



Research Anxiety among Turkish Graduate ELT Students

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Abstract:

The purpose of this study was to investigate the level and predictors of research-related anxiety among graduate ELT students in the Turkish context. 81 MA and PhD students from 14 universities offering graduate programs in ELT responded to a background questionnaire, a research anxiety scale, and a research self-efficacy survey. The analysis of the data revealed that graduate students were moderately anxious about conducting research. It was also found out that self-efficacy beliefs of graduate students were able to explain a certain portion of the research anxiety. Furthermore, while gender and having a publication experience do not affect the level of research anxiety, MA students were found to be having more research-related anxiety than PhD students. Finally, research self-efficacy was found to be negatively correlated with research anxiety. The overall findings suggest that graduate students need support to increase their self-efficacy about research in order to have lower levels of research anxiety. Recommendations for graduate programs and suggestions for further research are also provided.

Keywords: research anxiety, research self-efficacy, graduate students, ELT

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Graduate students in Turkey are considered as the lucky minority as they are accepted to graduate schools after challenging examinations. Most of them possess the self-confidence and feeling of accomplishment as they were among the good students during their undergraduate studies. Nevertheless, the road that goes to the successful completion of the programs is full of obstacles. The research requirement of the graduate courses, the courses specifically designed on research methods training, and the dissertation writing process usually bring psychological burden on those students. Anxiety is one of those sentiments that graduate students often experience during their work in the graduate school. Graduate students in the field of English Language Teaching (ELT) are no exception. They are even more concerned as most of them hold the two roles in the educational settings: being a student and being a teacher. Within this understanding, the present study aims to find out the level of research anxiety experienced by Turkish graduate ELT students and to identify the predictors of the research anxiety experienced by these students.

Theoretical Background and Previous Research

According to Sevidy-Benton and O’Kelly (2015), graduate student anxiety is a problem for the reason that this state is a dynamic mechanism in foreseeing students’ accomplishment. The complication of this might appear as the fact that the degree graduate students are supposed to obtain is acquired late or is never acquired. In other words, “anxiety about the research required in a class may overshadow any benefits the student may get from the content” (Sevidy-Benton & O’Kelly, 2015, p. 47). The complete disappointment and the procrastination experienced by these students are typically caused by these feelings of apprehension and fear about the research as well as the emotional states of insufficiency and uneasiness (Onwuegbuzie & Jiao, 1998). It is also evident that anxiety is strongly linked to student aspiration; in other words, higher levels of anxiety are caused by lower aspiration in students, those higher levels are also caused by low achievement scores (Kazmi, 2013).

Research anxiety can simply be defined as the anxiety that students experience in courses on research methodology (Onwuegbuzie, 1997). In his pioneer study on research anxiety, Onwuegbuzie (1997) conjectured that research anxiety is multidimensional mechanism which includes library anxiety, statistical anxiety, composition anxiety, and research process anxiety. Library anxiety is a component of research anxiety, and ‘barriers with staff’, ‘affective barriers’, ‘comfort with the library’, ‘knowledge of the library’, and ‘mechanical barriers’ are precursors of library anxiety among graduate students (Onwuegbuzie & Jiao, 1998). Amongst these antecedents, cooperative attitudes are strongly linked to “barriers with staff, comfort with the library, and knowledge of the library (Jiao & Onwuegbuzie, 2002). Statistics anxiety is also a vital phenomenon in graduate studies (Onwuegbuzie & Wilson, 2003). The relationship between statistics achievement and research anxiety, study habits, course load, and the number of statistics courses taken is significant among novice researchers (Onwuegbuzie, 2013). According to Elliott, Choi, and Friedline (2013), executing online statistics labs as an element of a basic research methods course may help students develop less negative attitudes toward statistics and expand their skills to read academic texts, which probably may result in lower levels of research anxiety.

Research anxiety in undergraduate programs has also been in the research agenda recently. According to Butt and Shams (2013), pre-service teachers do not hold positive attitudes towards research. As a matter of fact, undergraduates with the opinion that research is a vital component of their future professional lives have higher levels of anxiety (Papanastasiou & Zembylas, 2008). However, undertaking research projects with a first-hand involvement rather than being provided with theoretical knowledge about research may decrease the level of anxiety experienced by student teachers (Akyüz, 2013). Hence undergraduate programs, especially the teacher education programs, should act as an actual participant in reducing students’ research anxiety (Butt & Shams, 2013).

As they are more involved in the research component of the academic programs, graduate students are relatively more prone to anxiety. Previous research on the research anxiety of graduate students revealed different results. For example, Trimarco (1997) found out that graduate students with a superior extent of knowledge experienced less anxiety in the USA context. Abdullah, Erfanmanesh, and Abdul Karim (2014) reported that a certain level of information seeking anxiety was existent among Malaysian postgraduate students. Iranian graduate students, on the other hand, were found to be experiencing a moderate level of research anxiety, holding high level of research self-efficacy, and having positive attitudes toward research (Rezaei & Zamani-Miandashti, 2013). In a very recent inquiry, van der Westhuizen

(2015) reported that graduate students in South Africa were enthusiastic about learning and were positive about the importance of research in their professional lives although research was a tough subject to master. As for gender variable, studies showed that there was no significant relationship between anxiety levels of graduate students and their gender (Bibi, Lqbal, & Majid, 2012; Trimarco, 1997). As for the field of study variable, it was evident that MA students in the field of ELT were among the groups who exhibited higher levels of research anxiety than the graduate students from other disciplines (Bibi et al., 2012).

Research-related concerns of graduate students in Turkey have also been investigated. For example, graduate students perceived writing the discussion part of a research paper as the most challenging aspect of writing research papers while writing a list of references was the least challenging component (Köksal & Razi, 2011). As for the research anxiety, it was found out that Turkish graduate students had low levels of research anxiety (Bayar, Bayar, Eǧmir, Ödemiş, & Kayir, 2013; Saracalođlu, 2008). Moreover, graduate students' level of research anxiety did not differ in terms of their age, gender, and level of education. The current status of the graduate students, however, was varied: research assistants as graduate students had significantly lower levels of anxiety than their classmates (Bayar et al., 2013).

In order to reduce the research-related anxiety, Einbinder (2014) suggests employing some innovative educational techniques as a result of which students can deal with their worries, grow self-confidence in their skills, and grasp fundamental constituents of research methods. According to Kracker (2002), a cognitive/affective training model given in a 30-minute format can decrease the anxiety that is often linked to research paper assignments for novice researchers. Following the investigations about the relationship between the RA and RSE, Maschi, Wells, Yoder-Slater, MacMillan, and Ristow (2013) suggest a teaching model for instructors for lessening research-related anxiety of students by enhancing their self-confidence about research. Generating an understanding classroom environment, offering emotion-, cognitive-, and action-focused tasks, and using planned timing are among the strategies that instructors can use. Finally, graduate students' research-related anxiety decreases while their information literacy skills increase when there is an opportunity to work one-on-one with the librarians (Brinkman & Hartsell-Gundy, 2012).

The self-efficacy concept can be defined as the "beliefs in one's capabilities to organize and execute the courses of action required to produce given attainments" (Bandura, 1997, p. 3). Self-efficacy in an instructional context might easily be associated with the factors affecting the academic performance of a learner (Büyüköztürk, Atalay, Sozgun, & Kebapçı, 2011). In other words, higher levels of student determination, confrontation, and endurance might be the consequences of higher levels of self-efficacy beliefs. Research self-efficacy is similar to research anxiety in the way that both concepts are factors to foretell student attainment (Sevidy-Benton & O'Kelly, 2015), and both may lead to catastrophic consequences for graduate students in their effort to successfully complete their programs (Onwuegbuzie & Jiao, 1998). Furthermore, studies conducted to investigate graduate students' self-efficacy beliefs in Turkey showed that those students were sufficient in preparing assignments, presentations, and projects (Gökçek, Taşkın, & Yıldız, 2014). Besides, self-efficacy beliefs of graduate students are connected to their computer self-efficacy (Odaci, 2013; Tuncer, 2013), and subjective well-being (Odaci, 2013).

Research self-efficacy and research anxiety are two significantly related concepts (Saracalođlu, 2008) to the extent that students' levels of research anxiety decrease while their research self-efficacy increases (Pajares, 2002; Rezaei & Zamani-Miandashti, 2013; Trimarco,

1997). What is more, anxiety and difficulty of research as a subject matter do not relate to graduate students' positive attitudes towards research or the extent to which they viewed research as beneficial for their future career (van der Westhuizen, 2015).

Significance of the Study and the Research Questions

The aforementioned research findings about anxiety together with other variables affecting the success of a graduate program call for the question of 'How efficient are those programs to train future researchers?' Although the answer to this question is not clear, Bilican (2014) discovered that an ELT PhD program at a Turkish university was effective at improving the analytical and critical thinking abilities of the PhD candidates about research design. On the other hand, it is a known fact now that the current programs can be augmented by providing students with wider-ranging teaching resources as well as more sensible and thorough feedback (Bilican, 2014). Nevertheless, research on graduate students' anxiety and other components of research in graduate work is quite limited, especially in the ELT context. This study, therefore, is an attempt to shed more light into the issue. The present study is the first example of its kind to document the components of research anxiety and research self-efficacy and the possible relationship between the two concepts. It is obvious that the study is important for detailing the current status of the feelings of the graduate students of ELT towards conducting research. This will probably be inspiring for researchers studying on the graduate students in many other disciplines. To this end, the following research questions were formed for the present investigation:

1. What is the level of research anxiety experienced by Turkish graduate ELT students?
2. Do variables such as gender, level of graduate study, publication experience, and research self-efficacy beliefs have an effect on graduate ELT students' research anxiety?

Methodology

Participants

The participants of this study were 81 (25 male and 56 female) graduate students from 14 Turkish universities offering an MA and/or PhD programs. They were from different age groups: 20-25 years of age (24.69%), 26-30 years (43.21%), 31-36 years (13.58%), and 36 and above years (18.52%). 45 of the participants were MA students while 36 of them were studying PhD in ELT. More than half of the participants were EFL instructors at universities (62.96%) while some of them were either research assistants at ELT departments of universities (22.22%) or teachers teaching at state (9.88%) or private schools (2.47%) at K12 level. Only two of them were not working at the time of study, but full-time graduate students.

All of the participants had at least one basic 'Research Methods' course during their graduate study while some of them had some other research-related courses. 92.59% of them had the 'Research Methods in ELT/in Social Sciences' course. Furthermore, 56.79% of them took a course on 'Quantitative Research Methods' such as Statistics in ELT, Statistics in Social Sciences, etc. 61.73% of them had already taken a 'Seminar' course in which they were supposed to write research papers. Only 33.33% of them had a course related to 'Qualitative Research Methods'.

As for the publication experience of the participants, more than half of the students (54.32%) had never published a paper in a journal, in a conference proceeding, or in an edited book. Other students had experienced publication at an academic outlet at least once.

The purposes of graduate study in ELT were also diverse. Most students indicated that they were doing it for pursuing an academic career (88.89%), and 53.09% wanted it to improve themselves as EFL teachers. The remaining reasons for a graduate study was either to be

appreciated by others (6.17%) or because of being forced by their institutions (2.47%) or their parents (1.23%).

Instruments

An online survey was structured to obtain the required data to answer the research questions in three parts: a background questionnaire, the 'Research Anxiety Rating Scale' (RARS), and the 'Research Self-Efficacy Scale' (RSS).

The background questionnaire. The background questionnaire consisted of 10 items. The participants were first asked questions eliciting their demographic characteristics such as gender, age, level of study, university, and current job. Then, their current experience related to graduate courses related to research and their own publication experience were questioned. Students' reasons for studying in graduate programs were also elicited.

The RARS. In order to find out participant students' levels of research anxiety, the RARS (Onwuegbuzie, 2013) was used. RARS is a five-item Likert-type scale with a high level of reliability ($\alpha=.84$). The scale consists of 45 items in seven sub-categories asking contributors to respond to on a scale from 1 (*Strongly Disagree*) to 5 (*Strongly Agree*). Most of the statements in the scale were written in a way to specify research anxiety (i.e. *Writing a research proposal scares me*) while some others indicated positive feelings about research anxiety (i.e. *I am looking forward to conducting research in the library*). The statements in the latter case were taken as reverse items and coded accordingly (1 for *Strongly Agree* and 5 for *Strongly Disagree*). As earlier studies on anxiety with different measures suggested (Hart, 1987; Horwitz, Horwitz, & Cope, 1986), mean scores below 2.00 were considered representing low levels of research anxiety while mean scores above 3.50 were considered as the indicators of high research anxiety. The mean scores between 2.01 and 3.49 were taken as moderate levels of research anxiety. The sub-categories in RARS and sample statements are as follows:

1. Fear of Libraries (*I am looking forward to conducting research in the library.*)
2. Fear of Writing (*Writing a research proposal scares me.*)
3. Fear of Statistics (*Since I do not like statistics, I do/will not enjoy research methods.*)
4. Fear of Conducting Research (*Conducting research takes up too much time.*)
5. Fear of Research Language (*Research methods textbooks are difficult to understand.*)
6. Fear of Research Courses (*Taking a course in research methods frightens me.*)
7. Perceived Utility and Competence (*Research meetings/conventions intimidate me.*)

The RSS. In order to find out the self-efficacy beliefs of graduate ELT students related to research, the RSS was utilized. This scale was developed by Büyüköztürk et al. (2011) as a five-item Likert-type scale and established a high reliability level ($\alpha=.87$). It consists of 18 items each of which describes a competency related to conducting research such as *I believe I am sufficient in creating hypotheses relevant to my research (Item 2)* or *I can discuss my research findings within a conceptual framework (Item 15)*, and participants are supposed to indicate to what extent they agree with those statements on a scale from *Strongly Disagree (1)* to *Strongly Agree (5)*. To have a consistency with the RARS, mean scores below 2.00 from the RSS were considered representing low levels of self-efficacy beliefs about conducting research while mean scores above 3.50 were considered as the indicators of high self-efficacy. The mean scores between 2.01 and 3.49 were taken as moderate levels of self-efficacy beliefs about research.

Procedures

The online survey was uploaded to an online survey website in February 2015, at the end of the Fall semester before the Spring semester started. The link of the survey, then, was e-mailed to the professors from different universities to reach students from various graduate ELT

programs. The survey was open for two weeks. Once the time was over for responding to the survey, the collected data were entered to SPSS (Version 22) for statistical analyses. Descriptive statistics, a multiple regression test, independent-samples t-tests, and a Pearson’s correlation test were computed in order to answer the relevant research questions.

Results

In order to answer the first research question ‘*What is the level of research anxiety experienced by Turkish graduate ELT students?*’, descriptive statistics were run using the results obtained from the RARS. Table 1 presents the mean scores for the seven factors as well as the total scale.

Table 1
Descriptive Statistics for RARS

<u>Factors</u>	<u>N</u>	<u>Mean</u>
Fear of Conducting Research	81	3.02
Fear of Libraries	81	2.88
Fear of Research Language	81	2.81
Fear of Writing	81	2.70
Fear of Research Courses	81	2.23
Perceived Utility and Competence	81	2.09
Fear of Statistics	81	2.05
Overall	81	2.43

As Table 1 shows, graduate ELT students had moderate levels of research anxiety when both the overall scale (mean score= 2.43) and seven factors (mean scores ranging from 2.05 to 3.02) are considered. Nevertheless, it was evident from the analysis that fear of statistics and perceived utility and competence related to research were the most anxiety-provoking factors. On the other hand, fear of conducting research as well as fears related to libraries, research language, and writing were the least anxiety-creating factors among the seven components of research anxiety.

In order to answer the second research question, *Do variables such as gender, level of graduate study, publication experience, and research self-efficacy levels have an effect on their research anxiety?*, first, the descriptive statistics were calculated. The analysis showed that MA students had a higher research anxiety level than the PhD students (M= 2.52 and 2.32 respectively). On the other hand, the mean scores of the male and female students in the research anxiety scale were quite similar (M= 2.42 and 2.43 respectively). Similarly, students with a publication experience obtained a similar mean score (M= 2.40) with their peers without such experience (M= 2.46). Finally, the average research self-efficacy score of the participants was calculated as 3.85, which meant that graduate students were highly self-efficacious in terms of conducting research.

Second, a multiple regression test was run to find out the effect of the four variables (gender, level of study, publication experience, and research self-efficacy beliefs) on the research anxiety scores of the participants (Table 2). Table 2 shows that gender, level of study, publication experience, and research self-efficacy beliefs were altogether able to explain the 33% of the research anxiety. The analysis also suggested that while gender, level of study, and publication experience had minor effects, research self-efficacy had a significant effect on graduate students’ research anxiety.

Table 2
Multiple Regression Test Results

	<u>Model</u>	<u>R</u>	<u>Adjusted R²</u>	<u>β</u>	<u>Sig.</u>
Gender		.015	-.012	.021	.824
Gender, Level of Study		.240	.033	-.075	.490
Gender, Level of Study, Publication Experience		.243	.022	-.005	.960
Gender, Level of Study, Publication Experience, Research Self-efficacy		.603	.330	-.578	.000

In order to find out the significance of the differences among the mean scores, independent t-tests were run between research anxiety scores and gender, level of study, and publication experience separately. The results indicated that the scores were significantly different for the ‘level of study’ variable whereas the scores were not significantly different in terms of ‘gender’ and ‘publication experience’ variables. As Table 3 presents, MA students experienced significantly more research anxiety than the PhD students. Nevertheless, none of the differences between the scores of the MA and PhD students for the seven factors of the research anxiety scale were significantly different.

Table 3
Results of t-Test and Descriptive Statistics for RARS by Level of Study

	Level of Study							t	df
	MA			PhD					
	M	SD	n	M	SD	n			
Overall Scale	2.52	.45	45	2.32	.36	36	2.18*	79	
Fear of Libraries	3.11	1.82	45	2.59	.76	36	1.58	79	
Fear of Writing	2.81	.66	45	2.56	.62	36	1.77	79	
Fear of Statistics	2.15	.61	45	1.93	.38	36	1.91	79	
Fear of Conducting Research	3.03	.48	45	3.01	.34	36	.19	79	
Fear of Research Language	2.83	.48	45	2.78	.52	36	.47	79	
Fear of Research Courses	2.35	.71	45	2.08	.53	36	1.87	79	
Perceived Utility and Competence	2.19	.54	45	1.96	.52	36	1.97	79	

* p < .05.

The gender variable, on the other hand, did not provide any significant differences in terms of the overall research anxiety scores of male and female students (Table 4). The only

significant difference was observed in Factor 2, in which female graduate students were significantly more anxious than their male peers for writing research papers.

Table 4
Results of t-Test and Descriptive Statistics for RARS by Gender

	Gender							t	df
	Female			Male					
	M	SD	n	M	SD	n			
Overall Scale	2.43	.44	56	2.42	.37	25	.12	79	
Fear of Libraries	3.07	1.64	56	2.46	.84	25	1.75	79	
Fear of Writing	2.80	.69	56	2.47	.50	25	2.17*	79	
Fear of Statistics	1.99	.48	56	2.19	.62	25	-1.52	79	
Fear of Conducting Research	2.99	.48	56	3.10	.23	25	-1.09	79	
Fear of Research Language	2.79	.47	56	2.85	.57	25	-.54	79	
Fear of Research Courses	2.21	.67	56	2.27	.61	25	-.38	79	
Perceived Utility and Competence	2.09	.56	56	2.09	.50	25	.00	79	

* $p < .05$.

Table 5
Results of t-Test and Descriptive Statistics for RARS by Publication Experience

	Publication Experience							t	df
	With Experience			Without Experience					
	M	SD	n	M	SD	n			
Overall Scale	2.39	.36	37	2.46	.47	44	-.70	79	
Fear of Libraries	2.75	1.28	37	2.98	1.60	44	-.70	79	
Fear of Writing	2.63	.74	37	2.75	.57	44	-.82	79	
Fear of Statistics	1.97	.43	37	2.11	.60	44	-1.17	79	
Fear of Conducting Research	3.05	.28	37	3.00	.51	44	.52	79	
Fear of Research Language	2.86	.49	37	2.76	.51	44	.81	79	
Fear of Research Courses	2.16	.50	37	2.29	.75	44	-.89	79	
Perceived Utility and Competence	2.04	.49	37	2.13	.58	44	-.71	79	

* $p < .05$.

As for the ‘publication experience variable’, there were no significant differences between graduate students who published a paper and the ones who had never experienced publishing papers in terms of both the overall research anxiety and the seven factors of the research anxiety scale (Table 5).

Finally, in order to find out the possible relationship between the research anxiety and research self-efficacy beliefs of the graduate students, a Pearson’s correlation test was run. The result showed that research self-efficacy and research anxiety were significantly correlated in a negative direction ($r = -.599$, $p < .05$), which means that research anxiety decreases as the level of self-efficacy increases.

Discussion and Conclusions

The findings of this study put forward that Turkish graduate ELT students experience research-related anxiety at a moderate level. This overall outcome finds support from earlier studies (Abdullah et al., 2014; Bibi et al., 2012; Kracker, 2002; Rezaei & Zamani-Miandashti, 2013; van der Westhuizen, 2015) while it contradicts with some which found out that graduate students’ research-related anxiety is low (Bayar et al., 2013; Saracaloğlu, 2008).

Earlier studies concerning the research-training has largely emphasized the existence of statistics anxiety as the predictor and a determining factor of the research anxiety among students (Elliott et al., 2013; Onwuegbuzie, 2013; Onwuegbuzie & Wilson, 2003). However, the sample in this study reported experiencing statistics-related anxiety at the lowest level among all other factors. It is probably because of the fact that those students are equipped with the necessary skills to deal with statistics in research. As they indicated in the survey, all of these students had taken at least one research-related graduate course, almost all had taken ELT-based research classes, and a majority already completed a course successfully about either quantitative research methods, qualitative research methods, or both.

On the other hand, the most anxiety-provoking factor is the process of conducting research. Graduate students find research, when compared to other factors of research-related anxiety, a highly time-taking activity and a challenging and stimulating discipline; it is also one of the least enjoyable components of the graduate study. In fact, according to van der Westhuizen (2015), research is the most enjoyable part of graduate work, which students are very eager to learn about although it consists of very difficult subjects to master. Therefore, it can be assumed that there is something missing in the graduate programs to support graduate students to overcome the difficulties emerging from the nature of the research-related subjects and to change their negative attitudes towards research. It is evident in the literature that holding positive attitudes towards research results in reduced levels of research-related anxiety (Butt & Shams, 2013; Elliott et al., 2013; Rezaei & Zamani-Miandashti, 2013; van der Westhuizen, 2015).

Among the predictors of anxiety, gender has played a very minor role according to the findings of the present study as it was explaining only very limited portion of anxiety and the comparisons of the mean scores did not yield any significant differences between male and female graduate students. These findings corroborate with previous inquires (Bayar et al., 2013; Bibi et al., 2012) that the gender variable might not be cited as one of the factors influencing the research anxiety among graduate students. In addition to gender, graduate students’ involvement in publishing a research paper and/or presenting their research in front of an audience does not make a difference in terms of the level of research anxiety they experience. Providing that a student is anxious about any component of the research process, earlier experiences of conducting research are not effective in reducing or diminishing his/her stress and concerns. This

finding can be interpreted that even the most experienced researchers (professors or other publication-rich academics) might experience a certain degree of research anxiety from time to time in contrast to Bayar et al.'s (2013) findings, which suggest that research assistants as graduate students experience lower levels of anxiety than their peers who are full-time students or doing other jobs. As a matter of fact, the number of publication is significantly correlated with research self-efficacy (Rezaei & Zamani-Miandashti, 2013), therefore, it might be a more sound judgment to predict the existence of the research anxiety by considering the relevant factors as a whole rather than as separate entities.

Level of study (MA vs. PhD), on the other hand, displayed a significant difference in this study within the finding that MA students were more anxious than the PhD candidates in overall anxiety even though the seven factors comprising the overall anxiety level were not significantly different. This finding, however, does not mean that level of study is one of the factors to predict research-related anxiety among graduate students as it does not tend to predict the notion of anxiety by itself nor with other variables including gender and publication experience. One interpretation about this result can be to claim that PhD students have already passed through a research process with all the steps during their earlier work and gained experience, which eventually helped them to deal with the possible anxiety-provoking situations in the process of conducting research. This interpretation, of course, would contradict with the discussion related to the findings which signposts that experience is not a predictor of research anxiety. Nevertheless, publication experience might be a different concern from dealing with the research itself. Thus, it is normal that MA students, who are at an earlier stage of conducting research, hold more research-related concerns than their peers as PhD candidates.

The most prominent finding of this study is that graduate ELT students' self-efficacy beliefs about research is one of the predictors of the possible research-related anxiety. In addition to its predicting ability, research self-efficacy beliefs are negatively correlated with the research anxiety experienced by graduate students. In other words, research anxiety decreases as research self-efficacy increases. Previous studies on self-efficacy have also demonstrated the role and effect of self-efficacy beliefs on language learning anxiety claiming that there is a negative correlation between these two concepts (Tsai, 2013). In the same vein, the findings support the existing literature in the way that higher self-efficacy results in lower research anxiety (Pajares, 2002; Rezaei & Zamani-Miandashti, 2013; Trimarco, 1997). The present findings also confirm the postulation that graduate students with higher levels of self-confidence and stronger beliefs about their ability to handle research-related responsibilities such as completing the course work or writing theses experience less anxiety about research.

Implications and Recommendations

This study generally showed that graduate ELT students experience moderate levels of research anxiety, and this anxiety is interconnected to their self-efficacy beliefs about conducting research. A number of suggestions are possible for the instructors in the graduate schools to help graduate students find ways to increase their self-efficacy and to experience lower levels of research anxiety. Otherwise, undesired levels of anxiety about research may result in leaving the graduate programs or incomplete assignments and dissertations. First, graduate students should be taken as individuals who are trying to complete a difficult task. Therefore, it is normal that they sometimes experience research-related concerns, which might set barriers to their accomplishment. In a nutshell, as Rezaei and Zamani-Miandashti (2013) suggests, "understanding where research anxiety originates and how it is being propagated could provide pertinent information for administrators to better prepare and support graduate students in the

area of research” (p. 76). Furthermore, if instructors hold great expectations from those novice researchers, they will probably feel more stressed, even desperate about the graduate school. Thus, instructors should determine their expectations considering the current level of research-related know-how of the graduate students.

As most of the graduate ELT students are full-time EFL instructors at the same time, they might not balance their roles as students and teachers; therefore, they may need more guidance and encouragement in their graduate studies. A very recent inquiry clearly states that teachers in the ELT world are not very enthusiastic about engaging in research for their professional development (Anwaruddin & Pervin, 2015). Instructors in the graduate programs, then, should try to create a positive atmosphere in research-related courses and in the dissertation-writing process by eluding superfluous feedback while giving feedback and delivering lessons about research. Also, as Maschi et al. (2013) advocate, instructors in the graduate programs can create an appreciative classroom milieu and can propose tasks that focus on students’ emotional, cognitive, and behavioral needs as tactics to foster self-efficacy and reduce research-related anxiety.

To sum up, graduate programs should be aware of the graduate students’ emotional, cognitive, and social well-being. The supervisors and the instructors in the graduate programs can support these students to be positive about the ability to complete the research component of the program. They should also share the responsibility for supporting those graduate students in coping with the problems they encounter in the process of learning about and conducting research. Especially MA students, compared to the PhD candidates, will need this support a lot as they are more concerned about the research component in the graduate programs.

Limitations and Suggestions for Further Research

Although this study has been an attempt to understand the research anxiety experienced by graduate ELT students, the findings should be interpreted cautiously. First of all, despite the adequate number in sampling, each graduate student might be experiencing research anxiety at different levels in different forms as anxiety is a context-specific and a personal trait. Therefore, further studies may check the current level and different components of research anxiety that graduate students hold in both Turkish context and other venues. Second, this study used gender, level of study, and publication experience as well as research self-efficacy as the possible variables affecting research anxiety. These factors are able to explain only a certain portion of the phenomenon; thus, further inquiries should investigate the role of other factors such as attitudes towards research, achievement, orientations for a graduate study, etc. Finally, this study was a survey study whose results may not be generalized. As for catching further evidence, studies using other data collection tools, particularly case studies or multi-method enquiries will shed more light into the explanation of the existence and reasons of research anxiety among graduate students.

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