



The Impact of Peer Corrective Feedback on Extroverted and Introverted Iranian Elementary L2 Learners' Reading Comprehension

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ABSTRACT

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There seems to be a link between the type of corrective feedback students receive in the classroom and their personality styles. The current study investigated the impact of peer corrective feedback on the reading comprehension of extroverted and introverted Iranian elementary L2 learners. At first, a Quick Oxford Placement Test (QOPT) was used to select thirty-three elementary EFL students as participants. Then, based on their responses to the Persian translation of the Eysenck Personality Inventory (EPI) questionnaire, the participants were classified as extroverted and introverted learners. The participants were also divided into two groups; peer corrective feedback-extroverted learners and peer corrective feedback-introverted learners. In terms of the quantitative part of the study, a pre-test (a reading comprehension test), eight treatment sessions (peer corrective feedback sessions), and a post-test (the same as the pre-test) were administered in reading comprehension classes during a semester. As the qualitative part of the study, there was an interview session to assess the participants' attitudes towards the provision of peer corrective feedback. The quantitative data analysis results revealed that both groups benefited from the intervention. Although there was no statistically significant difference between the groups, introverted learners outperformed extroverted ones. The findings of the qualitative data analysis revealed that the majority of the participants agreed with the provision of peer corrective feedback in reading comprehension classes. According to the study's findings, using peer corrective feedback in reading comprehension course improved both extroverted and introverted elementary L2 learners' reading comprehension.

Keywords: Extroversion, Introversion, Peer Corrective Feedback, Reading Comprehension

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Introduction

Individual differences and their potential roles in language teaching and learning deserve a lot of attention. Understanding language learners' cognitive styles and personality traits is important for teachers in educational settings because it helps them find appropriate instructional techniques. Many researchers and educators have been interested in how individual differences moderate learners' classroom performance and achievements in recent years. Many studies have been conducted to investigate how learners' personality styles affect the type of feedback they receive. Individuals with different personality styles, for example, are thought to be able to choose from a variety of feedback sources (e.g., peers) and tactics for feedback-seeking (e.g., monitoring) (Grant & Ashford, 2008). It is also believed that feedback's role is to describe and evaluate learners' performance to assist them in improving their language production (Tabatabaei & Banitalebi, 2011).

It is widely acknowledged that matching instructional techniques to students' learning styles speeds up the learning process. There is also a substantial body of research on how introversion and extroversion influence students' learning behaviors (Boroujeni et al., 2015; Venugopalan, 2000; Zafar & Meenakshi, 2012). The current study shows the necessity of connecting learners' personality styles to the type of corrective feedback they receive for their incorrect forms in reading comprehension courses. The present study seeks to determine whether L2 learners' personality styles influence the extent to which they benefit from a type of corrective feedback known as peer corrective feedback. In fact, this study clarifies whether using peer corrective feedback in reading comprehension courses could help the extroverted and introverted elementary L2 learners improve their reading comprehension.

2. Literature Review

As the present study aims to investigate the impact of peer corrective feedback on the reading comprehension of extroverted and introverted Iranian elementary L2 learners, it is critical to present the theories and related studies that underpin the key elements of the study regarding peer corrective feedback, extroversion and introversion, and reading comprehension.

2.1. Peer Corrective Feedback

2.1.1. Theories behind Peer Corrective Feedback

Gielen et al. (2010) defined peer corrective feedback as a qualitative activity performed by equal status learners. The learners discuss in detail the

task's strengths and weaknesses and offer suggestions for improvement during the process of learning. It is believed that peer corrective feedback is distinct because its effectiveness may be mediated by some characteristics that distinguish peer interaction from interaction between learners and the teacher (Sato & Ballinger, 2012).

2.1.2. Related Studies on Peer Corrective Feedback

Zarei and Rezaoust (2020) investigated the effects of scaffolded and unscaffolded feedback on speaking anxiety and self-efficacy and concluded that scaffolded feedback followed by unscaffolded feedback via recast could reduce speaking anxiety while increasing speaking self-efficacy.

In a recent study, Shabani et al. (2016) tried to assess the effect of content feedback on learners' reading comprehension while employing some reading strategies and considering the learners' personality types, i.e., extroversion/introversion. The findings of the study supported the positive impact of the aforementioned techniques on learners' ability to comprehend the text. Both groups of introverted and extroverted learners performed well in this study, according to the findings, with the extroverted group outperforming the introverted group. It was also discovered that because the learners could self-regulate the reading exercises, they had positive attitudes toward the content feedback provided to them. It should be noted that the present study is different from the study done by Shabani et al. (2016) in terms of the type of corrective feedback used in the current study.

Nourzad Haradasht et al. (2020) compared the effects of metacognitive reading strategy (MRS) and collaborative strategic reading (CSR) on the reading comprehension of extroverted and introverted Iranian EFL learners. The results showed that introverts with MRS outperformed extroverts with MRS, introverts and extroverts with CSR, and control groups, implying that when using various reading strategies in reading comprehension classes, personality traits play a significant role. It is worth mentioning that the study done by Nourzad Haradasht et al. (2020) is different from the present study in terms of the variables they used in their study.

The effectiveness of peer corrective feedback has been the subject of numerous studies. Some of them concentrated on how fellow readers can obtain appropriate feedback (Caulk, 1994; Mendonca & Johnson, 1994). Peer review was widely used in language learning classrooms by instructors (Bruffee, 1984; Elbow, 1973, 1981; Gere, 1987).

Some studies have confirmed the significance and effectiveness of corrective feedback in improving learners' language skills or sub-skills (Ashwell, 2000; Foltz et al., 2014).

A research done by Sippel and Jackson (2015) suggests that peer corrective feedback accelerates L2 development in the same way that corrective feedback from other interlocutors does by causing learners to notice gaps in their inter-language communication.

A study by Zhao (2014), who reports the practicality of peer feedback from the perspective of his Chinese students, also confirms learners' comfort when receiving feedback from their friends.

Diab (2010) investigated the role of peer and self-feedback in reducing language errors in the writing ability of university EFL students in Lebanon. The study discovered that learners who received peer corrective feedback reduced their rule-based errors (pronoun agreement, subject/verb agreement) in revised essays more than those who received self-feedback. Peer corrective feedback enables students to engage in collaborative dialogue and meaning negotiation, which aids language learning and raises learners' awareness of meaning and form.

Zhao (2010) studied the use and perception of peer and teacher feedback by 18 Chinese EFL students. Despite the fact that the study's findings revealed that learners incorporated more teacher corrective feedback than peer comments in their corrections, they could not fully comprehend teacher corrections and benefited more from peer review.

McDonough's (2004) study involved EFL learners in Thailand doing communicative tasks in pairs and groups. The participants were divided into high-participation and low-participation groups based on the amount of peer feedback and modified output observed during peer interaction. The results of the study revealed that the high-participation group improved significantly on the target structures, whereas the low-participation group did not.

The effectiveness of peer corrective feedback was also tested experimentally in Adams' (2007) experiment, which involved ESL learners from various L1 backgrounds in the United States engaging in peer interaction. According to the findings, 59 percent of corrective feedback episodes resulted in L2 learning.

Sippel and Jackson (2015) designed a quasi-experimental study in which university students in Germany were divided into three groups: peer feedback, teacher feedback, and control. While working in groups, the learners in the peer feedback group were taught to provide output-promoting feedback, i.e., prompts to one another. In both the immediate and delayed post-tests, the experimental groups outperformed the control group.

Cho and MacArthur (2011) conducted research with university students that demonstrated that not only receiving but also giving feedback has a positive effect on students. They concentrated on peer writing comments as

the treatment of the experimental group. This experimental situation was contrasted with a reading condition in which students read their classmates' writing without any feedback or comments. Participants in the experimental group wrote better papers on a new topic than those in the other group.

2.2. Extroversion and Introversion

2.2.1. Theories behind the Personality Characteristics (Extroversion and Introversion)

As stated by Ehrman (1993) and Ehrman and Oxford (1995), EFL teachers must recognize and understand their students' differences in order to provide effective instructions. According to Eysenck (1965), extroverts and introverts are classified as follows: The extroverts are sociable, enjoy parties, need people to talk to, dislike studying alone, and have many friends. They take risks, act on the spur of the moment, put themselves out there, and are normally impulsive. They are always ready to respond and enjoy big changes. Introverted individuals, on the other hand, are quiet, shy, and introspective, preferring to read books over socializing. They accept friends with open arms but are distant and reserved. They distrust the spur of the moment and prefer to plan ahead. They dislike pleasure, take daily life seriously, and prefer a well-organized way of life.

According to Ellis (1994), while introverted learners excel at cognitive academic language skills, extroverted learners excel at interpersonal communicative skills. Extroverted learners, according to Hemmat Nezhad et al. (2014), are active, sociable, impulsive, risk-taking, expressive, and like taking part in group activities. Introverts, on the other hand, tend to be quiet, introspective, and reserved except for close friends.

Introverts derive their energy from solitary activities and the world of their ideas (Eysenck & Chan, 1982). They gain energy from private activities and the inner world of thoughts and ideas. Extroverted people, on the other hand, always get their energy from the outside world (Eysenck, 1981). Extroverts and introverts differ in a variety of ways including: 1. Introverts outperform extroverts in academic performance. Furthermore, students who withdraw from university or school for psychiatric reasons are more likely to be extroverts. 2. Extroverts have higher levels of arousal in the evenings and they are more active in the afternoons, while introverts have higher levels of arousal and are more active in the mornings. 3. Introverts enjoy chemistry and engineering, whereas extroverts prefer people-oriented work (e.g., social jobs) (Hjelle & Ziegler, 1992).

Entwistle and Wilson (1977) assert that because introverts have better long-term memory than extroverts, they achieve more. Furthermore, because of their personality traits, they take language learning more seriously and

devote more time to writing and reading. Introverts like reading, are quiet, tend to avoid excitement, and have a small circle of close friends. (Eysenck, 1981).

2.2.2. Related Studies on Extroversion and Introversion

Esfandiari (2019) conducted a study to determine how well certain personality traits predicted raters' ratings of students' written performance. According to the findings, extroversion, agreeableness, openness, neuroticism, and conscientiousness did not contribute significantly to the ratings. Such personality factors may not account for the ratings, and rater variability should be explained using other personality variables.

Pazhuhesh (1994) examined the relationship between extroversion/introversion as personality dimensions and reading comprehension. Introverts performed significantly better than extroverts in her study.

To find the relationship between extroversion/introversion and pronunciation accuracy, Hassan (2001) performed a study on 71 Arabic junior English students from an Egyptian university. There was a significant positive relationship discovered between extroversion and English pronunciation accuracy. Extroverts were found to be more accurate language learners in foreign language classes because they are more sociable than introverted students who may be afraid of interaction in the classroom.

Alavinia and Sameei (2012) studied the relationship between extroversion/introversion and listening ability. The participants were Iranian EFL students. The findings revealed a significant relationship between variables, as well as the fact that introverted students outperformed extroverted students.

Alibakhshi (2011) conducted research on 280 male and female Iranian EFL teachers to investigate the effect of personality type and gender on EFL instructors' instruction preferences and teaching effectiveness. He concluded that personality type and gender have no significant impact on instructors' teaching effectiveness. However, instructors' personality and gender have a significant impact on their preferred teaching activities.

In a different investigation, Hassan (2001) looked into the possibility of a relationship between extroversion/introversion and pronunciation accuracy in EFL courses. He observed that extroverted students outperformed introverted students in English pronunciation.

Mansouri Nejad et al. (2012) tried to find how extroversion and introversion affect academic writing ability. According to the findings, there was no significant relationship between personality type and writing ability.

Layeghi (2011) observed the relationship between EFL students' extroversion and introversion personality styles and their ability at argumentative writing in terms of form, content, and overall performance. She recognized that introverted writers outperformed extroverted writers in all three sections.

In a study, Dewaele and Furnham (2000) looked at the relationship between personality type and speech production. They discovered that bilinguals who are extroverted speak more fluently than bilinguals who are introverted, particularly under pressure and stress.

2.3. Reading Comprehension

2.3.1. Theories behind Reading Comprehension

Feedback in reading instruction can help students to master comprehension, which is the ultimate goal of reading instruction, just like it can in other language skills like speaking, listening, and writing (Nation, 2005). Reading comprehension is referred to as the process of meaning building that results from the fusion of textual content and messages with the reader's existing knowledge and skills (Pardo, 2004). Reading is primarily a goal-oriented activity (Alderson, 2000). Suparman (2010) also stated that there are two reasons for reading; reading for pleasure and reading for information to understand or do something with the information the reader receives. The ability to develop a mental model of the text is made possible by the intricate combination of automatic and strategic cognitive processes that occurs during reading comprehension (van den Broek & Espin, 2012). Comprehension is the essence of reading and is an active process of meaning construction in a text (Durkin, 1993). The effective application of strategic processes such as metacognition and comprehension monitoring is required for comprehension (Yovanoff et al., 2005).

Reading comprehension is divided into two levels: literal level, also known as shallow comprehension, which is a minimally coherent mental representation accomplished by readers based on their explicit knowledge, and inferential level, also known as deep comprehension, which is a highly coherent and richly integrated plausible presentation (McNamara, 2007). Extraction and construction of meaning from reading material through engagement and interaction are further components of reading comprehension (Snow, 2002).

Many scholars believe that reading is a socially constructed, cognitive, and developmental task that involves more than just understanding the words on a page (Hedgcock & Ferris, 2009). Reading comprehension, according to Maria (1990), is the holistic process of constructing meaning from written text through the interaction of (A) the context in which the text is read, (B) the

reader's interpretation of the language used by the author, and (C) the reader's knowledge, including word knowledge, word recognition skills, and linguistic convention knowledge.

According to Grabe (1997), the main characteristics of reading processing are phonological coding, orthographic processing, word recognition (lexical access), sentence parsing, working memory activation, propositional text-model formation, propositional integration, the development of an appropriate situation model (mental model), and text-model development.

Davies (1995) assumed that traditional reading exercises, such as multiple-choice tests, are severely limited learning activities. Reading comprehension tasks, which involve learners interacting with the text and with one another, may be applied as an alternative to traditional reading comprehension exercises because they use challenging and authentic texts. Kaplan (2002) said that one of the most significant characteristics of reading is that it is strategic, that is, while reading, the readers check whether they have achieved their purpose for reading or not.

2.3.2. Related Studies on Reading Comprehension

Zarei et al. (2016) discovered that only the planning and effort components of self-regulated learning strategies were significant predictors of reading comprehension in Iranian EFL learners when they investigated the relationship between reading comprehension and self-regulated learning strategies.

In a meta-analysis published in 2007, Krashen examined the extensive reading advantages for EFL learners who are adolescents and young adults. The results of the study showed that extensive reading significantly affects reading comprehension.

Al-Homoud and Schmitt (2009) investigated the effect of extensive reading on the reading comprehension of 70 Saudi male EFL college students. Participants were divided into extensive and intensive reading groups. The findings revealed that both groups improved in reading comprehension abilities. Nonetheless, there was no statistically significant difference between the groups. In terms of reading rate, the extensive reading group outperformed the other group.

Safdarian et al. (2014) conducted research to investigate the relationship between Iranian EFL university learners' reading strategies and their personality types. This study's findings revealed a link between reading comprehension strategies and extroversion/introversion. The introvert trait was positively correlated with the in-use strategy, and introverts were more strategic readers than extroverts.

Abdollahzadeh (2014) tested the relationship between gender differences and EFL learners' reading comprehension based on topic interest. This study included 106 intermediate EFL students (54 males, 52 females) from an institute and 41 students (20 males, 21 females) from a university. The findings revealed a significant relationship between topic interest and gender differences. Furthermore, both groups performed better on female-oriented topics.

Bell (2001) studied 26 young adults working for the government in Yemen. The participants were divided into two groups of 14 extensive readers and 12 intensive readers. The extensive readers significantly improved in reading comprehension and reading rate, according to the findings.

This study attempts to determine how extroverted and introverted Iranian elementary L2 learners' reading comprehension is affected by peer corrective feedback. To this end, the following research questions were posed:

RQ 1. Does peer corrective feedback have any impacts on extroverted Iranian elementary L2 learners' reading comprehension?

RQ 2. Does peer corrective feedback have any impacts on introverted Iranian elementary L2 learners' reading comprehension?

RQ 3. Are there any significant differences between the extroverted and introverted Iranian elementary L2 learners' reading comprehension as far as peer corrective feedback is concerned?

RQ 4. What is the learners' attitude towards the provision of peer corrective feedback?

3. Method

The present qualitative-quantitative study employed a pre-experimental design using a pre-test, treatment sessions, and a post-test. The participants have been assigned into two groups; peer corrective feedback – extroverted learners and peer corrective feedback – introverted learners. Peer corrective feedback (the treatment of the study) was the independent variable and the dependent variable of the study was extroverted and introverted learners' reading comprehension. A pre-test was given to the participants before starting the treatment sessions, then after eight treatment sessions a post-test was administered to measure the participants' reading comprehension. The qualitative part of the study aimed to explore learners' attitude towards the provision of peer corrective feedback in reading comprehension classes by running an interview session.

3.1. Participants

Sixty male and female Iranian EFL learners studying at Mazandaran University of Science and Technology (Babol, Mazandaran, Iran) took part in the study. At first, a QOPT was administered to check the participants' homogeneity in terms of their language proficiency and as a result of that, 33 male and female elementary learners were selected. Persian was the participants' mother tongue. Their age ranged from 18 to 27. The participants were also categorized as extroverted (2 male and 15 female) and introverted (6 male and 10 female) learners based on their scores on the Persian translation of the EPI questionnaire. Thus, two groups have been formed: extroverted learners who received peer corrective feedback and introverted learners who received peer corrective feedback in reading comprehension classes. None of the participants were absent in the pre-test, treatment, and the post-test sessions. In terms of informed consent, all participants were informed of the nature and purpose of the study, as well as the confidentiality of their answers.

3.2. Materials and Instruments

3.2.1. Quick Oxford Placement Test (QOPT)

A QOPT (version 2) was used to assess learners' language proficiency and to homogenize the participants' proficiency levels. The test consisted of 60 items including grammar and vocabulary multiple-choice questions and some cloze tests. Based on the results of the test, participants could be placed at six different levels: beginner, elementary, lower intermediate, upper-intermediate, advanced, and very advanced. The allotted time for the test was 30 minutes.

3.2.2. Eysenck Personality Inventory (EPI) Questionnaire

The Persian translation of the Eysenck Personality Inventory Questionnaire was used to recognize the participants' personality type (extroversion or introversion). The EPI is a 90 Yes/No items questionnaire to assess the personality traits of the individuals. Twenty-one items of the questionnaire measure extroversion and introversion, 23 items measure neuroticism, 25 items measure psychoticism, and the remaining 21 items examine the lie of the participants. According to Shapurian and Hojat (1985), who conducted a study on the Persian version of the Eysenck Personality Inventory Questionnaire, estimates of internal consistency (alpha reliability) for the extroversion and neuroticism scales were above .80 in two groups of their study. These estimates were .69 and .53 for psychoticism, respectively, and .74 and .70 for the lie scale in groups one and two. Extroversion, neuroticism, psychoticism, and lie scales had test-retest reliability of .81, .79, .79, and .84, respectively. The construct validity of these scales was supported by significant correlations between extroversion, neuroticism, psychoticism

scores, and measures that are conceptually related (anxiety, depression, self-esteem, and loneliness).

3.2.3. Reading Comprehension Test

3.2.3.1. Pre-test. To specify the participants' overall reading comprehension, a pre-test was held before the treatment sessions. The pre-test, which was selected from inside reading I, was a passage and its related comprehension questions including true/false items, fact/opinion items, matching items, omitting the extra word items, filling in the blanks, and checking the true statement items.

3.2.3.2 Post-test. In order to check the efficiency of the treatment sessions on the participants' reading comprehension, a post-test was administered. The passage and its reading comprehension questions for the post-test was the passage and its questions used for the pre-test, i.e., a reading passage and its comprehension questions selected from inside reading I. The Cronbach's alpha calculated for the pre-test and post-test was 0.87.

3.2.4. Treatment

After the pre-test, eight treatment sessions were also held. The main purpose of the treatment sessions was to familiarize the participants with the concept of feedback and, especially, peer corrective feedback, and its use in reading comprehension classes.

3.2.5. Interview

An interview session was run to extract the participants' ideas about giving/receiving peer corrective feedback during reading comprehension courses.

3.3. Procedure

There was a qualitative-quantitative procedure in this pre-experimental study. A QOPT was initially used to assess the participants' homogeneity and level of language proficiency. Based on the proficiency test, 33 elementary EFL learners from Mazandaran University of Science and Technology (Babol, Mazandaran, Iran) out of 60 learners were chosen to participate in the study. Then, to check the participants' personality style, a Persian translation of the EPI questionnaire was administered and its results affected the division of the participants either as extroverts ($n = 17$) or as introverts ($n = 16$). This research has been set to figure out the impact of peer corrective feedback on extroverted and introverted Iranian elementary L2 learners' reading comprehension. A passage and its comprehension questions selected from inside reading I, was used as a pre-test for specifying the participants' overall reading

comprehension before the treatment sessions. Then, after the pre-test session, eight sessions of treatment were held. The treatment sessions were divided into two parts; in the first four sessions, participants became familiar with the concept of feedback and especially peer corrective feedback in reading comprehension classes. During these sessions the researcher used different tools, such as classroom discussion, instructional videos, and power point presentations to describe the notion of peer corrective feedback. And in the second four sessions, participants applied peer corrective feedback when reading different passages in reading comprehension classes to comprehend the texts better and also to answer the comprehension questions of the texts. And finally, a post-test, i.e., the passage and its comprehension questions used for the pre-test, was held in order to check whether the treatment sessions were advantageous or not. For the qualitative part of the research, participants' attitudes towards the provision of peer corrective feedback were checked in an interview session and their ideas were audio recorded and transcribed.

3.4. Data Analysis

After the process of data collection, to analyze the data, both quantitative and qualitative methods were employed. In order to analyze the first three research questions, quantitative analysis through SPSS software was applied. To analyze the data, a number of ways were established. The normality of the data distribution was assessed using the Shapiro-Wilk and Kolmogorov-Smirnov tests. Paired samples t-tests were also used to compare the performance of extroverted and introverted learners in the pre-test and post-test. An Independent samples t-test was used to compare the performance of two groups of extroverted learners and introverted learners in the post-test. Finally, to analyze the fourth research question, participants' attitudes in an interview session were audio recorded and transcribed to assess the efficacy of the treatment sessions on the learners' reading comprehension.

4. Results and Discussion

4.1. Results

4.1.1. Investigation of the First Research Question

The first research question asked about the impacts of peer corrective feedback on extroverted Iranian elementary L2 learners' reading comprehension. To answer this question, statistical procedures have been adopted. To find out whether the scores of the extroverted and introverted participants were normally distributed, a normal distribution test (Table 1) was first conducted.

Table 1.

<i>Normality Distribution Test for the Extroverted and Introverted Groups</i>						
	Kolmogorov-Smirnov			Shapiro-Wilk		
	Statistic	df	Sig.	Statistic	Df	Sig.
Introverts' Pre-Test	.187	16	.138	.856	16	.017
Introverts' Post-Test	.166	16	.200*	.907	16	.106
Extroverts' Pre-Test	.157	16	.200*	.936	16	.307
Extroverts' Post-Test	.227	16	.027	.903	16	.091

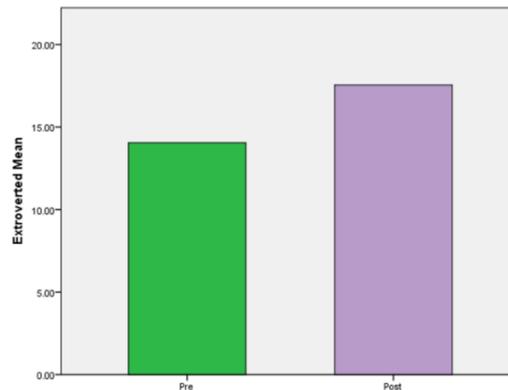
*. This is the true significance's lower bound.

The Kolmogorov-Smirnov goodness-of-fit test yielded .138 and .200 for the introverted learners' pre-test and post-test, respectively, and .200 and .027 for the extroverted learners' pre-test and post-test. The findings of the Shapiro-Wilk goodness-of-fit test were also examined due to the small sample size. The results showed that introverted learners scored .017 and .106 on the pre-test and post-test, while extroverted learners scored .307 and .091. The results showed that the scores were normally distributed, hence parametric tests should be employed when analyzing the data.

Extroverted students' performance was compared between the pre-test and post-test using descriptive statistics. Table 2 shows how extroverted students performed in the pre-test and post-test.

Table 2.***Extroverted Learners' Pre-test and Post-test Descriptive Statistics***

	N	Mean	Std.	
			Deviation	Std. Error Mean
Extroverts' Pre-Test	17	15.2206	2.42848	.58899
Extroverts' Post-Test	17	17.2647	2.00092	.48529

Figure 1.*Extroverts' Mean difference between the Pre-test and Post-test*

The participants' mean score increased from the pre-test ($M = 15.22$, $SD = 2.42$) to the post-test ($M = 17.26$, $SD = 2.00$), according to the descriptive statistics of the extroverted learners' pre-test and post-test, showing that they benefited from peer corrective feedback.

Table 3.*Paired Samples T-test on the Pre-test and Post-test for Extroverted Learners*

	Mean	Std. Deviation	Std. Error Mean	Paired Differences		T	Df	Sig.
				95% Confidence Interval of the Difference				
				Lower	Upper			
				Pre-test - Post-test	-2.04412			

The paired-samples t-test was used to compare the mean scores, and a significant difference was found ($p = .007$, $df = 16$, $t = -3.08$). The magnitude of the difference in mean was -2.04 ($CI = -3.44$ to $-.63$), indicating a large difference. It is indicated that the treatment sessions were effective for the extroverted participants (table 3).

4.1.2. Investigation of the Second Research Question

The second research question asked about the impacts of peer corrective feedback on introverted Iranian elementary L2 learners' reading comprehension. To answer this question, quantitative analyses were applied. To compare the performance of introverted participants in the pre-test and post-test, a paired-samples t-test was used.

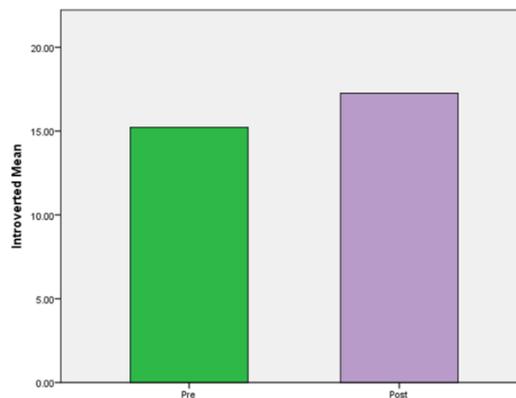
Table 4.

Introverted Learners' Pre-test and Post-test Descriptive Statistics

	N	Mean	Std.	
			Deviation	Std. Error Mean
Introverts' Pre-Test	16	14.0469	3.00169	.75042
Introverts' Post-Test	16	17.5469	1.20145	30036

Figure 2.

Introverts' Mean Difference between the Pre-test and Post-test



Descriptive statistics results (Table 4) showed an increase from the pre-test ($M = 14.04$, $SD = 3.00$) to the post-test ($M = 17.54$, $SD = 1.20$), indicating that the introverted students benefited from peer corrective feedback and an improvement was seen in their reading comprehension. The results of the paired samples t-test for the introverted students are shown in Table 5.

Table 5.***Paired Samples T-test on the Pre-test and Post-test for Introverted Learners***

	Mean	Std. Deviation	Std. Error Mean	Paired Differences		t	Df	Sig.
				Lower	Upper			
Pre-test - Post-test	-3.5000	2.80476	0.70119	-4.99455	-2.00545	-4.992	15	.000

Based on table 5, a significant difference between the mean scores was seen according to the paired-samples t-test results ($p = .000$, $DF = 15$, $t = -4.99$). The size of the mean difference was -3.50 ($CI = -4.99$ to -2.00), indicating a significant difference. The findings showed that the introverted students' reading comprehension was greatly impacted by peer corrective feedback.

4.1.3. Investigation of the Third Research Question

The third research question examined the differences in reading comprehension between extroverted and introverted Iranian elementary L2 learners in terms of peer corrective feedback. An independent samples t-test was used to compare the extroverted and introverted learners' mean scores on the post-test. Descriptive statistics (Table 6) show how extroverted and introverted students performed in the post-test.

Table 6.***Extroverted and Introverted Learners' Pre-test and Post-test Descriptive Statistics***

	N	Mean	Std. Deviation	Std. Error Mean
Introverts' Post-Test	16	17.5469	1.20145	.30036
Extroverts' Post-Test	17	17.2647	2.00092	.48529

Based on the above table, the mean scores of the introverted participants ($M = 17.54$, $SD = 1.20$) are not very different from those of the extroverted participants ($M = 17.26$, $SD = 2.00$), demonstrating that both groups' post-test performance was nearly equal.

In order to compare the groups' mean scores, an independent samples t-test was also used (Table 7) for both of the groups on the post-test.

Table 7.

Independent Samples T-test on the Post-test of the Groups

	F	Sig.	T	Df	Sig.
Eq. var. assumed	4.331	.046	-.487	31	.630
Eq. var. not assumed			-.494	26.464	.625

The assumption of equal variances is not violated, according to Levene's test, which revealed a non-significant p-value ($p = .046$). The post-test results for extroverted and introverted students did not differ significantly ($p = .630$, $df = 31$, $t = -.487$), as shown in the first line of the table. The 95% confidence interval for the mean difference, which ranged from -1.46 to .89, was -.28. There is no statistically significant difference following applying the Welch's procedure ($p = .625$, $df = 26.46$, $t = -.49$). The results were supported by the mean difference, which was -.28 with a 95% confidence ranging from -1.45 to .88, showing that there was no noticeable difference between the extroverted and introverted groups.

4.1.4. Investigation of the Fourth Research Question

The fourth research question attempted to investigate the learners' attitudes toward peer corrective feedback. To answer this question, 15 learners ($n = 15$) participated in an interview session and their responses were audio recorded and transcribed. The results have been presented below.

Transcription 1: Giving feedback in teamwork is a good way for improving our vocabulary knowledge, but sometimes it is not a good idea because different members of a group may have opposite ideas.

Transcription 2: I do not agree with giving feedback to each other. I just follow my own way. But giving and receiving feedback could be useful for others. I asked my friends and I found that they learned a lot from their partners' feedback.

Transcription 3: In my opinion, peer corrective feedback helps us to take an exam better. It also causes collaboration among the members of a group and, as a result of that, group members try hard to answer the questions correctly. Totally, I like this type of feedback and working in a team.

Transcription 4: I think I can do better individually and when I have a question I would ask my teacher, not other classmates.

Transcription 5: In my opinion, working in a team is better than working alone. Because, in a team, we can discuss every question comfortably.

Transcription 6: I think peer corrective feedback has lots of advantages, like cooperating and learning new things with each other.

Transcription 7: In my opinion, peer corrective feedback has both positive and negative points. It can help us understand a text better. But the negative point is that a person in the group might not work as hard as others.

Transcription 8: In these sessions when you have come to our class, we felt more active and tried to test our knowledge. I don't have any experience of using peer corrective feedback in classes and these sessions helped me learn how to work in a group with my partners. These helpful sessions helped me share my knowledge with my friends.

Transcription 9: In my idea, through peer corrective feedback, we can share our ideas but it is somehow, a waste of time, too.

Transcription 10: I think peer corrective feedback has positive effects on learners and helps them improve their knowledge.

Transcription 11: Working in a group and giving each other feedback is a stressful activity. I do think when I work alone I have more time to concentrate on my work.

Transcription 12: I don't really like to work with my classmates, because in this way I cannot learn very well, or maybe it is better to say, I don't like to share my knowledge with anyone. I think when working with other classmates, I cannot concentrate on my work because of the stressful situation.

Transcription 13: I think giving peer corrective feedback is very helpful because we can learn something together and if we have any problems, we can ask each other.

Transcription 14: Peer corrective feedback has some benefits. I mean one team but many solutions. Peer corrective feedback is a tool for finding new solutions to our problems. It is also a way of improving our vocabulary knowledge and learning from each other. There are some negative points, too. When giving and receiving feedback, it will take a lot of time to make the final decision. And there are some students who don't participate in group activities.

Transcription 15: In my opinion, giving peer corrective feedback in a reading comprehension exam is useful because students share their ideas and

ask each other about the meaning of new words. So, peer corrective feedback is very helpful in reading comprehension classes.

Based on the above transcriptions, most of the participants' comments (more than 60 percent) were positive regarding the provision of peer corrective feedback. Besides some negative ideas, most of the attitudes showed that learners can enhance their reading comprehension by receiving peer correction. It is conceivable, based on the transcriptions, that peer corrective feedback is a helpful tool in reading comprehension classes.

4.2. Discussion

This study looked into how extroverted and introverted Iranian elementary L2 learners' reading comprehension was affected by peer corrective feedback. The study's overall findings revealed that participants' reading comprehension improved noticeably (with introverted learners outperforming extroverts), indicating that using peer corrective feedback in reading comprehension classes was effective for both extroverts and introverts.

Three initial research questions looked into the effects of peer corrective feedback on the reading comprehension of extroverted and introverted Iranian elementary L2 learners, as well as the differences in reading comprehension between extroverted and introverted Iranian elementary L2 learners in terms of peer corrective feedback. The study's findings revealed that both extroverted and introverted EFL learners' pre-test to post-test mean scores increased. It should also be noted that introverted students outperformed extroverted students. The final research question's findings revealed that the majority of participants were favorable to the provision of peer corrective feedback.

The findings of the study are consistent with previous research that demonstrated the importance and effectiveness of corrective feedback in improving learners' language skills or sub-skills (Ashwell, 2000; Foltz et al., 2014). The findings support those who believe that individuals with different personality styles are thought to be able to choose from a variety of feedback sources (e.g., peers) and tactics for feedback-seeking (e.g., monitoring) (Grant & Ashford, 2008). The results of this investigation are in line with earlier research on how introversion and extroversion influence students' learning behaviors (e.g. Boroujeni et al., 2015; Venugopalan, 2000; Zafar & Meenakshi, 2012). The study also supported the notion that feedback in reading instruction can help students to master comprehension, which is the ultimate goal of reading instruction, just as it can in other language skills like speaking, listening, and writing (Nation, 2005). According to Eysenck and Chan (1982), the inner world and solitary activities are preferred by introverted learners. The current study, however, demonstrated that

introverted learners could benefit from social activities such as giving and receiving peer corrective feedback in reading comprehension. In a study which is not in accordance with the results of this study, Pazhuhesh (1994) looked into the relationship between reading comprehension and the personality traits of extroversion and introversion. Introverts performed significantly better than extroverts in her study did. This study also supports the notion that introverts take language learning more seriously and devote more time to reading and writing because of their personality traits (Entwistle & Wilson, 1977). Generally, based on the current study's findings, teachers should consider the facilitative role of corrective feedback, particularly peer corrective feedback, in reading comprehension courses.

5. Conclusion and Implications

Based on the quantitative results, both of the extroverted and introverted learners benefited from peer corrective feedback in reading comprehension classes. However, the introverted learners outperformed the extroverted ones. According to the qualitative analysis of the participants' answers to the interview question, besides some of the negative points the participants' mentioned in their comments, most of the learners had positive attitudes towards the treatment sessions. They thought that peer corrective feedback is like a useful tool that can help them improve their reading comprehension. They thought that these treatment sessions facilitated their reading comprehension. Thus, it can be concluded that, using peer corrective feedback in the reading comprehension classes is effective in improving the extroverted and introverted elementary L2 learners' reading comprehension.

The results and findings of the current study have some implications for EFL learners, EFL teachers, educational settings, and material developers. As was observed in the study, peer corrective feedback in reading comprehension courses can be beneficial for both extroverted and introverted elementary EFL learners. However, the extent to which this type of feedback is effective is different based on the learners' personality styles. The findings also implied that provision of peer corrective feedback in reading comprehension classes can facilitate the comprehension process. As the results of this study indicated, the role of personality type of the learners cannot be ignored, because learners with different personality traits benefit differently from peer corrective feedback. According to the study, peer corrective feedback provides opportunities for EFL learners to improve their reading comprehension. The results of this study also indicated that language learners should be aware of their personality type so that they can find the best type of feedback in order to facilitate the process of reading comprehension. In order to teach reading efficiently, teachers should be aware of their students' attitudes toward using peer corrective feedback in reading comprehension classes. For better

comprehension of passages, universities and institutes can also apply peer corrective feedback in reading comprehension classes based on their students' personality type. Finally, material developers can use peer corrective feedback as a model to be implemented in the reading books and materials in order to help material users to appropriately use this model based on their personality type.

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