The Effect of Content Feedback and Reading Strategies on Reading Comprehension: Extroverted and Introverted Learners

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Abstract

The current study aims to consider the effectiveness of content feedback (CF) along with reading strategies on L2 learners' reading comprehension ability based on the extrovert/introvert personality type. So, 35 pre-intermediate learners studying in a private language institute in Chaloos, Mazandaran, Iran participated in the study and were divided into experimental groups and control one. In order to answer the research question regarding the effectiveness of utilizing content feedback and reading strategies, eight treatment sessions were applied and the pre- post- and delayed post- tests were analyzed through SPSS software (version 20). The results revealed the positive effect of CF on the learners’ reading comprehension ability and also the extroverted learners outperformed the introverted ones. In order to mention the implication side, the study suggests that teaching reading skill by using effective strategies along with content feedback can improve the learners’ reading
comprehension ability.

**Keywords:** content feedback, reading comprehension, introversion, extroversion

1. **Introduction**

Reading is a necessary skill which is known as an interaction between the person who reads and the text and results in comprehension. Van den Broek (2010) defines reading comprehension as students' ability to construct “a coherent mental representation that integrates the textual information and relevant background knowledge” (p. 453). Regarding teaching reading and applying effective strategies for improving comprehension, Karabuga and Sire Kaya (2013) studied the effects of collaborative strategic reading on adult EFL learners’ reading comprehension ability and these strategies have remarkable effect on the learners’ comprehension ability.

In order to increase the learners' reading comprehension ability, some instructions and strategies should be used. According to Carrell, Gasdusek, and Wise (1998), “Reading strategies are of interest not only for what they reveal about the ways readers manage interactions with written text but also for how the use of strategies is related to effective reading comprehension” (p. 97). Numerous studies proved the positive effect of applying strategies on increasing the learners' reading comprehension ability (Marzban & Akbarnejad, 2012; Karabuga & Kaya, 2013; Sakolrak, 2014).

The role of feedback is another important point regarding the significant of teaching and is the process of evaluating the learner's performance to help them improve in areas that are needed. Hattie (2007) believed that feedback is necessary for understanding and performance. Focusing on the role of feedback on the learners' performance is clarified in different studies (Bannister, 1986; Schunk & Rice, 1991; Tabatabaei, 2011). So feedback can be a useful tool to help students to perform better. Feedback can prompt mental processes such as evaluation of information, comparison of new information with prior experiences, and formation of beliefs (Brandl, 1995).

Content feedback is known as a new technique in which teachers shouldn’t just focus on grammar and vocabulary, but also pay attention to the content of texts (Baghazou, 2011). Many teachers just focus on grammar correction. Truscott (1996) argues that teachers shouldn't just correct the grammar, because it fails to achieve learning goals. Several studies (Fathman & Whalley, 1999; Ashwell, 2000; Baghazou, 2011) were done regarding the importance of using content feedback in classrooms to help learners get the meaning of the whole texts to comprehend it better.

One of the learners' characteristics which affect the process of learning is their personality type. As Funder (2007) states, 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). Eysenck (1976) describes the differences between introverts and extrovert as a dichotomy. He applies the following characteristics to extroverts and introverts. "Extroverts are sociable; lively; impulsive; seeking novelty and change... and introverts are quiet; introspective; intellectual; well-ordered; emotionally unexpressive..." (p.
8). Again several researches are done based on the role of personality type on learners' learning (Venugopalan, 2000; Wakamoto (2007; Jafarpour, Roohani, & Hasanimanesh, 2015).

2. Research Question

The present study seeks the answer for the following research question:

RQ1. Does CF have any significant effect on Iranian pre-intermediate learners’ reading comprehension ability?

3. Methodology

3.1 Participants

To do so, based on convenience sampling method, 35 pre-intermediate students (between 13 to 19 years of age), who were studying in a private language institute in Chaloos, Mazandaran, Iran, took part in the study to find out the effect of content feedback on learners' reading comprehension. The participants took Oxford Placement Test (OPT) to check their homogeneity in terms of their language proficiency. It should also be noted that based on the personality type questionnaire, the participants were divided into two experimental groups including 21 extroverted and 14 introverted students to compare their scores in order to check the effectiveness of content feedback on their reading comprehension ability.

3.2 Procedure

The current study aimed to look into the impact of content feedback on the performance of introverted and extroverted pre-intermediate learners' reading comprehension ability. Firstly, the learners took the OPT to check their level of proficiency. After that, personality type questionnaire was administered to determine the learners' personality type. Twenty-one learners were extroverted and 14 participants were introverted. Then, the pre-test was administered to check their initial knowledge of reading comprehension. After that, the learners were provided with eight treatment sessions focusing on content feedback and reading strategy instruction. The 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. After the treatment, the learners were given the post-test and delayed post-test to measure their achievement scores.

3.3 Instrumentation

The following instruments were applied in the study:

3.3.1 Oxford Placement Test (OPT)

Oxford Placement Test was adopted to homogenize the learners in terms of their level of proficiency in order to take part in the study.
3.3.2 Reading Comprehension Diagnostic Test (Pre-Test)

Before the treatment session, learners took the pre-test which was 20 questions of multiple choice format in order to distinguish the learners' initial reading comprehension ability and to know their probable weaknesses in reading comprehension ability. The questions were adopted from 'Reading Power' book.

3.3.3 Reading Comprehension Achievement Test (Post-Test)

In order to check the effectiveness of treatment sessions on the learners' reading comprehension ability, the 20-item of multiple choice type post-test taken from the same book was applied to the learners.

3.3.4 Delayed Post-Test

Two weeks after the treatment sessions, the delayed post-test was adopted to check the learners' possible retained improvement on reading comprehension ability. The same as the pre- and post- test, the questions of delayed post- test were taken from 'Reading Power' book.

3.3.5 Personality Type Questionnaire

To distinguish the learners’ personality type based on their introversion or extroversion characteristics, a personality type questionnaire in Persian version of EPI (Nikjoo, 1982) was provided to be filled out by the Persian learners. The EPI (Eysenck, Eysenck, & Barrett, 1985) is a validated 57 Yes/No item questionnaire to assess the personality characteristics of a person.

3.4 Data Analysis

In order to analyze the research question of the study (Does CF have any significant effect on Iranian pre-intermediate learners’ reading comprehension ability?) quantitative methodology, i.e. descriptive and inferential statistics through SPSS software (version 20) was applied. The results of extroverted and introverted learners' pre- post- and delayed post- tests were collected and analyzed separately and then were compared with each other to clarify any difference.

4. Results

The research question of the study was to look into the effect of providing CF on Iranian pre-intermediate learners' reading comprehension ability. In doing so, quantitative measures were conducted both descriptively and inferentially as in the following.

Test of normal distribution (see Table 1) was initially carried out to see if the scores of the learners in both groups, i.e. experimental and control learners were distributed normally.
First of all, tests of normal distribution were run to see if the data were distributed normally. The results of Kolmogorov-Smirnov goodness-of-fit test showed .134, .133, and .171 for the pretest, posttest, and delayed posttest scores, respectively, of the experimental group, and .139, .130, and .200 for the pretest, posttest, and delayed posttest scores, respectively, of the control group. Since the sample size, in each group, was rather small (n=35), under 50, the results of Shapiro-Wilk test of normal distribution were accounted for as well. The results of Shapiro-Wilk goodness-of-fit test showed .143, .214, and .237 for the learners’ scores in the experimental group on the pretest, posttest, and delayed posttest, respectively, and .086, .125, and .160 for the learners’ scores in the control group on the pretest, posttest, and delayed posttest, respectively. The results of both tests, showing non-significant p-values, indicated that the scores were normally distributed. Therefore, parametric tests could be used to analyze the data.

After checking normality distribution, a set of paired-samples t-test (Table 2) was conducted to compare the experimental and control groups' performance on the pre-test.

Looking at the table of descriptive statistics, it can be seen that the learners’ mean score, in the experimental group, (M=9.71, SD= 1.58) was not too much different from that of the learners in the control group (M=10.11, SD= 1.71) indicating that the groups were different, but to a little extent. In order to compare the groups' mean scores on the pre-test, independent samples t-test was provided (Table 3).
The results of the independent-samples t-test table were analyzed to see if there was any significant statistical difference between the learners’ mean scores on the pretest. Looking at the Levene’s test, it can be seen that the assumption of equal variances is not violated (p= .637). Therefore, the results of the first line could be used to report the data. The results of the first line showed a non-significant p-value (p=.314, df= 68, t= -1.01). The mean difference was -.40 with 95% confidence interval ranging from -1.18 to .38 indicating that the learners performed similarly prior to the treatment.

Regarding the fact that parametric tests lack enough power to test the assumptions, it is safer to report the results of the second line of the independent-samples t-test called Welch’s procedure, as well, which assumes that the variances are not equal. The results of the second line showed a non-significant p-value as well (p=.314, df= 67.58, t= -1.01). The mean difference was -.40 with 95% confidence interval ranging from -1.18 to .38 which confirms the results of the first line.

In order to examine the efficacy of CF on the learners' reading comprehension ability, the experimental and control groups' performance was compared (see Table 4).

Table 4. Descriptive statistics of the experimental and control groups on the post-test

|     | Groups | N  | Mean  | Std. Deviation | Std. Error Mean |
|-----|--------|----|-------|----------------|-----------------|
| Pretest | Experimental | 35 | 13.7429 | 1.70368 | .28797 |
|         | Control      | 35 | 10.4000 | 2.08919 | .35314 |
The results of the descriptive statistics showed a difference between the performances of the learners in the experimental group (M= 13.74, SD= 1.70) and those in the control group (M= 10.40, SD= 2.08) showing that the learners in the experimental group performed so much better than those in the control group following the treatment sessions.

The results of the independent-samples t-test were analyzed to find the statistical difference between the two sets of scores obtained from the post-test of the two groups (Table 5).

Table 5. Independent samples t-test for the experimental and control groups on the post-test

| Levene's Test for Equality of Variances | t-test for Equality of Means | 95% Confidence Interval of the Difference |
|----------------------------------------|-----------------------------|----------------------------------------|
| Equal variances assumed                | 2.041 1.58 7.336 68 .000 3.34 2.43 4.25 | 2.43 4.25 |
| Equal variances not assumed            | 7.33 65.35 68 .000 3.34 2.43 4.25 | 2.43 4.25 |

Examining the Levene’s test, a non-significant p-value can be seen (p=.158) suggesting that the assumption of equal variances in not violated. Therefore, the first line of the table could be reported. The results of the first line of the table showed a significant p-value (p= .000, df= 68, t= 7.33). The mean difference was 3.34 with 95% confidence interval ranging from 2.43 to 4.25. The Cohen's d statistics showed a large difference as well (d= 1.75) indicating that the learners in the experimental group significantly outperformed those in the control group. The results of the second line of the table showed similar results. Examining the second line of the table, one can see a significant p-value (p= .000, df= 65.35, t= 7.33). The mean difference is 3.34 with 95% confidence interval ranging between 2.43 and 4.25 which denotes the outperformance of the learners in the experimental group.

The learners’ scores on the delayed post-test were also compared using another independent-samples t-test. However, descriptive statistics are initially provided in Table 6.

Table 6. Descriptive statistics of the experimental and control groups on the delayed post-test

| Groups     | N   | Mean  | Std. Deviation | Std. Error Mean |
|------------|-----|-------|----------------|-----------------|
| Delayed Posttest |     |       |                |                 |
| Experimental | 35  | 13.6571 | 2.40028    | .40572          |
| Control     | 35  | 10.6857 | 1.95194    | .32994          |
The results of the descriptive statics showed a rather big difference, again, between the performances of the learners in the experimental group (M=13.65, SD= 2.40) and those in the control group (M= 10.68, SD= 1.95) indicating that those in the control group scored higher.

The table of independent-samples t-test (Table 7) was, then, examined to find the statistical difference between the mean scores of the two groups, i.e. experimental and control.

Table 7. Independent samples t-test for the experimental and control groups on the delayed post-test

| Levene's Test for Equality of Variances | t-test for Equality of Means | 95% Confidence Interval of the Difference |
|----------------------------------------|----------------------------|------------------------------------------|
| Equal variances assumed                | Levene's Test F = 2.011, Sig. = .161 | t = 5.682, df = 68, Sig. (2-tailed) = .000, Mean Difference = 2.97143, Std. Error Difference = .52294 |
| Equal variances not assumed            |                             |                                          |

Having examined the Levene’s test, a non-significant p-value was observed (p= .161) suggesting that the assumption of equal variances was not violated. Hence, the first line of the table could be reported. The results of the first line of the table showed a significant p-value (p=.000, df= 68, t= 5.68). The mean difference was 2.97 with 95% confidence interval ranging from 1.92 to 4.01. The Cohen’s d statistics also showed a large difference (d=1.35) denoting that the learners in the experimental group outperformed those in the control group on the delayed posttest administered after two weeks and that the effects of the content feedback was durable. The results of the second line of the table also showed a significant p-value (p=.000, df= 65.28, t= 5.68). The mean difference was 2.97 with 95% confidence interval ranging from 1.92 to 4.01 which confirmed the results obtained from the first line.

5. Discussion

This study aimed to explore the effect of applying content feedback on introverted and extroverted learners' reading comprehension ability. Based on the results, utilized reading strategies, combined with content feedback, resulted in the improvement of learners' reading comprehending. Although the findings were in contrast with some other studies which focused on other skills (e.g. Pauline, 1987; Ashwell, 2000; Fathman & Whalley, 2000; Baghzou, 2011) it is in parallel to those of research which supports the claim that content feedback has positive effect on writing accuracy (Ashwell, 2000; Baghzou, 2011).

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 (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)

In the present study some reading strategies (i.e. previewing, predicting, scanning, guessing word meaning, topic of paragraphs, using reference words and skimming) were applied as a device to help learners to improve learners' comprehension and to get mastery over their reading task (Yussof, Jamian, Roslan, Hamzah, & Kabilan, 2012; Gunning, 2008; Fauziah, 2008). So, different types of strategies should be used by teachers to become as a tool in classrooms to help learners in reading comprehension (Sakolrak, 2014).

The study also focused on extroversion and introversion dichotomy of personality type. Considering the performance of extroverted and introverted learners, several studies were done and each of the two groups outperformed the other one (Venugopalan, 2000; Shahila & Meenakshi, 2011; Suliman, 2014). However, this type of personality characteristics (i.e. extroversion/introversion) wasn't mentioned as a dependent variable along applying content feedback and reading strategies (Marefat, 2006; Jafarpour, Roohani, & Hasanimanesh, 2015).

6. Conclusion

The present study aims to investigate the possible effect of content feedback on learners' reading comprehension ability by using some of reading strategies. Also, the personality types of the learners (extroversion, introversion) were also kept in view. The findings of the study indicated that the content feedback and reading strategies affect the learners' ability to comprehend the text and it is also found that both groups of introversion and extroversion learners performed well while the extroverted group outperformed the introverted one.

The current research considered the pre-intermediate level of students to gather the data. Other levels of proficiency can also be considered to clarify the effect of content feedback on the extroverted and introverted learners' reading comprehension ability. Because of the hardship of bureaucracies to gather the university students, the participants were selected from a private language institute. So, university learners can also be considered as the participants. The focus of the present study was on the reading comprehension skill in order to check the effect of content feedback on the learners' development; other skills can also be taken into account to investigate the learners' performance.

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