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## The relationship between foreign language anxiety and self-directed learning readiness

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### Abstract

Foreign Language Anxiety (FLA) and Self-Directed Learning (SDL) are two areas in applied linguistics which are researched extensively. However, the literature seems to be lacking studies which intends to find a correlation between two phenomena. For that reason, the aim of this study is to find out if there is a significant relationship between FLA and SDL. The participants are 104 students of English Language Teaching in Edirne, Turkey and the data collection instruments are Foreign Language Classroom Anxiety Scale (Horwitz et al, 1986) and Self-Directed Learning Readiness Scale (Guglielmino, 1978). Correlational analysis reveals that there is no significant relationship between foreign language anxiety and self-directed learning, however, there is a positive correlation between test anxiety and self control.

**Keywords:** Foreign language anxiety, self-directed learning readiness, learner differences

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## **Introduction**

Individual learner differences have undeniable effects on foreign language learning and learning outcomes together. According to Larsen-Freeman and Long (1991), age, socio-psychological factors, personality, cognitive style, hemisphere specialization, learning strategies and other factors like memory or gender influence one's learning experience, thus producing different outcomes even in the same environment.

Among the aforementioned socio-psychological phenomena, foreign language anxiety (FLA) is a widely studied area in terms of its relationship with motivation, self-confidence, self-efficacy and performance like Self-Directed Learning Readiness (SDLR), which is related to the autonomy of the learners. However, there seems to be a gap in the current literature as to whether FLA and SDLR are related to each other or not in a foreign language setting. In that respect, the aim of the present study is to reveal if there is a statistically significant relationship between FLA and SLDR among Turkish students of English Language Teaching.

## **Anxiety and foreign language learning**

In Larsen-Freeman and Long's (1991) taxonomy of individual learning differences, anxiety is among the personality factors along with self-esteem, extroversion, risk-taking, sensitivity to rejection, empathy, inhibition and tolerance of ambiguity. According to Barlow (2002), anxiety is a frame of mind that is related to one's preparation for imminent negative events. However, anxiety is not a uniform psychological construct as it is divided into three major types, state anxiety, trait anxiety and situation-specific anxiety (MacIntyre & Gardner, 1989). State anxiety is the feeling of "an apprehension expected at a particular moment in time as a response to a definite situation" (Spielberger, 1983). Trait anxiety, on the other hand, is more of a characteristic trait as its name suggests, which is defined by Levitt (1980:11) as "a constant condition without a time limitation". The last type of anxiety, also encompassing foreign language anxiety (MacIntyre & Gardner, 1989; Horwitz et al., 1986), is situation-specific anxiety, which can be defined as a type of anxiety that is limited to the existence of a particular situation (MacIntyre & Gardner, 1991).

Although the state of being anxious is gruesome in most cases, a certain level of anxiety actually may actually learning and anxiety does not necessarily have to be a negative state which hinders the cognitive performance of an individual (Jones et al., 1993). In that respect, this particular psychological phenomenon is classified into 'facilitative anxiety' and 'debilitative anxiety' by Horwitz and Young (1991), who claim that facilitative anxiety is a factor which operates as a driving force to take the challenge of learning, preparing the learner to get involved in the learning task. On the contrary, the effect of debilitative anxiety is usually to move away from the learning task mostly through avoidance.

A crucial phenomenon that affects the learning process, FLA is defined by Horwitz et al. (1986:128) as a "distinct complex of self-perceptions, beliefs, feelings, and behaviours related to classroom language learning arising from the uniqueness of the language learning process".

As for the causes of FLA, numerous studies have suggested that it may stem from a wide range of factors such as low proficiency, feelings of unease related to one's ethnicity and culture, learner motivation, learner attitudes towards language learning or acquisition, personality factors, interaction with the teacher, prior language learning experience and collaboration in the learning process (Slavin, 1991; Gardner as cited in Horwitz & Young, 1991; Ryan & Deci, 2002; Sparks & Ganschow as cited in Horwitz, 2001; Gregersen, 2003; Ehrman & Oxford, 1990; Vygotsky, 1986).

Several studies have shown that FLA has a significant negative effect on foreign language achievement (Coulombe, 2000; Kim, 2009; Abu-Rabia, 2004; MacIntyre & Doucette, 2010; Woodrow, 2006; Yan & Horwitz, 2008). Moreover, control over the anxiety level is a necessity for the conversion of input into intake (Krashen, 1985). Therefore, it could be stated that FLA is a barrier to the learning of a foreign language and thus it needs to be eliminated to reduced for a higher level of language achievement (Horwitz, 2008; Richards & Rodgers, 2001).

### **Self-directed learning in language learning**

Self-directed learning can be defined as a process where the learner takes initiative to discover his needs in terms of learning, draw up learning objectives, spot resources, adopt suitable learning strategies and evaluate the outcomes. In other words, it is a process in which the learner takes the responsibility of learning and make decisions accordingly (Knowles, 1975). Similarly, Mercer (2011:435) states that self-directed language learning has a relationship with "a learner's sense of agency involving their belief systems, and the control parameters of motivation, affect, metacognitive/self-regulatory skills, as well as actual abilities and the affordances, actual and perceived in specific settings". For this reason, it would not be inaccurate to state that self-directed learning is pertinent to the personality of the learner as well as the external factors which are a part of the learning environment (Brockett & Hiemstra, 1991).

Holec (as cited in Dickinson, 1995) defines autonomy as the ability to reflect on and control one's own learning. In terms of language learning, learner autonomy, which can be summarized as a learner's taking his own responsibility of regulating the process of learning is a necessity for language achievement (Wenden, 1991; Willing, 1989, Holec, 1996).

According to Little (1989) learner training is an important step to have the learner understand the process of learning, thus self-direct his own learning. The primary aim of learner training is to improve the process of learning and this improvement is an integral part of learner autonomy (McCarthy, 1998). Dickinson (1993) supports this remark stating that learning training should aid learners in developing the capability of taking responsibility in terms of learning. In a similar fashion, Chan (2001) defends that guidance should be provided to learners in order to work out their own learning strategies, as a part of autonomous learning. Self-directed learning and learner autonomy are interrelated in that in order to achieve self-directed learning, learners naturally need to have control over their learning (Bouchard, 2011).

In order for self-directed learning to be utilized sufficiently, learners should boost their skills of self-management, self-monitoring and self-assessment (Benson, 2001). However, this does not mean that formal ways of learning should be totally abandoned. On this matter, Hiemstra (1994) suggests that the concept of self-directed learning is a process that should make use of formal learning environments although it takes place outside such environments most frequently because he states that initiative taking in the process of learning is prompted through instruction.

The effect of self-directed learning readiness and learner performance has also been extensively investigated. Regarding their interaction, Long (1991) states that self-directed learning readiness and achievement have a positive correlation. According to Reio and Leitsch (2003), risk tolerance and tolerance of ambiguity are higher among the learners with a higher level of self-directed learning readiness, resulting in better performance. Reio (2004) also states that the most powerful predictor of learner performance is self-directed learning readiness.

Recent studies also support the usefulness of self-directed learning models to increase performance. For instance, Wichadee (2011), in a quasi-experimental study with 120 participants, concludes that a self-directed learning instructional model might have the potential to improve reading skills in English in terms of fluency and comprehension. In addition, Wichadee (2011) finds out that the same model also improves the self-directed learning ability of the participants. In a similar vein, Kim and Cha (2015) compare the effects of teacher-directed learning against self-directed learning with 79 students during a 16-week long General English course and reveal that the latter group outperforms the former one in the final exam of the course. Investigating the effects of a self-access portfolio based on self-directed learning on 17 adult learners of English in New Zealand, King (2011) discovers that the implementation has positive effects on the attitudes and behaviours of the participants in that the participants report to study outside the classroom in an increased duration after the completion of the portfolio and that it helps them improve their English. In an English for Specific Purposes setting, Yang (2015) utilizes a series of self-directed learning based online workshops and concludes that the procedure has a positive effect on promoting learner autonomy. In short, recent literature is also supportive of the benefits of self-directed learning for language learners.

### **Self-directed learning and anxiety**

Although the literature searching for a relationship between self-directed learning and foreign language anxiety appears to be somewhat limited, it is possible to infer from several studies that the two concepts might actually be linked to one another. For instance, in a qualitative study with 7 ESL/EFL teachers, Ohata (2005) finds out that the participants in the study believe that the techniques used to reduce classroom anxiety may have a positive effect on helping learners learn in a self-directed way. Moreover, Victori and Lockhart (1995) reveal that learners who choose self-directed learning increase their level of tolerance of ambiguity, motivation and self-esteem in a language learning setting. According to the Dewaele and Ip (2013), tolerance of ambiguity has a relationship with foreign language anxiety and Khodadady and Fadafen (2013) state that language learning motivation is related to this

particular type of anxiety. Furthermore, Liu (2012) argues that learners with a higher positive self-esteem are less inclined to experience anxiety on statistical findings.

Neuroimaging studies also indicate that the hippocampus, which is a part of the limbic system and has a role in the transfer of information from short to long term memory, is responsible for both evaluative emotional behaviour including anxiety and the coordination of self-directed learning through the regulation of Type I Theta oscillations, which are signals also observed during voluntary behaviour (Kramis et al., 1975; Grey, 1982; Kaplan et al., 2012).

Both FLA and SDLR have significant effects on one's learning of a second or foreign language, since both phenomena have the power to slow down or foster learning. Since the literature suggests that self-directed learning has an effect on tolerance of ambiguity, motivation and self-esteem and these three constructs are correlated with foreign language anxiety and evidence from neuroimaging studies points that self-directed learning and anxiety might have common neurobiological grounds, it may be possible that a relationship exists between self-directed learning readiness and foreign language anxiety, too. Taking the relevant literature into account, the aim of the present study is to search for a relationship between the two constructs.

## **Methodology**

A quantitative study design has been preferred in the study since the primary aim of the study is to look for a quantifiable relationship between self-directed learning readiness and foreign language anxiety and this sort of a research design is standardized, fixated and rigid, which makes it possible to measure psychological constructs in a reliable, generalizable and replicable way (Dörnyei, 2007).

To meet the aims of the study, the following research questions have been formulated:

- a. What are the FLA levels of the participants?
- b. What are the SDLR levels of the participants?
- c. Is there a statistically significant correlation between the FLA and SDLR levels of the participants?
- d. Are there statistically significant correlations among the constructs within FLA and SDLR?

## ***Setting and Participants***

The participants of the study are 104 first year students out of 135, who volunteered to participate. The sample of the study constitutes 77% of the population. All the participants are students of English Language Teaching, studying in Edirne, Turkey. The focus of the study is first year students since these students are treated as language learners, predominantly taking skill-based courses such as reading and writing, listening and phonology, contextual grammar and speaking skills unlike the students of other years, the majority of whose curriculum consist of courses on applied linguistics and foreign language teaching methodology. The ages of the participants range from 17 to 31. 68 (65%) of the participants are female and 36 (35%) are male. The perceived English proficiency levels of the participants range from A1 to C2, according to the Common European Framework.

***Data collections instruments***

There are two data collection instruments in the study since it aims to measure two different psychological constructs. The first one is the Foreign Language Classroom Anxiety Scale (FLCAS) developed by Horwitz et al. (1986). FLCAS is a 33-item, 5-point Likert scale which measures FLA levels along with the levels of Communication Apprehension, Test Anxiety and Fear of Negative Evaluation. In the analysis of the data stemming from FLCAS, items 2, 5, 8, 11, 14, 18, 22, 28 and 32 are reverse coded since they are negatively worded items. The instrument has been found out to be valid and reliable by Horwitz (1986, 1991), who claims that FLCAS has a Cronbach's Alpha Coefficient of .98 and test-retest reliability results indicate that the initial and follow-up test results are highly correlated,  $r = .83$ ,  $p < .01$ . The data collected for this study also support the reliability of FLCAS in that the Cronbach's Alpha values for the whole scale and communication apprehension, test anxiety and fear of negative evaluation subscales are .93, .77, .83 and .86 respectively.

The second data collection instrument of the present study is the Self-Directed Learning Readiness Scale (SDLRS), developed by Guglielmino (1978). SDLRS is a 40-item 5-point Likert type scale which measures the self-directed learning readiness levels as well as the perceived levels of self-management, desire for learning and self-control. According to its developer, the scale is valid and reliable with reliability coefficients ranging from .72 to .96 and test-retest reliability coefficients of .79 and .82 (Guglielmino, 1997). In the present study, SDLRS also have reliable results with Cronbach's Alpha values of .85 for the whole scale, .76, .62 and .80 for subscales respectively.

***Data collection procedures***

The data was collected in classroom environment by the researcher himself where most students were present. Firstly, the content, the aim and the voluntary basis of the study was explained to the students along with guidelines to fill out the Likert-scales provided by the researcher. No time limit was set in order to make sure each participant could fill out the instruments in line with his/her own speed and the participants were encouraged to ask for clarification should they needed any. The students who did not volunteer to participate for any reason were not given the data collection instruments.

***Data analysis***

For the analysis of the data, frequency distributions, percentages, means and standard deviation values have been calculated in order to acquire findings related to the first and second research questions. To provide answers for the third and fourth research questions, however, Q-Q plots and Box Plots related to each one of the scales and subscales have been inspected and it has been found out that the entire data related to the present study are normally distributed. For that reason, Pearson's  $r$ , or Pearson's product-moment correlation coefficient has been calculated in order to see if there is a statistically significant correlation between FLA and SDLR including their subscales.

## Findings

Table 1

*Results of the FLA Levels and the Related Constructs (N = 104)*

	Min.	Max.	<i>M</i>	<i>SD</i>
FLA	1.36	4.09	2.87	.63
Communication Apprehension	1.27	4.18	2.95	.65
Fear of Negative Evaluation	1.14	4.86	2.85	.86
Test Anxiety	1.33	4.13	2.82	.62

Table 1 illustrates that the mean value of the responses given by the participants to FLCAS is 2.87 ( $SD = .63$ ). The minimum mean score in FLCAS is 1.36 and the maximum mean score is 4.09. When the results are broken down according to the subscales within FLCAS, it is seen that the mean response values for Communication Apprehension, Test Anxiety and Fear of Negative Evaluation are 2.95 ( $SD = .65$ ), 2.82 ( $SD = .62$ ) and 2.85 ( $SD = .86$ ) respectively.

Table 2

*Item with the Highest Mean Value in Each Subscale of FLCAS (N = 104)*

	Statement	<i>M</i>	<i>SD</i>
Test Anxiety	10. I worry about the consequences of failing my foreign language class	3.36	1.19
Communication Apprehension	9. I start to panic when I have to speak without preparation in language class.	3.35	1.33
Fear of Negative Evaluation	33. I get nervous when the language teacher asks questions which I haven't prepared in advance	3.12	1.17

The items that have the highest mean value in each subscale is presented in Table 2. According to the findings, Item 9 has the highest mean in Communication Apprehension ( $M = 3.35$ ,  $SD = 1.33$ ) and Item 10 has the highest mean in Test Anxiety subscales ( $M = 3.36$ ,  $SD = 1.19$ ). In the subscale of Fear of Negative Evaluation, the item with the highest mean value is Item 33 ( $M = 3.12$ ,  $SD = 1.17$ ).

Table 3

*Item with the Lowest Mean Value in Each Subscale of FLCAS (N = 104)*

	Statement	<i>M</i>	<i>SD</i>
Test Anxiety	17. I often feel like not going to my language class	2.27	.93
Communication Apprehension	14. I would not be nervous speaking the foreign language with native speakers.*	2.53	1.23
Fear of Negative Evaluation	31. I am afraid that the other students will laugh at me when I speak the foreign language.	2.50	1.23

\*: Reverse Coded Item

According to the findings portrayed in Table 3, the reversely coded Item 14 is the one with the lowest mean value in Communication Apprehension subscale ( $M = 2.53$ ,  $SD = 1.23$ ) while the item with the lowest mean in the subscale of Test Anxiety is Item 17 ( $M = 2.27$ ,  $SD = .93$ ). In the subscale of Fear of Negative Evaluation, the item with the lowest mean value is Item 31 ( $M = 2.5$ ,  $SD = 1.23$ ).

Table 4

*Results of the SDLR Levels and the Related Constructs (N = 104)*

	Min.	Max.	<i>M</i>	<i>SD</i>
SDLR	2.90	4.58	3.80	.34
Desire for Learning	3.00	4.83	4.03	.36
Self Control	2.67	4.80	3.94	.44
Self-Management	1.85	4.46	3.44	.48

The mean, standard deviation, minimum and maximum values related to SDLRS are displayed in Table 4. According to the findings, the mean of the responses given by the participants to SDLRS is 3.80 ( $SD = .34$ ). The minimum mean score in scale total is 2.90 and the maximum mean score is 4.58. The mean scores according to the subscales of Self-Management, Desire for Learning and Self Control are 3.44 ( $SD = .48$ ), 4.03 ( $SD = .36$ ) and 3.94 ( $SD = .44$ ) respectively.

Table 5

*Item with the Highest Mean Value in Each Subscale of SDLRS (N = 104)*

	Statement	M	SD
Desire for Learning	14. I want to learn new information.	4.54	.61
Self Control	28. I am responsible for my own decisions/actions.	4.48	.67
Self Management	13. I am confident in my ability to search out information.	3.95	.89

According to the findings tabulated in Table 5, the item with the highest mean in the subscale of Self-Management is Item 13 ( $M = 3.95, SD = .89$ ). In Desire for Learning subscale, the highest mean value is observed in Item 14 ( $M = 4.54, SD = .61$ ) and Item 28 has the highest mean in the subscale of Self Control ( $M = 4.48, SD = .67$ ).

Table 6

*Item with the Lowest Mean Value in Each Subscale of SDLRS (N = 104)*

	Statement	M	SD
Self Control	30. I have high personal standards.	3.36	1.02
Desire for Learning	18. I enjoy studying.	3.01	1.14
Self Management	4. I set strict time frames.	2.56	.94

The lowest mean for each subscale in SDLRS is presented in Table 6. The findings show that the item with the lowest mean value in the subscale of Self-Management is Item 4 ( $M = 2.56, SD = .94$ ) and the one with the lowest mean in Desire for Learning is Item 18 ( $M = 3.01, SD = 1.14$ ). The subscale of Self Control, on the other hand, has Item 30 as the item with the lowest mean ( $M = 3.36, SD = 1.02$ ).

Table 7

*Correlations between FLCAS and SDLRS and among the Subscales (N = 104)*

		SDLRS	Self Management	Desire for Learning	Self Control
FLCAS	Pearson Correlation	-.091	.026	-.071	-.166
	Sig. (2-tailed)	.359	.796	.471	.093
Communication	Pearson Correlation	-.042	.049	-.007	-.131

Apprehension	Sig. (2-tailed)	.672	.621	.943	.186
Test Anxiety	Pearson Correlation	-.149	-.018	-.134	-.202*
	Sig. (2-tailed)	.132	.852	.174	.040
Fear of Negative Evaluation	Pearson Correlation	-.028	.059	-.027	-.097
	Sig. (2-tailed)	.775	.550	.782	.327

\*. Correlation is significant at the 0.05 level (2-tailed).

The correlations between FLCAS and SDLRS, including all the subscales can be seen in Table 7. According to the results of Pearson's Product-Moment Correlation Analyses, the responses given to FLCAS and SDLRS have no statistically significant correlation,  $p > .05$ . Moreover, Communication Apprehension and Fear of Negative Evaluation subscales of FLCAS are not correlated with SDLRS or its constructs.

According to the findings, Text Anxiety is not correlated with the Self-Management and Desire for Learning subscales of SDLRS, however, a statistically significant correlation has been discovered between Text Anxiety and Self Control. The correlation is negative and weak, but statistically significant,  $r = -.20$ ,  $p < .05$ .  $r^2$  value indicates that the  $r$  value is able to explain 4% of the variance.

## Discussion and conclusion

The present study aims to discover the FLA and SDLR levels of Turkish ELT students. According to the findings, Communication Apprehension is the domain in FLA that is experienced in the highest level. Test Anxiety, on the other hand, is the domain in FLA that is experienced in the lowest level. The higher level of communication apprehension on behalf of the participants may be stemming from low levels of perceived L2 competence (Yashima, 2002), communication skills or education achievement (Witherspoon et al., 1991). In addition, communication apprehension is negatively correlated with willingness to communicate (Mansson & Myers, 2009) and perceived communication competence (Teven et al., 2010), which might be among the factors that account for the high level of communication apprehension among the participants. Regarding the text anxiety mean being the lowest among the subscales of FLCAS, the timing of the research might serve as the reason since, as Joy (2013) states, text anxiety is experienced the most before and during a test and the least after a test. Since the present study has been carried out in a period which participants did not have any exams or other types of tests to take, the participants may have not felt this particular sort of anxiety at a high level, thus affecting the results of the analyses.

The items with the highest means in FLCAS indicate that the participants feel the most anxious when they have to speak in the class without prior preparation, think about the consequences of failing and receive questions that they are not prepared to answer. These results suggest that the participants may not be willing to take risks, which is in line with Zuckerman and Kuhlman (2000) who state that extrovert students are better risk takers. In that respect, the results may pose a sign for a high level introversion among the sample of this study. Another explanation to the reason why the participants reported high levels of anxiety

in those items could be the ‘Capacity to Speak’, which could be defined as the perceptions of the students related to speaking in varying classroom situations. According to Humphries et al. (2015), one’s capacity to speak in a foreign language is either positively or negatively affected by teacher and peer support in terms of using English as a medium of communication, standards and structure of speaking English in a given context, the cognitive load and level of spontaneity of a particular activity and affective status, including the effects of preparation. Since two of the three items with the highest mean values in FLCAS indicate the unprepared nature of the given situation, it could be stated that the source of anxiety in those items may be perceived as the capacity to speak limited by the lack of preparation opportunities. On the other hand, the findings reveal that the participants do not experience a problematic level of anxiety when they are required to talk to native speakers. Moreover, the participants claim that they do not hesitate to speak English in the class or have a desire to skip classes. A cross-comparison of the items with the highest and the lowest means show that the participants do not lack the confidence to communicate but the confidence to communicate without preparation, which can be regarded as supportive of the personality factors and ‘capacity to speak’ arguments presented above.

As for SDLR, desire for learning is the domain with the highest mean while self-management is the one with the lowest. The relatively higher desire for learning may be due to the motivation levels of the participants, or their L2 Motivational Self-System, a term coined by Dörnyei (2005, 2009) to explain the motivational aspect of language learning. According to the L2 Motivational Self-System Theory, a learner’s motivational system consists of three components, the ideal self, which refers to the attributes the learner wants to retain, the ought-to self, which pertains to the facets the learner feels he or she ‘should’ have, and the learning experience, which can be summarized as the effects caused by the language teacher, curriculum learning group and other external sources (Dörnyei, 2005, 2009). Taking into account the facts that the participants made a conscious choice to study English Language Teaching and there are also external factors such as passing courses or graduating from the department, their ideal L2 self and ought-to L2 self may be overlapping at a point to increase their knowledge, resulting in a higher desire for learning. The low level of self-management skills, on the other hand, may be due to the fact that the participants are all first year students and in comparison with their more experienced senior counterparts, first year students may be having difficulties in managing their time and self in terms of their studies, as they are considered to be still coping with psychological difficulties such as stress and anxiety, resulting in last-minute submissions of assignments and revising the content of their courses at the end of the semester before their final exams (Alexander, 2010).

The findings related to the items in SDLRS reveal that the means are the highest for the items which indicate confidence in ability to search out information, desire to learn new information and taking responsibility for own decisions/actions. The findings related to these items can be interpreted as the strengths of the participants in terms of learner autonomy and they may also be signifying a relatively high level of self-efficacy, defined as one’s beliefs about handling a given task or challenge by Bandura (1997). However, the means appear to be the lowest in the items indicating setting strict time frames, enjoying studying and having high personal standards. Low personal standards may be a sign of low self-esteem as suggested by

Accordino et al. (2000) and the lesser enjoyment while studying may be signifying low motivation. Yet still, there is a disagreement between the higher desire to learn new information and lower enjoyment in studying, whose reasons may lie beneath the anxiety arising from the pressure to pass a given course since the participants may be relating studying to their exams instead of learning something new.

The correlational part of the study yields no significant difference among FLCAS, SDLRS and their subscales except for Text Anxiety (FLCAS) and Self Control (SDLRS). These results indicate there is no statistically significant relationship between foreign language anxiety and self-directed learning readiness. However, it can be observed in the results that the level of Test Anxiety increases as Self Control decreases in a small portion of participants. For this group of the variance whose test-anxiety levels correlate with self control levels, the results are in parallel with the findings of Bertrams et al. (2013), Englert and Bertrams (2013) and Bertrams and Englert (2014) who state that the strength of self-control and test anxiety are correlated and a lower level of anxiety helps one perform better in a given test, which requires self-control, or one's ability to refrain from action which is irrelevant to the achievement of a personal goal (Tangney et al., 2004), a psychological construct which is also related to academic performance (Duckworth et al., 2012).

It should also be noted that the present study is limited to its sample size and data collection instruments. Different findings can be achieved especially in larger samples and different instruments. Moreover, the literature suggests multiple reasons to the findings acquired in this study. For that reason, a more thorough model should be developed using Structural Equation Modeling in order to find out which variables are able to explain the findings of the present study.

The results also reveal the potentially problematic areas within the sample, which are Communication Apprehension and Self-Management. In order to decrease the former and increase the latter, language teachers may find it useful to utilize communicative activities that promote learner autonomy, which could also improve self-confidence and may ease self-control through the students' own managing of the activities autonomously. Pair or group activities within the class which actively involve students may also have positive effects on the anxiety levels of the students, increasing their motivation, performance and paving the way to self-directing their own learning.

## References

- Abu-Rabia, S. (2004). Teacher's role, learner's gender differences, and FL anxiety among seven-grade students studying English as a FL. *Educational Psychology*, 24(5), 711–721.
- Alexander, S. (2010). Flexible learning in higher education. In P. Peterson, E. Baker, B. McGraw (Eds.). *International Encyclopaedia of Education*, 4 (pp. 441-447). Oxford, UK: Elsevier.
- Bandura, A. (1997). *Self-efficacy: the exercise of control*. New York: Freeman.

- Barlow, D., H. (2002). *Anxiety and its Disorders: The Nature and Treatment of Anxiety and Panic* (2nd ed.). New York: Guilford Press.
- Benson, P. (2001). *Teaching and Researching Autonomy in Language Learning*. Essex: Pearson Education Ltd.
- Bertrams, A., & Englert, C. (2014) Test anxiety, self-control, and knowledge retrieval in secondary school students. *Zeitschrift für Entwicklungspsychologie und Pädagogische Psychologie*, 46(4), 165-170.
- Bertrams, A., Englert, C., Dickhäuser, O., & Baumeister, R. F. (2013). Role of self-control strength in the relation between anxiety and cognitive performance. *Emotion*, 13(4), 668-680.
- Bouchard, P. (2011). Self-directed learning and learner autonomy. In S. Norbert (Ed.), *The Encyclopaedia of the sciences of learning*. New York: Springer Science and Business Media, LLC.
- Brockett, R., G., & Hiemstra, R. (1991). A conceptual framework for understanding self-direction in adult learning. In *Self-Direction in Adult Learning: Perspectives on Theory, Research, and Practice*, London and New York: Routledge.
- Chan, V. (2001). Readiness for Learner Autonomy: what do our learners tell us? *Teaching in Higher Education*, 6 (4), 505-518.
- Coulombe, D. (2000). *Anxiety and beliefs of French-as-a-second-language learners at the university level* [Doctoral Dissertation]. University of Laval.
- Dewaele, J., & Ip, T. S. (2013). The link between foreign language classroom anxiety, second language tolerance of ambiguity and self-rated English proficiency among Chinese learners. *Studies in Second Language Learning and Teaching*, 3(1), 47-66.
- Dickinson, L. (1993). Talking shop: Aspects of autonomous learning, An interview with Leslie Dickinson. *ELT Journal*, 47 (1), 330-341
- Dickinson, L. (1995). Autonomy and Motivation: A literature review. *System*, 23 (2), 165-174.
- Dörnyei, Z. (2005). *The Psychology of the Language Learner: Individual Differences in Second Language Acquisition*. Lawrence Erlbaum Associates: Mahwah, NJ.
- Dörnyei, Z. (2007). *Research methods in applied linguistics: Quantitative, qualitative and mixed methodologies*. Oxford: Oxford University Press.
- Dörnyei, Z. (2009). The L2 motivational self-system. Dörnyei, Z., Ushioda E. (eds.). In *Motivation, Language Identity and the L2 Self*. Multilingual Matters: Clevedon, 9-42.
- Duckworth, A. L., Quinn, P. D., & Tsukayama, E. (2012). What no child left behind leaves behind: The role of IQ and self-control in predicting standardized achievement test scores and report card grades. *Journal of Educational Psychology*, 104, 439-451.
- Ehrman, M., & Oxford, R. (1990). Adult language learning styles and strategies in an intensive training setting. *Modern Language Journal*, 74, 311-317.

- Englert, C., & Bertrams, A. (2013). The role of self-control strength in the development of state anxiety in test situations. *Psychol Rep*, 112(3), 976-991.
- Gray, J. A. (1982). *The neuropsychology of anxiety: an enquiry into the functions of the septo-hippocampal system*. Oxford: Oxford University Press.
- Gregersen, T. S. (2003). To err is human: A reminder to teachers of language- anxious students. *Foreign Language Annals*, 36 (1), 25–32.
- Guglielmino, L. M. (1978). Development of the self-directed learning readiness scale. [Doctoral dissertation, University of Georgia, 1977]. *Dissertation Abstracts International*, 38, 6467A.
- Guglielmino, L.M. (1997). Reliability and validity of the Self-Directed Learning Readiness Scale and the Learning Preference Assessment. In H. B. Long & Associates, *Expanding horizons in self-directed learning* (pp. 209-222). Norman, OK: Public Managers Center, College of Education, University of Oklahoma.
- Hiemstra, R. (1994). Self-directed learning. In T. Husen & T. N. Postlethwaite (Eds.), *The international encyclopedia of education (2nd Ed.)*, Oxford: Pergamon Press.
- Holec, H. (1996). Self-directed Learning: An Alternative Form of Training. In Holec, H., Little, D., Richterich, R. *Strategies in Language Learning and Use*. Strasbourg: Council of Europe Press
- Horwitz, E. K., & Young, D. (1991). *Language anxiety: From theory and research to classroom implications*. Englewood Cliffs, NJ: Prentice Hall.
- Horwitz, E. K. (2001) Language Anxiety and Achievement, *Annual Review of Applied Linguistics*, 21, 112-126.
- Horwitz, E. K., Horwitz, M. B., & Cope, J. (1986). Foreign language classroom anxiety. *The Modern Language Journal*, 70(2), 125-13.
- Horwitz, E., (2008). *Becoming a Language Teacher: A Practical Guide to Second Language Learning and Teaching*. Allyn & Bacon: Pearson Education, Inc.
- Humphries, S. C., Burns, A., & Tanaka, T. (2015). “My head became blank and I couldn’t speak”: Classroom factors that influence English speaking. *The Asian Journal of Applied Linguistics*, 2(3), 164-175.
- Jones, G., Swain, A., & Hardy, L. (1993). Intensity and direction dimension of competitive state anxiety and relationships with performance. *Journal of Sport Sciences*, 11, 525-532.
- Joy, J. L. (2013). The altitude of test anxiety among second language learners. *Language Testing in Asia*, 3, 1-10.
- Kaplan, R., Doeller, C. F., Barnes, G. R., Litvak, V., Düzel, E, Bandettini, P.A., & Burgess, N. (2012) Movement-Related Theta Rhythm in Humans: Coordinating Self-Directed Hippocampal Learning. *PLOS Biology*, 10(2), 1-13. DOI:10.1371/journal.pbio.1001267.

- Kim, H., & Cha, Y. (2015). Is self-directed learning effective in an online reading environment?, *Multimedia-Assisted Language Learning (MALL)*, 18(3), 73-96.
- Kim, S., Y. (2009). Questioning the stability of foreign language classroom anxiety and motivation across different classroom contexts. *Foreign Language Annals*, 42(1), 138–157.
- King, C. (2011). Fostering self-directed learning through guided tasks and learner reflection. *Studies in Self-Access Learning Journal*, 2(4), 257-267.
- Knowles, M. S. (1975) *Self-directed learning. A guide for learners and teachers*. Englewood Cliffs: Prentice Hall/Cambridge.
- Kramis, R, Vanderwolf, C. H., & Bland, B. H. (1975). Two types of hippocampal rhythmical slow activity in both the rabbit and the rat: relations to behavior and effects of atropine, diethyl ether, urethane, and pentobarbital. *Exp Neurol*, 49(1), 58–85. DOI:10.1016/0014-4886(75)90195-8.
- Krashen, S., (1985). *The Input Hypothesis*. Longman, London.
- Larsen-Freeman, D., & Long, M. (1991). *An Introduction to Second Language Acquisition Research*. New York: Longman.
- Levitt, E. E. (1980). *The psychology of anxiety*. Hillside: New Jersey. Lawrence Erlbaum Associates.
- Little, D. (ed.). (1989). *Self-Access Systems for Language Learning*. Dublin: Authentik, in association with CILT, London.
- Liu, M. (2012). Predicting effects of personality traits, self-esteem, language class risk-taking and sociability on Chinese university EFL learners' performance in English. *Journal of Second Language Teaching and Research*, 1(1), 30-57.
- Long, H.B. (1991). Self-directed learning: Consensus and conflict. In H.B. Long & Associates (Eds.). *Self-directed learning: Consensus & conflict* (pp. 1-9). Norman, OK: Oklahoma Research Center for Continuing Professional and Higher Education of the University of Oklahoma.
- MacIntyre, P. D., & Doucette, J. (2010). Willingness to communicate and action control. *System*, 38, 161–171. DOI:10.1016/j.system.2009.12.013
- MacIntyre, P.D., & Gardner, R., (1989). Anxiety and second language learning: Toward a theoretical clarification. *Language Learning*, 39(2). 251-275.
- MacIntyre, P.D., & Gardner, R., (1991). Methods and results in the study of anxiety and language learning: a review of literature. *Language Learning*, 41, 85–117.
- Mansson, D. H., & Myers, S. A. (2009). A reexamination of Swedish and American college students' communicative attributes. *Journal of Intercultural Communication Research*, 38, 9-22.
- McCarthy, C. P.(1998). *Learner Training for Learner Autonomy on Summer Language Courses*. Celbridge: The Salesian English Language Center.

- Mercer, S. (2011). Understanding learner agency as a complex dynamic system. *System*, 39(4), 427–436.
- Ohata, K. (2005). Language anxiety from teachers' perspective: Interviews with seven experienced ESL/EFL Teachers. *Journal of Language and Learning*, 3(1), 133-155.
- Reio, T. G. (2004). Prior knowledge, self-directed learning readiness, and curiosity: Antecedents to classroom learning performance. *International Journal of Self-Directed Learning*, 1(1), 18-25.
- Reio, T. G., Jr., & Leitsch, P. K. (2003). A preliminary exploration of the relationship between self-directed learning and critical thinking. In H. B. Long & Associates, *Current Developments in E-Learning & Self-Directed Learning* (pp. 185-196). Melrose, FL: International Self-Directed Learning Symposium.
- Richards, J., & Rodgers, T., (2001). *Approaches and Methods in Language Teaching* (2nd ed). Cambridge University Press, Cambridge.
- Ryan, R. L., & Deci, E. M. (2002). Overview of self-determination theory: An organismic-dialectical perspective. In E. L. Deci & R. M. Ryan (Eds.), *Handbook of self-determination research* (pp. 3-33). Rochester, NY: University of Rochester Press.
- Slavin, R. E. (1991). Synthesis of research on cooperative learning. *Educational Leadership*, 48, 71-82.
- Spielberger, C. D. (1983). *Manual for the State Trait Anxiety Inventory*. CA: Consulting Psychologists Press.
- Tangney, J. P., Baumeister, R. F., & Boone, A. L. (2004). High self-control predicts good adjustment, less pathology, better grades and interpersonal success. *Journal of Personality*, 72, 271-322.
- Teven, J. J., Richmond, V. P., McCroskey, J. C., & McCroskey, L. L. (2010). Updating relationships between communication traits and communication competence. *Communication Research Reports*, 27, 263-270.
- Victori, M., & Lockhard, W. (1995). Enhancing metacognition in self-directed language learning. *System*, 23(2), 223-234.
- Vygotsky, L. S. (1986). *Thought and language*. Cambridge, MA: MIT Press.
- Wenden, A. (1991). *Learner Strategies for Learner Autonomy*. London. Prentice Hall International.
- Wichadee, S. (2011). Developing the self-directed instructional model to enhance English reading ability and self-directed learning of undergraduate students. *Journal of College Teaching and Learning (Online)*, 8(12), 43-52.
- Willing, K. (1989). Teaching How to Learn Teaching Strategies in ESL. *Teachers Guide*. Sydney: National Centre for English Language Teaching and Research, Macquarie University.

- Witherspoon, A. D., Long, C. K., & Nickell, E. B. (1991). Dropping out: Relationship of speaking anxiety to self-esteem, crime and educational achievement. *Psychological Reports*, 69, 673-674.
- Woodrow, L. J. (2006). Anxiety and speaking English as a second language. *Regional Language Centre Journal*, 37, 308– 328. doi:10.1177/0033688206071315
- Yan, X., & Horwitz, E. K. (2008). Learners' perceptions of how anxiety interacts with personal and instructional factors to influence their achievement in English: A qualitative analysis of EFL learners in China. *Language Learning*, 58, 151–183. doi:10.1111/j.1467-9922.2007.00437.x
- Yang, Y. (2015). Self-directed learning to develop autonomy in an online ESP community. *Interactive Learning Environments*, 1-18. Doi: 10.1080/10494820.2015.1041402.
- Yashima, T. (2002). Willingness to communicate in a second language: The Japanese EFL context. *The Modern Language Journal* 86 (1), 54–66. doi:10.1111/1540-4781.00136.
- Zuckerman, M., & Kuhlman, D., M. (2000). Personality and risk taking: common biosocial factors. *Journal of Personality*, 68, 999-1029.