The Effect of Content Feedback on Extroverted and Introverted English Learners' Reading Comprehension Ability

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Abstract

The present study aims to explore the effectiveness of content feedback (CF) embedded into reading strategies on L2 learners' reading comprehension ability across extrovert/introvert personality style. To do so, 35 pre-intermediate learners studying in a private language institute in Chaloos, Mazandaran, Iran took part in this study comprising the experimental and control groups. The study followed the test-treatment-retest design to quantitatively assess the effect of content feedback on the learners' improvement. As to the qualitative part of the study, the teacher-learner talks were analyzed through conversation analytic (CA) perspective to examine the efficiency of treatment sessions. Semi-structured interview was also deployed to qualitatively probe into the learners' perceptions about teaching reading. The qualitative and quantitative results revealed the positive effect of CF on the learners’ reading comprehension ability. It was also concluded that the extroverted learners outperformed the introverted ones. Moreover, the learners in the experimental group believed that benefiting from content feedback can arm them with better learning environment paving the way for their reading development. On implication side, the study suggests that teaching reading skill by applying effective strategies as well as content feedback can result in improving the learners’ reading comprehension ability since they are interacting with the teacher as well as their peers, allowing them to self-regulate the reading comprehension process.

Keywords: content feedback, reading comprehension, introversion, extroversion.
Introduction
There is a tacit assumption that L2 teaching has brought the need to establish different strategies to provide opportunities for learners to master language skills (Cabrera & Bazo, 2002). Teachers should attribute importance to teaching language skills in the best ways. In order to communicate, learners need to acquire the ability of using language skills. Reading as a valuable skill is an interactive process between the reader and the text which results in comprehension (Alyousef, 2005). According to Karabuga and Sire Kaya, (2013), reading is a process of problem solving in which the readers make an effort to comprehend meaning from words, ideas, information, claims, and arguments.

In an experimental study, Kim, Wagner, and Lopez (2012), investigated the relationship between reading fluency and reading comprehension and found that developing reading skills demands changes in different variables to be done by teachers and material developers. According to Abdorahimzade (2014), there is also a relationship between gender differences and EFL reading comprehension, concluding that the result supported the psychological reality of gender differences in reading interests among students. It seems that abundance of studies on reading demonstrates that reading, as Fry (1997) argued, is mother of all study skills “and is a basic tool of learning and one of the most important skills in everyday life” (p.9).

In educational contexts, learners are usually expected to learn how to read. They can improve their comprehension by being trained to use effective reading strategies in classrooms. In terms of teaching reading and applying proper strategies for improving comprehension, Karabuga and Sire Kaya (2013) studied the effects of collaborative strategic reading on adult EFL learners’ reading comprehension ability. Reading strategies were found to have remarkable effect on the learners’ comprehension ability and to help them to scrutinize the text thoughtfully. Similarly, Sakolrak (2014) aimed to develop a strategy (qualitative reading inventory) to resolve reading comprehension problems. It was revealed that teachers can use reading comprehension instructions concerning the application of reading strategies in order to improve both teachers’ awareness and help students’ competency in comprehending texts.

Besides reading comprehension and teaching strategies and techniques to master this substantial skill, the importance of knowing how to upraise the quality of comprehension should be taken into account by L2 scholars. As an important issue regarding the significance of teaching language skills is the role of feedback, which is the process of describing and evaluating the learners’ performance to help them improve their production of language (Tabatabaei & Banitalebi 2011). Researchers have been interested in the implementation of feedback using various procedures. Teaching reading, like teaching other language skills such as, speaking, listening or writing, can benefit from the provision of feedback to get mastery over comprehension which is the ultimate goal of teaching reading (Nation, 2004). In this regard, Schunk and Rice (1991) looked into the effects of goals and goal progress feedback on reading comprehension self-efficacy and skill. Results indicated the significant effect of feedback on learning progress improvement. Feedback may have the most powerful influence on learning and also as guidance to know how performance can be improved (Hattie, 2011). As Cohen (1985) stated, feedback is a powerful tool in designing teaching. Tabatabaei & Banitalebi (2011) applied both positive and corrective feedback in L2 reading comprehension classes. The frequencies of the feedback types revealed the impact of feedback on improving comprehension.
Therefore, teachers should be aware of using different kinds of feedback one of which is content feedback operationally defined as proving an evaluative response, usually given by the teacher, for the purpose of continuing the flow of social communication resulting in total understanding of the content, which confirms comprehension (Ashwell, 2000). Ashwell goes further to say that content feedback, provided by the teacher or maybe the peers, directs the learners’ attention to understanding the whole message, while guiding them to smoothly be involved in the communication task. In this regard, Fathman and Whalley (1999) made an attempt to figure out the effect of form feedback versus content feedback on students’ writing. The findings reported significant gains in improving writing skill by receiving content and form feedback simultaneously.

Content feedback in teaching reading comprehension or writing skill seems to be a rather new technique in which teachers do not just focus on grammar and vocabulary, but put more emphasis on the content of texts and make learners aware of organization and cohesion of the paragraphs. In a study done by Baghazou (2011), the effect of content feedback on students’ writing was taken into account. Applying content feedback on students' writing showed that using content feedback had a positive effect on improving students' writing performance. The literature shows that the role of feedback, particularly content feedback has, to a large extent, been recognized by L2 scholars. However, content feedback on reading seems to be less attended, up to the present, since it demands more elaboration and planning on the part of the teacher to provide the most effective type of feedback which is suitable to the level of the learners (Hattie, 2011). Bearing in mind the importance of teaching strategies and content feedback to arm the learners with appropriate tool to comprehend the text as smoothly as possible for the purpose of achieving learning goals and communication, one should consider the different characteristics of learners as well.

Psychological issues also attracted the researchers as well as teachers’ attention in classroom practice (Zafar & Meenakshi, 2012). Characteristics of learners may affect the quality of learning. As Funder (2007) stated, personality type refers to “an individual’s characteristic pattern of thought, emotion, and behavior, together with the psychological mechanisms, hidden or not, behind those patterns” (p.5). Extroversion and introversion dichotomy, as two main components of psychological learning, is considered with the way people focus on their attention. Extroverts prefer to get energy from outside, but introverts prefer the inner world of ideas (Eysenck & Chan, 1982).

There exist studies (e.g. Jafarpour, Roohani, & Hasanimanesh, 2015; Venugopalan, 2000; Zafar & Meenakshi, 2012) to examine how introversion and extroversion affect students’ learning behaviors. Venugopalan (2000) looked into the relationship between personality type (i.e. introversion and extroversion) and subject proficiency in four areas of reading, writing, speaking, and listening in advanced level. The results revealed a significant relationship between personality type and four areas. In a similar study carried out by Jafarpour, Roohani, and Hasanimanesh (2015), the possible impact of extroversion and introversion personality types on EFL learners’ writing ability was analyzed. It was found that introverts took better scores than extroverts in writing courses. Hence, teachers can be aware of the learners’ personality types and address students’ needs better as well.

Regarding the efficacy of feedback, particularly content feedback and applying strategies on comprehending texts, the literature suggests the need for more research. Psychological factors seem not to be sufficiently considered in reading comprehension studies as well. It was also not expressed that whether introverted or extroverted learners can act differently to reach
improvement in reading comprehension. Further studies may reveal that applying content feedback on reading comprehension can be beneficial, and its combination with reading strategy instruction can help the learners to improve their comprehension ability. Therefore, the present study aims to answer to the main question that whether reading strategy instruction and incorporating content feedback can affect the pre-intermediate learners’ reading comprehension ability in relation to their personality type (i.e. introversion/extroversion).

Research Questions
1. Does content feedback affect the introverted learners’ reading comprehension ability?
2. Does content feedback affect the extroverted learners’ reading comprehension ability?
3. Is there any significant difference between extroverted and introverted learners’ reading comprehension ability through content feedback?
4. To what extent, can content feedback improve the learners’ reading comprehension ability?
5. What are the learners’ perceptions toward teaching reading comprehension?

Methodology
Participants
To gather desirable data for this study, 35 pre-intermediate students, studying in a private language institute in Chaloos, Mazandaran, Iran, were the candidates to explore the efficiency of the provision of content feedback on reading comprehension ability. In fact, convenience sampling method was used in that the participants who were available were selected to meet the purpose of the study. According to Dornyei (2007), this type of sampling allows the researcher to collect the desirable data with the participation of the present learners. The participants took Oxford Placement Test (OPT) to check their homogeneity in terms of their language proficiency. Moreover, subjects’ homogeneity was met regarding their age in that all of them were selected form teenagers (between 13 to 19 years of age) to see how young learners would respond to content feedback. It should also be noted that the participants were divided into two experimental groups, which included 21 extroverted and 14 introverted students (based on the personality type questionnaire) to compare their scores in case of the effectiveness of content feedback on their reading proficiency.

Procedure
The present study aimed to look into the impact of content feedback on the introverted and extroverted pre-intermediate learners’ reading comprehension ability as well as comparing their performance. Investigating the learners’ perceptions about teaching reading were also the secondary focus of the present research. To do so, firstly, the learners took the OPT to check their level of proficiency and select the desirable participants in terms of homogeneity. After that, Persian translation of Eysenck Personality Inventory (EPI) questionnaire was administered to determine the learners’ personality type. Twenty-one learners were identified to be extroverted and 14 participants were introverted. Then, the pre-test was administered to examine their initial knowledge of reading comprehension. Also, the learners took part in an interview session to explore their initial perceptions about teaching reading. After that, the learners were provided with eight treatment sessions focusing on content feedback and reading strategy instruction. It is of value to note that the main treatment of the study was the application of content feedback, and strategies were taken into account as supplementary instruction to enhance the learners’ reading comprehension ability. Considering applying
content feedback as the main goal during treatment sessions, some of reading comprehension strategies taken from the book 'Reading Power' (i.e. previewing, predicting, scanning, guessing word meaning, topic of paragraphs, using reference words, and skimming) were used to help the learners in comprehending different kinds of passages efficiently. After the treatment, the learners were given the post-test to measure their achievement scores in reading. Finally, the second interview was carried out to explore the possible changes in their perceptions about teaching reading. It is noteworthy that the interview sessions as well as the treatment sessions were audio recorded for qualitative data analysis.

**Instrumentation**

The following instruments were adopted in the study:

*Oxford Placement Test (OPT)*

Oxford Placement Test was applied to homogenize the learners in terms of their target level of proficiency (i.e. pre-intermediate level) to meet the purpose of the study.

*Reading Comprehension Diagnostic Test (Pre-Test)*

In order to distinguish the learners’ initial reading comprehension ability, they took the pre-test before the treatment sessions. In fact, the purpose was to check their reading proficiency and to know their probable weaknesses in reading comprehension ability. The questions of the pre-test were of multiple choice format, including 20 items. It should also be noted that the questions were adopted from 'Reading Power' book.

*Reading Comprehension Achievement Test (Post-Test)*

In order to check the effectiveness of treatment sessions on the learners' reading comprehension ability, like the pre-test, the 20-item post-test was administered to the learners. Like the pre-test, the post-test was of multiple choice type.

*Delayed Post-Test*

Two weeks after the treatment sessions, to check the learners' possible retained improvement on reading comprehension ability, the delayed post-test was administered. In fact, the purpose was to investigate if the learners could perform similarly compared to their post-test. The post- and delayed post-test questions were taken from the same book.

*Semi-Structured Interview*

Semi-structured interview was used to probe the learners' perceptions about teaching reading and see whether they were aware of the reading strategies applied in teaching reading. In fact, group interview was carried out once before the treatment to check their initial perceptions and the second time after the treatment to look into their probable changes in their perceptions.

*Eysenck Personality Inventory (EPI) Questionnaire*

In order to distinguish the learners’ personality type regarding their introversion or extroversion characteristics, Persian version of EPI (Nikjoo, 1982) was provided to be easily filled out by the participants, who were Persian speakers. The EPI (Eysenck, Eysenck, & Barrett, 1985) is a validated 57 Yes/No item questionnaire to assess the personality traits of a person. Twenty-four items are related to extroversion/introversion. Therefore, an Iranian adult could score between zero to twenty four on extraversion (E scale) so that zero indicates the extreme introvert and twenty four indicates the extreme extrovert.
Twenty-four items also measure neuroticism (N scale) and the rest of the nine items in the lie (L scale) examine the social desirability or lie of the participants. These items are randomly distributed throughout the questionnaire for its internal and external validity. Hence, items of the questionnaire cannot be separately administered. The reliability coefficient of the Persian translation of EPI was found to be 0.74 for male and 0.80 for male learners (Nikjoo, 1982), which shows an acceptable measure of reliability.

**Data Analysis**

In order to analyze the data, both quantitative and qualitative methodology were adopted. In order to analyze the first three research questions of the study (i.e. does content feedback affect the introverted learners' reading comprehension ability?; does content feedback affect the extroverted learners' reading comprehension ability?; and is there any significant difference between extroverted and introverted learners' reading comprehension ability through content feedback?), quantitative methodology, i.e. descriptive and inferential statistics through SPSS software (version 20) was applied. As to the fourth research question (i.e. to what extent can content feedback affect the learners' reading comprehension ability?), the participants’ as well as the teachers' transcripts of the classroom talk were analyzed through conversation analysis (CA) methodology (Wong & Waring, 2010), to qualitatively check the effectiveness of treatment sessions (content feedback) on the learners’ reading comprehension ability. As to the fifth research question, which is in favor of looking into the learners' perceptions toward teaching reading, grounded theory methodology (Glaser & Strauss, 1967) was utilized to interpretively investigate the learners' perceptions and figure out the main codes in the learners' interview transcripts.

### Results

**Investigation of the First Research Question**

The first research question of the study was to see whether introvert learners could benefit from content feedback to improve their reading comprehension ability. To answer the question, quantitative measures were carried out as in the following.

First, test of normal distribution (see Table 1) was conducted to see if the scores of the learners in both groups, i.e. extroverted and introverted learners were distributed normally.

<table>
<thead>
<tr>
<th>Groups</th>
<th>Kolmogorov-Smirnova Statistic</th>
<th>Kolmogorov-Smirnova df</th>
<th>Kolmogorov-Smirnova Sig.</th>
<th>Shapiro-Wilk Statistic</th>
<th>Shapiro-Wilk df</th>
<th>Shapiro-Wilk Sig.</th>
</tr>
</thead>
<tbody>
<tr>
<td>Extrovert/Introvert</td>
<td>Pre-test</td>
<td>.167</td>
<td>21</td>
<td>.131</td>
<td>.948</td>
<td>21</td>
</tr>
<tr>
<td></td>
<td>Delayed Post-test</td>
<td>Pre-test</td>
<td>.162</td>
<td>21</td>
<td>.158</td>
<td>.931</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Post-test</td>
<td>.219</td>
<td>14</td>
<td>.068</td>
<td>.909</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Delayed Post-test</td>
<td>.212</td>
<td>14</td>
<td>.089</td>
<td>.924</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>.201</td>
<td>14</td>
<td>.129</td>
<td>.917</td>
</tr>
</tbody>
</table>

a. Lilliefors Significance Correction

The results obtained from the Komogorov-Smirnov goodness-of-fit test showed .131, .194, and .158 for the pre-test, post-test, and delayed post-test, respectively, of the introverted learners, and .068, .089, and .129 for the pre-test, post-test, and delayed post-test, respectively, of the introverted learners. The results of Shapiro-Wilk goodness-of-fit test were
also examined as the sample was rather small. The results showed .319, .372, and .145 for the pre-test, post-test, and delayed post-test, respectively, of extroverted learners and .153, .252, and .201 for the pre-test, post-test, and delayed post-test, respectively, of the introverted learners. Thus, the results of both tests showed that the scores were normally distributed and parametric tests could be used for analyzing the data.

A set of paired-samples t-test (Table 2) was conducted to compare the introverted learners’ performance on the pre-test, post-test, and delayed post-test.

Table 2. Descriptive statistics of the introverted learners on the pre- and post-test

<table>
<thead>
<tr>
<th></th>
<th>Mean</th>
<th>N</th>
<th>Std. Deviation</th>
<th>Std. Error Mean</th>
</tr>
</thead>
<tbody>
<tr>
<td>Introvert Pre-test</td>
<td>9.2857</td>
<td>14</td>
<td>1.48989</td>
<td>.39819</td>
</tr>
<tr>
<td>Post-test</td>
<td>13.6429</td>
<td>14</td>
<td>1.15073</td>
<td>.30755</td>
</tr>
</tbody>
</table>

The results of the descriptive statistics showed an increase from the pre-test (M= 9.28, SD= 1.48) to the post-test (M= 13.64, SD= 1.15) indicating that content feedback was beneficial to the introverted learners and improving their reading comprehension ability. Table 3 shows the paired samples t-test for the introverted learners.

Table 3. Paired samples t-test for the introverted learners on the pre- and post-test

<table>
<thead>
<tr>
<th>Paired Differences</th>
<th>Mean</th>
<th>Std. Deviation</th>
<th>Std. Error Mean</th>
<th>95% Confidence Interval of the Difference</th>
<th>t</th>
<th>df</th>
<th>Sig. (2-tailed)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Introvert Pre-test - post-test</td>
<td>-4.3571</td>
<td>1.33631</td>
<td>.35714</td>
<td>-5.12870 to -3.58558</td>
<td>-12.200</td>
<td>13</td>
<td>.000</td>
</tr>
</tbody>
</table>

The results of the paired-samples t-test also showed a significant difference between the mean scores (p=.000, df= 13, t= 12.20). The magnitude of the difference in means was -4.35 (CI= -5.12 to -3.58) which indicated a large difference (Cohen’s d= -3.27). The results, therefore, suggested that content feedback greatly affected the introverted learners’ reading comprehension ability. Table 4 indicates descriptive statistics for the introverted learners’ performance on the delayed post-test.

Table 4. Descriptive statistics of the introverted learners on the pre-test and delayed post-test

<table>
<thead>
<tr>
<th></th>
<th>Mean</th>
<th>N</th>
<th>Std. Deviation</th>
<th>Std. Error Mean</th>
</tr>
</thead>
<tbody>
<tr>
<td>Introvert Pre-test</td>
<td>9.2857</td>
<td>14</td>
<td>1.48989</td>
<td>.39819</td>
</tr>
<tr>
<td>Delayed Post-test</td>
<td>12.7143</td>
<td>14</td>
<td>2.12779</td>
<td>.56867</td>
</tr>
</tbody>
</table>

Having compared the mean scores obtained from the pre-test and the delayed post-test, it was found that the introverted learners performed better on the delayed post-test (M= 12.71, SD= 2.12) than the pre-test (M=9.28, SD= 1.48) as well. The introverted learners' performance on the two occasions of pre-test and delayed post-test was examined through paired samples t-test (Table 5).

Table 5. Paired samples t-test for the introverted learners on the pre-test and delayed post-test

<table>
<thead>
<tr>
<th>Paired Differences</th>
<th>Mean</th>
<th>Std. Deviation</th>
<th>Std. Error Mean</th>
<th>95% Confidence Interval of the Difference</th>
<th>t</th>
<th>df</th>
<th>Sig. (2-tailed)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Introvert Pre-test - Delayed Post-test</td>
<td>-3.42857</td>
<td>2.56348</td>
<td>.68512</td>
<td>-4.90868 to -1.94846</td>
<td>-5.004</td>
<td>13</td>
<td>.000</td>
</tr>
</tbody>
</table>
The results of the paired-samples t-test also showed a significant difference between the two mean scores (p = .000, df = 13, t = -5.00). The magnitude of the difference in means was -3.42 with 95% confidence interval ranging from −4.90 to -1.94 which showed a large difference (Cohen’s d = -1.86). Thus, the results showed that the introverted learners exhibited a better performance two weeks after the treatment sessions finished than that on the pre-test. The mean scores obtained from the post-test and the delayed post-test were compared in Table 6.

Table 6. Descriptive statistics of the introverted learners on the post- and delayed post-test

<table>
<thead>
<tr>
<th></th>
<th>Mean</th>
<th>N</th>
<th>Std. Deviation</th>
<th>Std. Error Mean</th>
</tr>
</thead>
<tbody>
<tr>
<td>Introvert Post-test</td>
<td>13.6429</td>
<td>14</td>
<td>1.15073</td>
<td>.30755</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>12.7143</td>
<td>14</td>
<td>2.12779</td>
<td>.56867</td>
</tr>
</tbody>
</table>

The descriptive results showed a decline from the post-test (M = 13.64, SD = 1.15) to the delayed post-test (M = 12.71, SD = 2.12) suggesting that the introverted learners, apparently, lost some of their ability in reading comprehension after two weeks.

Table 7. Paired samples t-test for the introverted learners on the post-test and delayed post-test

<table>
<thead>
<tr>
<th>Paired Differences</th>
<th>Mean</th>
<th>Std. Deviation</th>
<th>Std. Error Mean</th>
<th>95% Confidence Interval of the Difference</th>
<th>t</th>
<th>df</th>
<th>Sig. (2-tailed)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Introvert Post-test - Delayed Post-test</td>
<td>.92857</td>
<td>2.40078</td>
<td>.64163</td>
<td>-.45760 to 2.31474</td>
<td>1.447</td>
<td>13</td>
<td>.172</td>
</tr>
</tbody>
</table>

Table 7 was, thus, examined to find the statistical difference. The results of paired-samples t-test, however, showed a non-significant difference (p = .172, df = 13, t = 1.44). The mean difference was also .92 (CI = -.45 to 2.31) which showed a small difference, although tending to be medium (Cohen’s d = .54). The results, therefore, suggested that although content feedback improved the introverted learners’ reading comprehension ability, the learners were not able to retain all the abilities they gained. In other words, the effects were lost after two weeks following the last treatment session.

**Investigation of the Second Research Question**

The second research question of the study aimed at figuring out whether content feedback had impact on the extroverted learners’ reading comprehension ability. To do so, the same statistical procedures have been adopted. Descriptive statistics was conducted to compare the extroverted learners’ performance on the pre-test, post-test, and delayed post-test. Table 8 depicts the extroverted learners' performance on the pre- and post-test.

Table 8. Descriptive statistics of the extroverted learners on the pre- and post-test

<table>
<thead>
<tr>
<th></th>
<th>Mean</th>
<th>N</th>
<th>Std. Deviation</th>
<th>Std. Error Mean</th>
</tr>
</thead>
<tbody>
<tr>
<td>Extrovert Pre-test</td>
<td>10.0000</td>
<td>21</td>
<td>1.61245</td>
<td>.35187</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>13.8095</td>
<td>21</td>
<td>2.01542</td>
<td>.43980</td>
</tr>
</tbody>
</table>

Having examined the descriptive results obtained from the pre- and post-test of the extroverted learners, it was found that the learners’ mean score increased from the pre-test (M = 10.00, SD = 1.61) to the post-test (M = 13.80, SD = 2.01) indicating that the extroverted learners exhibited better performance and thus, benefitted from content feedback.

Table 9. Paired samples t-test for the extroverted learners on the pre- and post-test

<table>
<thead>
<tr>
<th>Paired Differences</th>
<th>Mean</th>
<th>Std. Deviation</th>
<th>Std. Error Mean</th>
<th>95% Confidence Interval of the Difference</th>
<th>t</th>
<th>df</th>
<th>Sig. (2-tailed)</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
Having compared the mean scores through paired-samples t-test, as Table 9 shows, a significant difference was observed (p= .000, df= 20, t= -9.81). The magnitude of the difference in mean was -3.80 (CI= -4.61 to -3.00) which showed a large difference (Cohen’s d= -2.08). It is, thus, denoted that the treatment the extroverted learners received affected, to a large extent, the learners’ reading comprehension ability. Table 10 indicates descriptive statistics for the extroverted learners' performance on the delayed post-test.

Table 10. Descriptive statistics of the extroverted learners on the pre-test and delayed post-test

<table>
<thead>
<tr>
<th>Mean</th>
<th>N</th>
<th>Std. Deviation</th>
<th>Std. Error Mean</th>
</tr>
</thead>
<tbody>
<tr>
<td>Extrovert Pre-test</td>
<td>10.0000</td>
<td>21</td>
<td>1.61245</td>
</tr>
<tr>
<td>Delayed Post-test</td>
<td>14.2857</td>
<td>21</td>
<td>2.41128</td>
</tr>
</tbody>
</table>

Paired-samples t-test (see Table 11) was also conducted to compare the mean scores of the pre-test and the delayed post-test, showed an increase from the pre-test (M= 10.00, SD= 1.61) to the delayed post-test (M= 14.28, SD= 2.41).

Table 11. Paired samples t-test for the extroverted learners on the pre-test and delayed post-test

<table>
<thead>
<tr>
<th>Paired Differences</th>
<th>Mean</th>
<th>Std. Deviation</th>
<th>Std. Error Mean</th>
<th>95% Confidence Interval of the Difference</th>
<th>Lower</th>
<th>Upper</th>
<th>t</th>
<th>df</th>
<th>Sig. (2-tailed)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Extrovert Pre-test - Delayed Post-test</td>
<td>-4.28571</td>
<td>2.34825</td>
<td>.51243</td>
<td>-5.35463 to -3.21680</td>
<td>-8.364</td>
<td>20</td>
<td>.000</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

The results of the paired-samples t-test showed a significant p-value (p= .000, df= 20, t= -8.36) as well. The magnitude of the difference was – 4.28 (CI= -5.35 to -3.21) which indicated a large difference (Cohen’s d= -2.08).

To descriptively compare the mean scores of the extroverted learners on the post- and the delayed post-test, the following Table was provided.

Table 12. Descriptive statistics of the extroverted learners on the post- and delayed post-test

<table>
<thead>
<tr>
<th>Mean</th>
<th>N</th>
<th>Std. Deviation</th>
<th>Std. Error Mean</th>
</tr>
</thead>
<tbody>
<tr>
<td>Extrovert Post-test</td>
<td>13.8095</td>
<td>21</td>
<td>2.01542</td>
</tr>
<tr>
<td>Delayed Post-test</td>
<td>14.2857</td>
<td>21</td>
<td>2.41128</td>
</tr>
</tbody>
</table>

As Table 12 shows, there was a slight increase from the post-test (M= 13.80, SD= 2.01) to the delayed post-test (M= 14.28, SD= 2.41).

Table 13. Paired samples t-test for the extroverted learners on the post- and delayed post-test

<table>
<thead>
<tr>
<th>Paired Differences</th>
<th>Mean</th>
<th>Std. Deviation</th>
<th>Std. Error Mean</th>
<th>95% Confidence Interval of the Difference</th>
<th>Lower</th>
<th>Upper</th>
<th>t</th>
<th>df</th>
<th>Sig. (2-tailed)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Extrovert Post-test - Delayed Post-test</td>
<td>-.47619</td>
<td>1.63153</td>
<td>.35603</td>
<td>-1.21886 to .26648</td>
<td>-1.338</td>
<td>20</td>
<td>.196</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

The results of the paired-samples t-test (Table 13) showed, however, a non-significant difference (p= .196, df=20, t= -1.33). The magnitude of the difference in mean was -.47 with 95% confidence interval ranging from -1.21 to .26 which showed a negligible difference (Cohen’s d= -.21) denoting that the extroverted learners were able to retain their abilities in
reading comprehension gained from the instruction and performed almost equally after two weeks, although slightly better than the post-test.

**Investigation of the Third Research Question**

The third research question of the study was to investigate significant difference between extroverted and introverted learners' reading comprehension ability through content feedback. The extroverted and introverted learners’ mean scores on the post-test and the delayed post-test were compared through running independent samples t-test. First of all, descriptive statistics (Table 14) is provided to show the introverted and extroverted learners' performance on the post-test.

**Table 14. Descriptive statistics for the groups on the post-test**

<table>
<thead>
<tr>
<th>Groups</th>
<th>N</th>
<th>Mean</th>
<th>Std. Deviation</th>
<th>Std. Error Mean</th>
</tr>
</thead>
<tbody>
<tr>
<td>Post-test</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Extrovert</td>
<td>21</td>
<td>13.8095</td>
<td>2.01542</td>
<td>.43980</td>
</tr>
<tr>
<td>Introvert</td>
<td>14</td>
<td>13.6429</td>
<td>1.15073</td>
<td>.30755</td>
</tr>
</tbody>
</table>

Looking at the Table of descriptive statistics, the mean scores of the extroverted learners (M=13.80, SD= 2.01) is not so much different from that of the introverted learners (M= 13.64, SD= 1.15), indicating that the learners in both groups performed equally well on the post-test. In order to thoroughly compare the groups' mean scores, independent samples t-test was provided (Table 15).

**Table 15. Independent samples t-test for the groups on the post-test**

<table>
<thead>
<tr>
<th>Levene's Test for Equality of Variances</th>
<th>t-test for Equality of Means</th>
</tr>
</thead>
<tbody>
<tr>
<td>F</td>
<td>Sig.</td>
</tr>
<tr>
<td>Equal variances assumed</td>
<td>3.281</td>
</tr>
<tr>
<td>Equal variances not assumed</td>
<td></td>
</tr>
</tbody>
</table>

An examination of the Levene’s test showed a non-significant p-value (p= .079), indicating that the assumption of equal variances is not violated. Looking at the first line of the Table, therefore, did not show a significant difference (p=.781, df=33, t= .28) between the extroverted and introverted learners’ post-test scores. The mean difference was .16 with 95% confidence interval ranging from -1.04 to 1.37. The Cohen’s d statistics showed a negligible effect size as well (d= .1). Following the Welch’s procedure, a non-significant difference can be seen, too (p= .758, df=32.41, t= .31). The mean difference was .16 with 95% confidence interval ranging from -.92 to 1.25 which confirmed the preceding results, i.e. there was no significance difference between the extroverted and introverted groups.

The difference between the mean scores on the delayed post-test of the extroverted and introverted learners was compared through descriptive statistics. Table 16 demonstrates the groups' performance on the delayed post-test.

**Table 16. Descriptive statistics for the groups on the delayed post-test**

<table>
<thead>
<tr>
<th>Groups</th>
<th>N</th>
<th>Mean</th>
<th>Std. Deviation</th>
<th>Std. Error Mean</th>
</tr>
</thead>
<tbody>
<tr>
<td>Delayed Post-test</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Extrovert</td>
<td>21</td>
<td>14.2857</td>
<td>2.41128</td>
<td>.52619</td>
</tr>
<tr>
<td>Introvert</td>
<td>14</td>
<td>12.7143</td>
<td>2.12779</td>
<td>.56867</td>
</tr>
</tbody>
</table>
As to the Table above, there was a difference between the two groups. In other words, the extroverted learners (M= 14.28, SD= 2.41) exhibited a better performance than the introverted learners (M=12.71, SD= 2.12).

Table 17. Independent samples t-test for the groups on the delayed post-test

<table>
<thead>
<tr>
<th></th>
<th>Levene’s Test for Equality of Variances</th>
<th>t-test for Equality of Means</th>
<th>95% Confidence Interval of the Difference</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>F</td>
<td>Sig.</td>
<td>t</td>
</tr>
<tr>
<td>Delayed Post-test</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Equal variances assumed</td>
<td>1.927</td>
<td>.174</td>
<td>1.977</td>
</tr>
<tr>
<td>Equal variances not assumed</td>
<td>2.028</td>
<td>.051</td>
<td>1.57143</td>
</tr>
</tbody>
</table>

An examination of the Levene’s test (Table 17) showed, however, a non-significant p-value (p=.174), suggesting that the assumption of equal variances is not violated. Having examined the results of the independent-samples t-test, a non-significant difference was found (p= .056, df= 33, t= 1.97), although tending to be significant. The mean difference was 1.57 with 95% confidence interval ranging from -0.04 to 3.18. The Cohen’s d statistics showed a medium effect size as well (d=.69). Following the Welch’s procedure, it can be seen that the mean scores tend to be different significantly, although the difference is, apparently, not significant (p= .051, df=30.33, t= 2.02). The mean difference was 1.57 with 95% confidence interval ranging from -.01 to 3.15. The results, therefore, confirmed the outperformance of the extroverted learners.

**Investigation of the Fourth Research Question**

In order to analyze the learners’ talks on treatment sessions and answer to the fourth question of the study to figure out the extent of affecting content feedback on the learners’ reading comprehension ability, conversation analytical perspective was applied. To do so, the extracts of the teacher-learner interactions were provided in the following sections to explore the possible effect of content feedback on the learners’ understanding of the target text.

Considering applying content feedback as the main goal during treatment sessions, reading comprehension strategies (i.e. previewing, predicting, scanning, guessing word meaning, topic of paragraphs, using reference words and skimming) from the book 'Reading power' were used to assist the learners in comprehending different kinds of passages.

In fact, the main purpose of these sessions was to investigate whether content feedback and using different kinds of strategies have been effective. As CA lies in sociocultural theory (the framework for the possibility of content feedback), it can be mentioned that at first sessions, the teacher attempted to help learners to be ready to learn a new system of reading by providing useful feedback and applying strategies, but as the following extracts shows, the role of the teacher has gradually been less and the learners made a teamwork and cooperation for the purpose of better comprehension.

All of the eight sessions were recorded and the extracts were qualitatively analyzed based on CA as in the following.

*Extract 1. Teacher is directing the learners' attention toward the pictures.*
T: Look at the picture and talk about it. What do you guess about the text regarding this picture?
L1: She is a student.
T: What else?
L2: She's from China. Maybe she goes to university.
T: Yes, maybe. What else?
L3: She looks happy.
T: Thank you

This account of classroom talks shows that, the teacher attempted to get the learners' attention to point to the pictures and ask them to talk about it in order to use previewing strategy. As this conversation shows, the role of the feedback is also illustrated. Teacher's resistance of not being convinced by the learners' answers is a clear example of content feedback. For example, by saying "what else?" the teacher wanted to challenge the students' answer. In fact, the teacher aimed to help the learners pay attention to the content of the passage to find out the meaning completely. At first sessions, the learners seemed not to cooperate well, because they might not be aware of a possible system of reading strategies to comprehend different texts better.

Extract 2. Teacher's concentration on title
T. Now look at the title "a busy student". What is your opinion about it?
L1. She has a lot of work to do.
T. Yes. Others please. Who is a busy student?
L2. She does hard activity.
L3. Maybe she goes to university.
T. Yes, thank you

The main focus of the teacher- learner interaction part was making the learners familiar with strategies (previewing and predicting) and also helping them for better comprehension by giving feedback on the content (Yes. Others please. Who is a busy student?). The teacher asked all the students to focus on the title before reading the text to indirectly use the strategy 'previewing'. Since the goal of content feedback is paying attention to the content, not grammar, the teacher didn't pay attention to grammatical error (she go) which was committed by the learner.

Extract 3. Learners' attempt to find the title
T: Choose the best title. Read the text please.
L1: I think the answer is B. Because it talks about trees.
T: Just trees? Isn't it too specific?
L2: It also talks about lands and forest
T: So? Where are trees?
L3: In the jungle.
L2: C is correct.
T: Yes. A is not correct because it's too specific. B is too general. So the best answer is C

As to the above classroom talk, the teacher aims to facilitate comprehension by asking some questions related to the passage. Students were supposed to find the best answer by interaction and focusing on teacher's feedback. It was based on the content of the passage and one of the strategies known as 'topic of paragraph'. In fact, content feedback was provided to give the learners more learning opportunities. Answering comprehension questions requires
the learners' attention to the content of the passage. As the classroom talk shows, learners were likely eager to find the answer of questions and pay attention to feedback by teacher and also using strategies.

Extract 4. Teacher's evaluation of students' application of strategies
T: We have a passage with a picture. First step?
L1: We should pay attention to picture and guess the passage.
L2: The man read the newspaper. They have dog.
T: Who are they? what do you guess?
L2: They are wife and husband.
L3: They have some animals.
T: Pet. Yes, thank you
It seems that session by session through content feedback and getting familiar with reading strategies, the learners were able to follow the comprehension process smoothly. The extract above shows that the learners appear to be aware of the strategies and steps which can help them to analyze the content of a piece of writing to read it fast and comprehend it better. Again, there is another example regarding the ignorance of grammatical mistakes (the man read) made by a learner which lies within the purpose of content feedback in that the teacher doesn't account for the learners' erroneous utterances.

Extract 5. The learners' ability to self-regulate their reading ability
T: Talk about this passage.
L1: The title is Hebrides Island.
L2: So it's about an island.
T: Ok. What do you know about an island?
L2: A place around the water. sea.
L3: People travel there by ships.
L4: It's far from the city. It doesn't have pollution.
T: yes, its clean.
L5: People go there for vacation and relaxation.
L3: But its hard to live there.
T: Why?
L3: Because there isn't any hospital or school or ..
T: Other points please.
L6: It's dangerous too.
T: Thank you. So it's maybe about the different characteristics of an Island.
Finally this extract also reveals the effectiveness of implemented strategies by applying content feedback which focuses on the whole organization and meaning of a text. Improvement on and mastery over utilizing different strategies regarding reading comprehension is, to a large extent, tangible in this extract. In fact, the learners were completely aware of the importance of paying attention to content in order to get the main point of a text better.
As CA of the teacher-learner interaction reveals, it can be concluded that implementing different kinds of reading strategies as well as benefiting from content feedback, as a tool, might significantly result in improving reading comprehension ability.
Investigation of the Fifth Research Question

Regarding the fifth research question of the study about learners' perception toward teaching reading comprehension, grounded theory was utilized in order to code the data and extract the main categories based on codes. To do so, two interview sessions were conducted. According to the categories emerging from the learners' interview transcription, their perceptions toward teaching reading comprehension before and after the treatment sessions were analyzed as follows.

A) The learners' perception before the treatment

As to the participants' interview transcripts, the main categories that almost the majority of learners mentioned were 1. The importance of the domain of vocabulary; 2. The necessity of the role of the meaning; and 3. The importance of pronunciation of new words.

The main purpose was to be aware of the learners' initial beliefs about reading comprehension and whether they are aware of using different kinds of strategies in teaching reading comprehension. Therefore, these categories are analyzed by pointing to some of learners' interview extracts:

1. The importance of the domain of vocabulary

Acquiring a large extent of vocabulary is one of the students' challenges in learning English. Learning and memorizing vocabulary needs attempt and students pay attention to new words in any passages.

Following the learners' interview transcripts, it was found that the majority of the learners (n=29) believed that vocabularies specially the new words are the main part of reading comprehension skill and comprehending a passage depends on vocabulary. One of the learners' extracts is explained in the following:

Extract 1.
"The first step in reading a text is identifying the letters which makes words. We should recognize the words..."

This quotation shows that this learner has a general idea about the first step in reading which is 'knowing the words'. So she believed in recognizing the words as a main point in comprehending and as a definition of reading comprehension skill.

Extract 2.
"I have problem with the words which are difficult and I've never seen them before."

To know the learners' beliefs about the problems they have in comprehending a text, one of the main common perceptions is mentioned above. He believed that new words and level of difficulty are the main problems in comprehending passages. So, similar to the previous learner, this learner believed in importance of vocabularies.

2. The necessity of the role of the meaning

To know the purpose and intention of a text, students are supposed to recognize the meaning of words and sentences. They mostly pay attention to the meaning of words separately and have problem with making meaning of sentences. Based on the learners' beliefs, it is necessary to know the meaning of all words to be able to answer the questions of a text and comprehending the reading.

It was found that a large number of participants (n=27) tended to translate a text to find out the passage. In fact they mainly focus on the meaning and know it as the main device to comprehend a passage. In order to highlight their perception, some extracts are provided:

Extract 1.
"We can translate word by word but it's difficult to translate them as a sentence and we should know the meaning of all sentences and vocabularies to recognize the passage..."

As to this learner, difficulty of translating a sentence is the problem in reading comprehension. She pointed out to meaning and believed that by translating and knowing the meaning of sentences, comprehension will be achieved. She also mentioned that teachers should teach useful ways to help students memorize the meaning of new words.

Extract 2.
"I have problem with linking words; which have different meanings separately, but when they put together, change the meaning of sentence completely."

Based on the above extract, this learner like his friends was concerned with finding the meaning of words and sentences. They believed that if they knew the meaning and could translate sentences in the right form, they could comprehend the text as they mentioned that answering questions of a text depends on the translating and meaning.

3. The importance of pronunciation of new words
Here, it is aimed at exploring the learners' perceptions toward pronunciation of words. These learners believed that the way the teachers pronounce words has a main role in helping them to memorize words better. As to the learners' interview, it was found that more than half of the students (n=24) pointed out the importance of pronunciation to learn the new words in the right form. So, they believed that difficulty of pronouncing new words is one of the problems of comprehending a text.

In order to clarify the learners' perceptions, some of their interview extracts are sketched in the following:

Extract 1.
"In the class, new words are taught and pronunciation of words is repeated and when we pronounce words in the right form, we can memorize their meaning and remember them easily."

According to this learner, the right form of pronunciation is an important point to learn words and their meaning and it will result in realizing the passage. He thought that teachers should help students to learn the pronunciation of new words to recognize them in different kinds of texts.

Extract 2.
"I have problem with pronunciation of words..."

As this learner mentioned, to know the answer to the question of problems which learners have in comprehending a text, pronunciation can also be classified as a concern and problem. According to these extracts, it is concluded that learners mostly focused on vocabularies and were concerned with problems which may happen in their pronunciation.

B) The learners' perceptions after the treatment
After taking the learners' attitude toward teaching reading comprehension, another interview session was conducted in order to probe the learners' belief after the treatment sessions to see whether using different kinds of strategies changed learners' beliefs about reading comprehension.
The results of the participants' second interview indicated that the main categories that most of the students mentioned after the treatment sessions were 1. Easy comprehension of passages and answering to the related questions; 2. increasing of speed in reading a passage; and 3. the usefulness of strategies used in reading comprehension. These categories were categorized based on the learners’ perceptions toward teaching reading comprehension after eight sessions of treatment. The second interview was conducted in order to see the possible impact on students' perceptions toward teaching reading comprehension. The above-mentioned categories are explained by clarifying the learners’ interview extracts.

1. Easy comprehension of passages and answering to the related questions
As the participants mentioned in the first interview session, reading comprehension skill was a difficult part of learning English. During these sessions, students could use strategies and were able to read different kinds of texts easily. Nearly 90% of students believed that using these strategies and useful feedback by teacher made comprehension easier for them. In order to prove their beliefs, some of extracts are mentioned in the following.

   Extract 1.
   "Reading was difficult for me. But after these sessions it is easy for me now..."
Regarding this extract, using different kinds of strategies and helping students during these sessions by giving feedback, made reading comprehension easier and it helped students to read texts without any anxiety.
   Extract 2.
   "These sessions were really useful, especially reading long passages together. Now it's really easy for me to read long passages."
As this student mentioned, one of the problems which students have, is reading of long passages. They believed that they were supposed to read all the text word by word and it was really hard for them. But after these sessions it became easier for them. They interacted with each other and by using different strategies they could read long passages easily.

2. Increasing the speed of reading a passage
One of the factors which students are concerned with is the speed of reading a passage. In some kinds of exams, they are supposed to answer questions relevant to reading comprehension fast. But they complained about this problem. After these sessions, they were satisfied with being able to read passages fast.

   Extract 1.
   "Based on what you have taught us, now we can read different kinds of passages faster. We know the important parts of a passage and we can get the intention of a passage by reading it fast."
Based on what this student mentioned, recognizing the important parts of a passage became easier for the learners and they could get the intention of passage by reading it fast and even could answer the questions related to the text by reading them just one time.
   Extract 2.
   "The speed of guessing a passage increased. By using these strategies we can easily start reading a passage and keep it on fast."
Increasing the speed of reading a passage was the important point and advantage of these sessions. As students mentioned, they could easily keep on a passage fast without being
nervous about getting back to the previous part. They believed that using the mentioned strategies and feedback by teacher helped them to have a speed reading.

3. The usefulness of strategies used in reading comprehension

In the first interview session, some of the students were eager to learn new methods or ways of teaching to be able to master in reading skill. As they mentioned in second interview session, they were really content with these sessions and teaching of strategies. They believed that these strategies will help them to comprehend different texts better. Almost 80% of participants were satisfied with these strategies.

Extract 1.

"These sessions helped me a lot. I had problems with reading comprehension, but after these sessions and learning these strategies and receiving feedback, my problems are solved."

Regarding this extract which is chosen from the same extracts of participants' perception, utilizing the mentioned strategies and also receiving feedback by teacher could help learners to be a good reader and comprehend different kinds of passages easier.

Extract 2.

"It was really good. We weren't aware of these kinds of teaching and strategies which can help us a lot..."

Teaching a skill should be based on different useful methods to help learners learn skills in the best ways. As these participants mentioned, these sessions vindicated learners' needs and expectations. As this student mentioned, they weren't aware of such methods and strategies in learning reading skills and now they are glad because of learning a new method which help them comprehend better.

Regarding applying different kinds of strategies in eight sessions as treatment of reading comprehension and expecting any possible change in learners' perceptions, their extracts were analyzed. Based on this purpose, it was concluded that after the eight treatment sessions, there was a significant change in learners' belief. Participants expected teachers to help them to be good readers. But after these sessions, their beliefs and perceptions were changed. They believed that these sessions helped them to comprehend texts easier and also expected teachers to use such strategies in classrooms.

Discussion

This study attempted to delve into the effect of applying content feedback on introverted and extroverted learners' reading comprehension. The overall result of the study showed that implementing reading strategies, combined with content feedback, positively resulted in the improvement of comprehending different texts. Although findings of the study were in contrast with other studies which focused on other skills (e.g. Pauline, 1987; Ashwell, 2000; Fathman & Whalley, 2000; Baghzou, 2011; Foltz & Gilliam, 2014) the affirmation of the efficacy of content feedback on the learners' development of language skills is parallel to those of research which supports the claim that content feedback would improve the learners' writing accuracy (Ashwell, 2000; Baghzou, 2011). It was also found that teacher feedback significantly helped students to improve their reading skill in contrast with the time when no content feedback was provided (Fathman & Whalley, 2000).

The possibility of the role of feedback, particularly content feedback, was also proved in order to be included in classroom lessons to achieve better productivity as this kind of feedback has a significant effect on students' better learning (Pauline, 1987). There are also
other studies working on applying content feedback which reveals its importance and effectiveness on the learners' improvement of language skills or sub-skills. (Foltz, Gilliam & Kendall, 2000; Ashwell, 2000)

The present study also benefited from reading strategies (i.e. previewing, predicting, scanning, guessing word meaning, topic of paragraphs, using reference words and skimming), which led to improvement in the learners' comprehension ability. Strategies can be used as a device to help learners get mastery over their reading task and it results in enhancing the reading comprehension performance among the students (Yussof, Jamian, Roslan, Hamzah, & Kabilan, 2012). Effective strategies can efficiently be applied to help students smoothly follow the reading process (Gunning, 2008; Fauziah, 2008).

Several researches lied down on the comprehension progress when students are engaged with reading strategies were reported in (Yussof et al., 2012; Marzban & Akbarnejad, 2012; Karabuga& Kaya, 2013). Hence different types of strategies should be trained by teachers and gradually become as a tool to help learners to be proficient readers (Sakolrak, 2014). The present study benefited from sociocultural theory to justify the positive effect of content feedback on the learners' reading comprehension ability. Vygotskian cultural-historical psychology or sociocultural theory presents a framework in which “cognition can be systematically investigated without isolating it from social context” (Lantolf& Throne, 2006, p.1). Lantolf (2004) believed that sociocultural theory is not concerned with the social and cultural aspects of human existence, but it’s a theory of mind that shows how social relationships shape human forms of thinking.

As to the so-called theory, the terms, mediation and regulation play an important role in the learning process. Mediation, according to Lantolf and Throne (2006), is the process through which “humans deploy culturally constructed artifacts, concepts and activities to regulate (i.e. gain voluntary control over and transform) the material world or their own and each other’s social and mental activity” (p. 79). In regulation, learners apply their thought to regulate their activity (Lantolf & Throne, 2006). It is of value to take Vygotsky's two terms (i.e. other-regulation and self-regulation) into account. Other-regulation deals with support from a more knowledgeable person while in self-regulation the point is the role of learner without the provision of support from a capable peer.

Regarding the findings of the study, content feedback was revealed to significantly result in the learners' reading improvement. Hence, content feedback can be used as a tool to recognize the role of self-regulation, by creating the environment for learners to be independent and be capable of comprehending the texts themselves. The teacher created the primary situation for supporting the learners by applying CF during the treatment sessions and, as the aim of regulation reveals, at the end of the sessions, the learners were able to apply different strategies and techniques in order to comprehend passages better which was highlighted in both quantitative and qualitative findings.

Finally, the present study demonstrated the significant changes in the perceptions about teaching reading after receiving the treatment. The changes in the learners' perceptions were, to a large extent, based on the reading strategies as well as content feedback, paving the way to experience a real-life peer or teacher-learner interaction. Sociocultural theory, as Kalaja and Barcelos (2006) argue, can justify changes in the learners’ belief system during the course of time while interacting directly or indirectly with the environment (Alanen, 2006). In other words, the learners' interaction caused by the provision of content feedback and teaching reading strategies brought about changes in the learners' perception to hold such an attitude.
that their reading comprehension ability was strongly affected by the treatment (i.e. content feedback and reading strategies).

The study also focused on extroversion and introversion dichotomy of personality type. According to Eysenck and Chan, (1982), extroverted learners mostly focus their energy outward, but introverted learners prefer solitary activities and the inner world. Considering the performance of extroverted and introverted learners, several studies were carried out and the outperformance of each of the two groups was mentioned. (Venugopalan, 2000; Shahila & Meenakshi, 2011; Suliman, 2014). However, there wasn't alignment between previous studies and the current study regarding considering this type of personality characteristic (i.e. extroversion/ introversion) as a dependent variable along utilizing content feedback and reading strategies. (Marefat, 2006; Jafarpour, Roohani, Hasanimanesh, 2015).

Conclusion
This study aims to clarify the possible effect of a kind of feedback, named as content feedback, on learners' reading comprehension ability along with utilizing some of reading strategies. Moreover, the personality types of the learners (extroversion, introversion) were also considered. Corresponding to previous research findings, on the effect of content feedback and applying reading strategies, the results of the study supported the positive effect of the above techniques on the learners' ability to comprehend the text. Based on the results collected from the learners' both post and delayed post-test, both groups of introversion and extroversion learners performed well in this study, while the extroverted group outperformed the introverted one. As to the learners' perceptions, it was found that the learners' held positive views regarding the content feedback provided for them since they could self-regulate the reading exercises.

The present study benefited from the pre-intermediate level of students to gather the data. Other levels of proficiency can also be taken into account to find the effect of content feedback on the extroverted and introverted learners' reading comprehension. As to the hardship of bureaucracies and gathering the university students, the participants were selected from a private language institute. So, university learners can also be considered as the probable participants since they are involved with reading comprehension courses in Iranian content (Mehrpoor, 2004). The present study focused on the reading comprehension skill to check the effect of content feedback on the learners' improvement, other skills can also be studied to investigate the learners' reaction and their performance.
References


