasks carefully.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
2 I do things without thinking.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
3 I make-up my mind quickly.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
4 I am happy-go-lucky.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
5 I don't "pay attention."	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
6 I have "racing" thoughts.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
7 I plan trips well ahead of time.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
8 I am self-controlled.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
9 I concentrate easily.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
10 I save regularly.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
11 I "squirm" at plays or lectures.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
12 I am a careful thinker.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
13 I plan for job security.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
14 I say things without thinking.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
15 I like to think about complex problems.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
16 I change jobs.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
17 I act "on impulse."	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
18 I get easily bored when solving thought problems.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
19 I act on the spur of the moment.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
20 I am a steady thinker.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
21 I change residences.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
22 I buy things on impulse.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
23 I can only think about one thing at a time.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
24 I change hobbies.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
25 I spend or charge more than I earn.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
26 I often have extraneous thoughts when thinking.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
27 I am more interested in the present than the future.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
28 I am restless at the theater or lectures.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
29 I like puzzles.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
30 I am future oriented.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>