The Relationship between Anxiety and Iranian EFL Learners’ Reading Comprehension

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ABSTRACT: Learning an additional language is both cognitively and emotionally demanding. Anxiety, a complicated phenomenon, is a kind of emotion so the issue of anxiety in second language (L2) learning has concerned researcher. This study investigated the correlation between anxiety and reading comprehension skill among Iranian EFL learners. At first, a modified version of Comprehensive English Language Test was administered to a group of 82 students to determine their homogeneity as well as to assess their language proficiency. In the next phase of the study 33-item Likert-style Foreign Language Reading Anxiety Scale was modified. In the last phase of the study, the students were given a reading comprehension test consisting of 28 multiple-choice items based on 3 reading passages. This test was designed to examine the relationship between foreign language reading anxiety and reading comprehension. The result shows anxiety and reading comprehension in English are correlated negatively in boys & girls separately and boys & girls both. The normal level of anxiety gives positive affect in reading comprehension.

Keywords: Anxiety, Anxiety reading comprehension, Reading comprehension

INTRODUCTION

Reading is a highly cognition of separate words and phrases, immediate memory of what has just been read, remote memories based on the reader's earlier experiences, interest in the reading matter, and a sufficient degree of intelligence to understand what is read. Comprehension takes place only when all these elements work together, and a failure to comprehend may be due to any malfunctioning of one or more of them. Reading is primarily a matter of comprehension & interpretation of meaning. It is influenced by many factors such as attitudes, motives, interests, curiosity, anxiety, classroom atmosphere, child's background, teacher's sensitivity to the group, emotional problems.

Anxiety being a common symptom of man has attracted the attention of clinicians, psychologists, social workers & educationists.

Research and theory on anxiety has, therefore, proliferated in the recent past and attempts has been made at understanding the nature of this basic human emotion as well as at unveiling the conditions related to it. Apart from its clinical Significance, anxiety has been found to affect an individual's performance and behavior in a variety of situations. Anxiety affects the curiosity of students which in turn reduces the functioning of cognitive abilities & capacities like logical thinking, keen observation, questioning etc. and because of these the comprehension as such is affected. Several studies have investigated the relationship between anxiety & memory (Borkowski & Mann, 1968). The detrimental effect of anxiety has been generally demonstrated by these researches which ultimately affects the reading comprehension.

Research Questions

1. Is there a relationship between anxiety and Iranian EFL learners’ reading comprehension?
2. Is there a relationship between foreign language reading anxiety and gender?
3. Is there a relationship between reading comprehension and gender of students?
Hypothesis
H01. There is an inverse relationship between anxiety and Iranian EFL learners’

Reading Comprehension
H. There is a relationship between foreign language reading anxiety and gender.
H02. There is no significant relationship between reading comprehension and gender of students.

Review of literature
Language Learning and Anxiety

Results from studies on language learning and anxiety reveal that anxiety is a significant variable in second language oral production with adults (Clement et al., 1977; Clement, 1987; Horwitz, 1986; MacIntyre, 1999), but not so with children (Bracken& Crain, 1994). In a review of studies on L2 reading and anxiety, Horwitz, Horwitz & Cope, (1986) discussed the ambiguities in research methods as well as conflicting results, and MacIntyre & Gardner (1989) stated that even with the disparities in research methodologies there is a clear relationship between foreign language anxiety and foreign language proficiency in communicative situations. Most recently, Frantzen & Magnan (2005) reported that beginners enrolled in language classes at the university do not experience extreme anxiety, and this may be due to instructional practices. It is important to note that the majority of investigations reviewed by the above researchers utilized participants from the introductory levels of language instruction.

MacIntyre and Gardner (1991a) identified three distinct approaches to the study of anxiety: trait anxiety refers to general personality traits; state anxiety is an emotional state; and situation specific anxiety refers to forms of anxiety within a given situation (p. 87). The authors maintain that situation specific perspective better captures the nature of foreign language anxiety. In studies on situation specific constructs participant’s anxiety is examined in a well-defined situation, and consequently conclusions can be made about specific language learning tasks. MacIntyre (1999) offers a synthesis of language anxiety research and offers the following general assertions: (1) anxiety develops from negative experiences early in the language learning experience; (2) language anxiety negatively correlates with L2 achievement and with self-perception of L2 proficiency; and finally, (3) anxious learners achieve lower grades, spend more time studying, and have greater difficulty processing new L2 input and output. To date, the database of research concerning anxiety and L2 reading is not complete, and therefore no generalizations specific to reading can be formulated. The present study examines L2 reading and post-reading tasks (situation specific anxiety) at the advanced levels.

Anxiety and L2 Reading

To date, only a few studies have addressed affect and L2 reading. Franson (1984) found that … "type of motivation for reading a particular text is an important factor influencing the choice of approach to learning, and thus also determining likely levels of outcome”. He concluded that students naturally perform better on reading comprehension when there is no expectation of a factual knowledge test. Steffensen, Goatz, and Cheng (1999) included affect as a key variable in a study about readers’ nonverbal responses. In three different experiments conducted with students in China, the researchers explored the imagery and emotional responses that readers experienced while reading a text in L1 and L2. Readers completed rating scales for imagery and emotional response ratings as well as free reports. Overall, findings revealed that affect and imagery are present during the reading process and that the “nonverbal representational system is a fundamental component of both L1 and L2 reading”. With participants from introductory courses of French, Russian and Japanese, Saito, Horwitz and Garza (1999) found that foreign language reading anxiety does exist, and that it is distinct from general foreign language anxiety concerning oral performance. More specifically, they found that levels of reading anxiety vary by target language and seem to be related to writing systems. In their study, learners of Japanese were most anxious, followed by French and then Russian. They attributed the difference between the results of French and Russian to the fact that Russian symbols are phonetically dependable and French is not. Moreover, they reported that student course grades decreased alongside levels of reading anxiety as well as with general foreign language anxiety. The higher the self-reported level of foreign language reading anxiety, the lower the course grade, and vice versa. The authors discuss the level of instruction as a variable to be examined in future inquiries of this type. Additionally, as Saito, Horwitz and Garza state, “… the anxiety might appear at some point after the reading was actually accomplished or when the student encounters the teacher’s or other students’ interpretations of the text”.

With participants from a third semester course and an intermediate level conversation course in university level Spanish, Sellars (2000) also found that reading anxiety is a distinct variable in foreign language learning. Furthermore, students with higher levels of overall foreign language learning anxiety reported higher levels of reading anxiety. In a close look at anxiety ratings, findings showed that more students indicated feeling “somewhat” anxious about L2 reading than any other rating. Sellars asked students to read a magazine article and found a negative relationship between reading anxiety and L2 reading comprehension. In a complex L2 reading investigation with students of
second year university level Spanish. Young (2000) examined several interacting variables including anxiety, comprehension, self-reported comprehension, text features, and reading ability. With four different non-literary reading passages (magazines, newspapers, etc) she found that the higher the reading anxiety, the lower students rate their level of understanding the L2 texts. She also reported a significant relationship between L2 reading anxiety and L2 reading comprehension with two of the four passages utilized in the study. These findings echo Sellar’s (2000) results with third semester participants where reading anxiety affected reading comprehension, and Young explains that linguistically dense texts could produce more reading anxiety than the text length and structure. Results also revealed that reading anxiety is not a good predictor of L2 comprehension at this level. Both Sellers and Young utilized participants from courses taken before the reading of authentic texts begins which leads to the following question: Do students at the advanced levels feel anxious about reading lengthy authentic texts? If so, do they feel anxious about the act of reading and/or post-L2 reading tasks? Does anxiety affect comprehension?

Kopper (1970); MacIntyre & Gardner (1991a, 1991b, 1991c, 1994b), Gardner & MacIntyre (1993) found that anxiety was related negatively to reading comprehension. Durrett (1965); Devi (1969); De & Singh (1972) and Arora (1976) found that females are more anxious than males. Hundal & Singh (1971) found that males are more anxious than females. Dass (1984); Dhanger (1985) studied that low anxiety level had better reading comprehension than those with a high anxiety level. Gokulnathan (1971); Hundal & Singh (1971); Hundal & Kour (1974) investigated that there were no significant sex differences in anxiety, Brahmbhatt (1983) found that anxiety showed high correlation with achievement in English. Lall (1984); Gupta (1987); Thilagavathithi (1990) found that academic achievement & performance was negatively and significantly related to anxiety.

**METHODOLOGY**

**Participants**

Survey data were collected from 62 students from three institutes in Naghadeh including Sadaf institution, Zabansara institution, Ertebatat institution. First of all, 82 male and female students in intermediate level were chosen. Then a Comprehensive English Language Test (CELT) was used. The reason for the administration of such a standardized test was to evaluate the proficiency level of the subjects as well as to select a homogeneous sample. Of the 82 participants, only 68 were found to be homogenous. 6 subjects could not take part in one or both of written tests and were excluded from the study. 62 main participants who took part in all phases of the research were both male and female and in an age group 18 to 22.

**Instrumentation**

To achieve the purpose of the present study, while controlling for the differences in the participants’ level of language proficiency, the researcher utilized the following instruments:

**Language Proficiency Test**

A modified version of a language proficiency test, Comprehensive English Language Test (CELT), consisting of 54 items, was selected to investigate whether the participants were homogeneous in terms of their general language proficiency. The test was piloted to 82 intermediate students at different institutes of Naghadeh. This group was almost similar to the target group regarding their language proficiency level, gender, and age.

**Foreign Language Reading Anxiety Scale (FLRAS)**

In the second phase, this group took a psychology test which was called Foreign Language Reading Anxiety Scale, adapted from FLCAS (Horwitz, Horwitz & Cope, 1986). The scale consisted of 33 Likert-style questions (after calculating the internal consistency) with points ranging from Strongly Agree to Strongly Disagree.

Foreign Language Reading Anxiety Scale (FLRAS) was employed in three institutes in Naghadeh including Sadaf institute, Ertebatat institute and Zabansara institute, to measure the anxiety level of the participants.

**Reading Comprehension Task**

In this phase of the study, the students were given a reading comprehension test consisting of 28 multiple-choice items based on 3 reading passages. This test was designed to examine the relationship between foreign language reading anxiety and reading comprehension. Participants performed the task in a very calm and friendly environment in one of the classes of their institutions. The tasks were presented to the students by their teacher and the researcher. Multiple-choice reading comprehension tests are able to evaluate a reader’s reading comprehension efficiently (Wolf, 1993).

**Procedure**

The following steps were taken to determine whether there is any significant relationship among creativity and written narrative performance.
Administration of the Language Proficiency Test

In this stage, the modified version of the Comprehensive English Language Test (CELT) was administered to the participants to ensure that there was no significant difference between them regarding their language proficiency level.

Administration of Foreign Language Reading Anxiety Scale (FLRAS)

In this stage, Foreign Language Reading Anxiety Scale (FLRAS) was administered to the participants. Foreign Language Reading Anxiety Scale (FLRAS) adopted from Hurwitz et al. (1986) consists of 33 items measuring language anxiety related to foreign language learning. Participants responded to a 5-point Likert scale for each item with 1, 2, 3, 4, and 5 signifying strongly agree, agree, neither agree nor disagree, disagree, and strongly disagree respectively. Lower scores indicate lower LA and higher scores indicate higher LA. The participants were asked to complete information about name and age on the papers in order to be identified in the other stages of the study. They were also notified that all tests and questionnaires of this study would have no influence on their institute-related achievements and that they were asked to be as honest as possible.

Administration Reading Comprehension Task

Students were given a reading comprehension test consisting of 28 multiple-choice items based on 3 reading passages. Participants spent 60 minutes reading the passage of about 300 words extracted from the textbook used in the reading classes, and then answering 28 multiple-choice questions based on the reading. This test was designed to examine the relationship between foreign language reading anxiety and reading comprehension. Participants performed the task in a very calm and friendly environment in one of the classes of their institutions. The tasks were presented to the students by their teacher and the researcher.

RESULT

In order to analyze and interpret the data, descriptive and inferential statistics has been used.

Table 1. Descriptive statistics.

<table>
<thead>
<tr>
<th></th>
<th>N</th>
<th>Mean</th>
<th>Median</th>
<th>Mode</th>
<th>SD</th>
<th>V</th>
<th>Range</th>
</tr>
</thead>
<tbody>
<tr>
<td>Anxiety</td>
<td>62</td>
<td>90.23</td>
<td>86.00</td>
<td>82</td>
<td>8.61</td>
<td>73.981</td>
<td>28</td>
</tr>
<tr>
<td>Reading comprehension</td>
<td>62</td>
<td>49.50</td>
<td>49.00</td>
<td>48</td>
<td>4.288</td>
<td>27.959</td>
<td>21</td>
</tr>
</tbody>
</table>

Survey data were collected from 62 students, 31 males and 31 females.

Table 2. Correlations coefficient.

<table>
<thead>
<tr>
<th></th>
<th>Anxiety</th>
<th>Reading Comprehension</th>
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<tbody>
<tr>
<td>Male And Females</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Females Anxiety</td>
<td>Pearson Correlation</td>
<td>1</td>
</tr>
<tr>
<td>Sig. (2-Tailed)</td>
<td></td>
<td>-.680**</td>
</tr>
<tr>
<td>N</td>
<td>31</td>
<td>31</td>
</tr>
<tr>
<td>Reading Comprehension</td>
<td>Pearson Correlation</td>
<td>-.680**</td>
</tr>
<tr>
<td>Sig. (2-Tailed)</td>
<td></td>
<td>.630</td>
</tr>
<tr>
<td>N</td>
<td>31</td>
<td>31</td>
</tr>
<tr>
<td>Males Anxiety</td>
<td>Pearson Correlation</td>
<td>1</td>
</tr>
<tr>
<td>Sig. (2-Tailed)</td>
<td></td>
<td>-.738**</td>
</tr>
<tr>
<td>N</td>
<td>31</td>
<td>31</td>
</tr>
<tr>
<td>Reading Comprehension</td>
<td>Pearson Correlation</td>
<td>-.738**</td>
</tr>
<tr>
<td>Sig. (2-Tailed)</td>
<td></td>
<td>.450</td>
</tr>
<tr>
<td>N</td>
<td>31</td>
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Research Hypothesis 1:

H1: There is a negative significance relationship between anxiety and Iranian EFL learners’ reading comprehension.
In order to determine the level of anxiety on reading comprehension, Regression method has been used. The results showed that the effect of anxiety on reading comprehension is positive and significant ($r = 0.70$, $p < 0.001$, $df = 60$, $F = 59.669$)

a. Predictors: (Constant), reading comprehension
b. Dependent Variable: anxiety
**Validity**

In this research the test-retest method has been used which 0.77 reported for anxiety, it showed a good level of validity and also 0.68 reported for reading comprehension which showed that these students have a good level of reading comprehension and showed a good level of validity. As it was mentioned the content validity and test-retest validity has been used in this research. For analyzing and interpreting the validity, KMO and Bartlett’s Test has been used.

<table>
<thead>
<tr>
<th>Table 6. KMO and Bartlett’s Test.</th>
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<tbody>
<tr>
<td>Kaiser-Meyer-Olkin Measure of Sampling Adequacy.</td>
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<tr>
<td>Bartlett’s Test of Sphericity</td>
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<tr>
<th>Table 7. KMO and Bartlett’s Test.</th>
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**Reliability**

Coronbach’s alpha has been used for calculating the reliability of these tests. 0.73 alpha reported for anxiety and 0.64 alpha reported for reading comprehension which showed reliability of tests.

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<th>Table 8. Reliability Statistics.</th>
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<tr>
<td>Cronbach's Alpha</td>
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<tr>
<td>0.732</td>
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<tr>
<th>Table 9. Reliability Statistics.</th>
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<tr>
<td>Cronbach's Alpha</td>
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<td>0.648</td>
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**CONCLUSION**

From the results of the study, it can be concluded that anxiety is correlated negatively but insignificantly with reading comprehension in English in students in general. Anxiety is not a controlled feature in reading comprehension. As such, the normal level of anxiety should give positive effect in comprehension. However, the values of higher anxiety in girls denoting low comprehension & lower anxiety in boys denoting high comprehension is a proof of the gender effect evidently affecting reading comprehension. Hence, efforts should be made to manage anxiety aspect in our teaching in the English class.

**Pedagogical implications**

A short review of the literature shows that not only is language anxiety a worldwide problem in language classes and mostly rooted in communication apprehension and test anxiety, but also much attention has been given to the affective state of each learner in ESL/EFL classes.

In order to overcome the negative and debilitating effects of anxiety on all the four skills particularly reading comprehension, it should be of utmost importance and high priority to teachers or instructors to remove any unnecessary anxiety from language learning, and create a stress-free, safe and relaxing atmosphere in the class where students feel secure, interested, joyful and motivated to learn and internalize the learning materials so that they can approach the aims of teaching and learning. Therefore, teachers play a prominent role in alleviating and
controlling anxiety in the classroom. They are likely to facilitate language learning through providing a supportive and friendly environment, applying nonthreatening teaching methods and making use of interesting topics and themes which are relevant to the learner’s lives and interests. Similarly, Rogers (1989) believes that “much of what is called learning... involves little feeling of personal meaning, and has insufficient relevance for the whole person, with a resulting lack of interest”.

Brown (1994) maintains that instructors need to “establish interpersonal relationships” with their students. Teachers should be warm and friendly in their relationships with students. Besides they should value effort, risk-taking and successful communication and also they should take it for granted that errors and mistakes are a natural part of learning. Consequently, in such an atmosphere students seek to have more opportunities to interact positively with each other and act in a cooperative rather than a competitive manner; as a result, they focus on communication rather than being worried and afraid of negative evaluation.

In conclusion, foreign language anxiety should be taken more seriously not only by instructors, but also by students and possibly program developers. This may be achieved through workshops or presentations on foreign language anxiety and exploring different possible ways to alleviate anxiety in the classroom. As Young (2000) believes the only way to train students to become better language learners is accomplished by helping students deal with and overcome their feelings of anxiety.

Moreover, one of the objectives of teacher training programs, or maybe in-services, should be to explore the possible ways of helping future teachers to use their personal experiences about the phenomenon of language learning to the benefit of their English language learners. Besides, future educators would take advantage of teacher education programs by being taught to identify the importance of the role of affect in language learning and how to operate to reduce its negative effect on the learning process, and achieve an ideal result. It is essential that teachers become familiar with the FLCAS instrument (Horwitz, Horwitz & Cope, 1986) to increase awareness of foreign language anxiety and to be informed about different ways in which students experience it.

It should be also a main concern for the teacher to ensure that the levels of anxiety do not hamper the class progress. As MacIntyre and Gardner (1989) maintains that students feel anxious only after on-going negative experiences in the language learning environment.

Furthermore, the findings of this research are consistent with those of other studies: the female learners are more concerned about language difficulties than males, and women tend to be more anxious and worry-oriented than men. Nevertheless, in co-education systems where men and women study in the same class, there seems to be more peer-related anxiety. As Bracken and Crain (1994) state adolescence is a time for fluctuating interpersonal relationships; so that, peers become more important than teachers, and since girls depend more on their peers and social communication with them (Plancherel & Bolognini, 1995) on the one hand, and they are afraid of being laughed at or cajoled by their peers on the other hand, they feel more anxious when they take a test or asked to answer a question in class.

Consequently, if teachers encourage more cooperative learning atmosphere in which the affective safety of all the participants is considered, students will have more opportunities to interact positively with each other and, as a result, anxiety would be reduced. While accepting that a little anxiety can be considered as a motivating factor, it is important for teachers to be trained on how to adjust the dose.

REFERENCES


