The effect of anxiety on foreign language academic achievement

TÓTH ANDREA*

University of Dunaújváros, Teachers’ Training Centre, 2400 Dunaújváros, Táncsics Mihály utca 1/A, Hungary

RESEARCH ARTICLE

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ABSTRACT

Anxiety has commonly been regarded as one of the most significant affective obstacles in language learning achievement, and has been the subject matter of many second language researches (MacIntyre & Gregersen, 2012; Huang, 2012; Hewitt & Stefenson, 2011; Riasati, 2011; Horwitz, 2001).

The primary purpose of the present study is to explore the anxiety levels of a class of students studying at the University of Dunaújváros and to investigate their attitude towards acquiring a second/foreign language. On the basis of the information gained the study is aiming at revealing some degree of correlation between students’ anxiety and their academic achievement.

Responses to the Foreign Language Anxiety Scale show that the relatively high levels of anxiety among these participants are related to the worry about (1) the consequences of failing their foreign language class, (2) thinking that the others are better at languages and (3) communication with native speakers of the foreign language. However, the results on the relationship between anxiety levels and academic achievements show no significant correlation between these two variables, which leads us to the conclusion that the participants’ anxiety levels do not exceed the level which would have a negative impact on their academic results.

KEYWORDS

anxiety, academic achievement, foreign language, language acquisition, language pedagogy, language teaching

* Corresponding author. E-mail: Toth.Andrea@uniduna.hu
INTRODUCTION

Foreign language teaching has been highly affected by psychology. Many studies have been performed to find out the relationship between language learning and affective variables. Such affective variables focus on a number of personality factors: self-esteem, risk-taking, empathy, extroversion, motivation and anxiety (Hewitt & Stephenson, 2011; Horwitz, 2001; Huang, 2012; MacIntyre & Gregersen, 2012; Riasati, 2011).

Anxiety is defined as the “subjective feeling of tension, apprehension, nervousness and worry associated with an arousal of the autonomic nervous system” (Spielberger, 1983, p. 15).

When anxiety is limited just to a specific situation, such as using a foreign language, we use the term specific anxiety. On the other hand, the term general anxiety is used with those who are generally anxious in various situations (Horwitz, Horwitz, & Cope, 1986). Traditional psychological classification (Horwitz, 2001) distinguishes the anxiety of people who are generally anxious in a variety of situations (trait anxiety) from those who are anxious only in specific situations (state anxiety).

Anxiety when associated with learning a foreign language is termed as “second/foreign language anxiety” (FLA) related to the negative emotional reactions of the learners towards foreign language acquisition (Horwitz, 2001). FLA is generally viewed as a complex phenomenon of self-perceptions, beliefs, feelings and behaviours related to foreign language learning (Horwitz et al., 1986).

SOURCES OF FOREIGN LANGUAGE ANXIETY

As McDonough and Shaw suggested (1993) every class is composed of individuals who will have different capabilities and work rates. For some learners time is important whereas others pay extra attention to the place. These differences in the learners’ perception of the environment might be a factor that leads them to anxiety. Working alone or in groups might also be an important factor for some students.

Researchers have also started to examine the situations that make people more or less anxious about communication. Five different characteristics have been identified (Daly and Buss, 1984; Richmond and McCroskey, 1988 cited in Daly, 1991):

1. People may start to be nervous while they are speaking a language after they become conscious that someone may be judging their performance.
2. People are more comfortable in familiar settings and if they meet new situations, the first thing they do is to remain quiet.
3. People are likely to become more silent if they do not know what they are being judged on.
4. If people think that they are in an activity where their competence is low, they generally prefer not to be the focus of attention.
5. Students who previously have had negative experiences when learning languages are likely to be more anxious.

Ohata (2005) indicated that teachers’ perceptions play an important role in students’ FLA as the teacher is the person in the classroom who can regulate the atmosphere, search for the signs of anxiety and help students overcome it. The classroom that follows traditional learning styles, its strictness and formality is declared as the major source of stress.
EFFECTS OF FOREIGN LANGUAGE ANXIETY

As indicated by MacIntyre (1999), FLA may have numerous academic, cognitive, social and personal effects.

High levels of FLA are associated with low levels of academic achievement in language courses (e. g. Horwitz, 1986; Young, 1986; Aida, 1994). According to the model developed by Tobias (1979, 1980, 1986 cited in MacIntyre, 1999), anxiety functions as a filter, it prevents the information from getting into the cognitive system. If it does get in the cognitive system, anxiety influences both the speed and accuracy of learning. During the output stage, anxiety can influence the quality of speaking or writing in the second language.

The results of studying the social effect of anxiety (MacIntyre and Charos, 1995 cited in MacIntyre, 1999) show that anxious learners are less willing to communicate and they speak less frequently. Spitali (2000) found a significant negative relationship between FLA level and attitudes toward people from different cultures.

As suggested by MacIntyre, the personal effect of anxiety is that for some students language learning may be a “traumatic experience” (1999, p. 39).

In their study Tancer and Doğan (2015) revealed that the students’ ever-increasing anxiety during their English prep-education strongly predicted their academic performance. Whatever its source may be, anxiety in learning environments is mostly an unwanted situation.

A QUESTIONNAIRE-BASED RESEARCH

The primary purpose of the present questionnaire-based research is to explore the trait and state anxiety levels of a class of university students studying at the University of Dunaújváros and to investigate their attitude towards acquiring a second/foreign language. On the basis of the information gained on the anxiety levels of the participants and on their level of academic achievement the study is aiming at revealing some degree of correlation between these two variables, in other words, the study intends to shed light on whether the academic achievement of the students’ taking part in the research is in any way influenced by their anxiety levels.

The participants completing the questionnaires were seventeen Economics and Management major students in their first year of higher-level vocational training from the University of Dunaújváros, The participants were both males and females, between the ages of 18 and 26. They have studied English for an average of 9.7 years, with a minimum of four and a maximum of sixteen years before entering university. None of the participants have ever visited an English speaking country for a longer period of time. In this respect, they can be regarded as typical EFL learners, learning the target language almost exclusively in a monolingual classroom, typically from non-native teachers of English, with limited opportunities to use the language for communication outside the classroom.

The course during which the participants were being measured is Basics of Business English, which is a 5-lesson-per week course lasting for one semester. “Nowadays the requirements of the labour market are not just general English but specific English: vocabulary of the particular job or discipline” (Szabó, 2015, p. 84). This is why the University of Dunaújváros places a great emphasis on providing various courses in specific English.
INSTRUMENTS

The State-Trait Anxiety Inventory (STAI) (Spielberger, 1983) was used to map the participants’ state and trait anxiety levels. This self-report scale indicates the intensity of anxiety; it distinguishes between state anxiety (a temporary condition experienced in specific situations) and trait anxiety (a general tendency to perceive situations as threatening). It was originally developed as a research instrument to study anxiety in normal adult population samples, but it can be used to measure anxiety disorders as well (Spielberger, 1970). The two subscales consist of 20 statements each with which the participants expressed their level of agreement or disagreement by choosing from four options in a Likert-type format. The four State Anxiety Scale options are Not at all (1), Somewhat (2), Moderately so (3), Very much so (4). The four Trait Anxiety Scale options are Almost never (1), Sometimes (2), Often (3), Almost always (4).

At the beginning of the course the English language competence of the participants was measured by a Placement Test designed by the instructor of the course in the application called Socrative (a cloud-based student response system). The test was a 60-item multiple choice test to be completed online, including both General and Business English vocabulary and grammatical structures.

The participants’ foreign language anxiety was measured by the Hungarian language validated version of Horwitz et al.’s (1986) Foreign Language Classroom Anxiety Scale (α = 0.93) (Tóth, 2008). The Foreign Language Anxiety Scale (FLAS) was hypothesized to include three domains: communication apprehension, test anxiety and fear of negative evaluation and has been used in a large number of studies (Horwitz, 2017). This scale is a 33-item Likert-type scale with five possible responses ranging from Strongly disagree to Strongly agree. It is meant to assess the degree of foreign language anxiety in the EFL classroom and in conversation with native speakers of English. The scale was administered to the students close to the end of the semester.

The academic achievement of the participants during the course was measured by the end-term marks the calculation of which was based on the results of two midterm papers, a presentation delivered by the participants, a home assignment and an end-term paper.

PROCEDURES

First, I examined the participants’ levels of anxiety, and how highly anxious they feel and behave in their English classes at university. Second, I explored the perceived sources of these learners’ Foreign Language Anxiety. Finally, I examined the relationship between the participants’ anxiety levels and their academic achievement by using the Pearson Moment Correlations. The P-value set for the test of hypothesis using Pearson correlation coefficient was at 99% level of significance.

RESULTS AND DISCUSSION

To shed light on whether the participants felt anxious in general and in specific situations, first their scores on the trait and state anxiety measure were consulted.
Based on individual anxiety scores, participants were classified as (1) non-anxious (if they had a total score between 20 and 37, revealing virtually no anxiety), (2) moderately anxious (with scores between 38 and 44), (3) considerably anxious (with scores 45–80, suggesting high levels of anxiety).

In the respect of the scores of state anxiety more than half of the students (58.8%) fell into the non-anxious category, less than one-fifth of them (17.6%) formed the moderately anxious group, and about one-fourth of them (23.5%) could be described as considerably anxious (See Fig. 1).

On the other hand, the scores of trait anxiety indicate a quite different result: only about one-fourth of the participants (23.5%) fell into the non-anxious category, less than one-third (29.4%) fell into the moderately anxious group and about half of them (47%) formed the considerably anxious group (See Fig. 2).

Based on the anxiety results obtained participants as a group could be described as slightly anxious, carrying a moderately low level of anxiety in the state anxiety scale, and showed somewhat higher anxiety levels in the trait anxiety scale. However, the relatively wide range of ratings indicated that this group is not homogeneous in terms of how anxious its members are (Std. Deviation = 5.28597 for the state anxiety, Std. Deviation = 5.85247 for the trait anxiety).

The following chart (See Fig. 3) indicates the items showing the highest frequencies of responses in the Foreign Language Anxiety Scale.
The questions shown in Fig. 3 are the following:

- Q1: I worry about the consequences of failing my foreign language class.
- Q2: I keep thinking that the other students are better at languages than I am.
- Q3: Even if I am prepared for language class, I feel anxious about it.
- Q4: I would probably feel comfortable around native speakers of the foreign language.
- Q5: I feel overwhelmed by the number of rules you have to learn to speak a foreign language.
- Q6: It frightens me when I don’t understand what the teacher is saying in the foreign language.
- Q7: I tremble when I know that I’m going to be called on in language class.

Responses to the Foreign Language Anxiety Scale show that the relatively high levels of anxiety among these participants were related to

- the worry about the consequences of failing their foreign language class,
- thinking that the others are better at languages,
- communication with native speakers of the foreign language.

On the other hand, results indicate that these learners are not anxious in their English lessons about not understanding what the teacher is saying in the foreign language, and they are not so anxious that they tremble when they know that they are going to be called on in the language course.

The Pearson Product Moment Correlation analysis used to compute the correlation between students’ academic achievement and their trait anxiety levels is presented in Table 1 and the correlation between students’ academic achievement and their state anxiety levels is shown in Table 2.

**Table 1. Correlations between academic achievement and trait anxiety levels**

|           | Academics | Trait |
|-----------|-----------|-------|
| Academics | Pearson Correlation | 1 | 0.163 |
|           | Sig. (2-tailed) |   | 0.505 |
|           | N          | 19 | 19   |
| Trait     | Pearson Correlation | 0.163 | 1 |
|           | Sig. (2-tailed) | 0.505 |   |
|           | N          | 19 | 19   |
Based on the computed results we can see that the Pearson correlation coefficient is 0.163 for the relationship between the students’ academic achievement and their trait anxiety levels, whereas it is 0.192 for the relationship between the students’ academic achievement and their state anxiety levels. These results show that there is no significant relationship between these two sets of variables, therefore for this set of data we can state that the students’ academic achievements were surprisingly not influenced by their anxiety levels.

CONCLUSION

Previous studies show that students with higher level of anxiety tend to obtain lower marks in their end-of-semester examination. Anxiety while studying is a major predictor of academic performance (McCraty, 2007; McCraty, Dana, Mike, Pam, & Stephen, 2000) and various studies have demonstrated that it has a negative effect. It has always been underlined in the literature that in order to facilitate learners’ language learning process, the effect of anxiety should be minimized (Huang, 2012).

As opposed to these previous findings, present study found no significant correlation between participants’ anxiety levels and academic performance. Students who had high level anxiety did not necessarily achieve low academic performance. Therefore, these findings do not support previous research that high level of anxiety brings about lower academic performance (Sena, Lowe, & Lee, 2007; Luigi et al., 2007). A possible reason for these reverse results might be connected to the small sample size and to the fact that the participants’ higher anxiety levels were connected primarily to passing the subject (learned from the Foreign Language Anxiety Scale results) and not to the value of marks to be obtained during the course, therefore their anxiety levels did not exceed the level which would have a negative impact on their academic results. In other word, students’ anxiety levels did not reach the debilitating anxiety levels, which motivates the learner to “flee” the new learning task, and stimulates the individual to take on avoidance behavior which may lead to avoidance of work and inefficient work performance (Scovel, 1978, cited in Zheng, 2008; Scovel, 1991; cited in Tanveer, 2008). It would also be thought-provoking to examine factors like gender and culture with respect to foreign language anxiety in a larger sample size.

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**Ethics:** The Director of The Teachers’ Training Centre of the University of Dunaújváros approved the study procedures. All subjects were informed about the study and all provided informed consent.

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**ABOUT THE AUTHOR**

Tóth Andrea PhD is an English language teacher and college associate professor. She received her PhD at Eötvös Loránd University, Hungary in Psycholinguistics. Her primary research fields are the Psycholinguistic Aspects of Interpreting and Foreign Language Pedagogy. She is a college associate professor in the Teachers’ Training Department at the University of Dunaújváros. She has gained experience in business interpreting and translation, English language teaching and examination as well as teaching pedagogical, linguistic and communication subjects both to Hungarian and international students. She has also acquired expertise in operating a language school and a language examination unit.

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