

Analyzing the Anxiety States of Candidates Applying for Special Talent Examination in the School of Physical Education and Sports in Terms of Several Variables

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Abstract

In this study, anxiety states of candidates who were going to attend special talent examination in the School of Physical Education and Sports were analyzed in terms of various variables such as age, gender, residence and socio-economic level of the family, parents' educational levels and professions, active sports status, the number of exams taken, and applied training methods. Within the scope of this study, 244 candidates who applied for the special talent examination held by the School of Physical Education and Sports in Gümüşhane University in 2014-2015 academic year volunteered to participate. Regarding the data collection tool, a personal information form and State-Trait Anxiety Scale developed by Spielberger et. al were used. For the analysis of gathered data, for paramedic variables, t test and test of One Way Anova were applied. For non paramedic variables, Kruskal Wallis test was applied. In order to determine the source of difference between the means Post Hoc Tukey test was applied. All the analyses during the research process were carried out by SPSS 20.00 package program. As a result, it was found out that the only significant difference between the anxiety scores and the stated variables was in terms of candidates' mothers' occupation variable ($F_{239} = 2,507$, $p < .05$) whereas no other significant difference was determined concerning other variables.

Keywords: Trait Anxiety, Physical Education, Sports

Introduction

As a result of changes that can be observed in every field of life today, the higher education has gained importance. Young people and their parents can consider university education to be the only option for a successful life. However, tests that students have for their admission to university can create great pressure on young people and their parents. Teenagers going through the most unsteady and critical period of their lives can react to these challenging exam conditions with different levels of anxiety (Doğan, 1999).

Anxiety can be regarded as one of the most important feelings for people. Anxiety can be defined as a danger signal felt and conceived consciously and it can be triggered by an external sensation (Çakmak ve Hevedanlı, 2004).

In other words, anxiety is an accommodating mechanism for dealing with danger; it is a basic human feeling and a multi dimensional feeling which involves scientific elements, subjective feelings, physiological implications and behaviors (Özusta, 1995:32). It is a feeling experienced when an intrapsychic or environmental life threatening danger exists or a danger is perceived in that way (Güleç ve Köroğlu, 1997; Ehtiyar & Üngüren, 2008). As Kaya and Varol (2004:34) state “normal anxiety which is a basic reaction to a threat is a useful feeling that helps people adapt to environment. Anxiety within normal boundaries is a positive thing in terms of protecting the self. This kind of anxiety ends when the threat disappears”. Yet, if the anxiety lasts for a long time or it is excessive, then pathological anxiety can be referred. This situation can have negative results (health problems, etc) on people. It is suggested that people should learn how to manage anxiety in order to reduce these harmful effects (Urgan, 2012).

In conceptual studies about anxiety, state anxiety and trait anxiety were put forward through Cattell and Scheier (1958) factor analysis studies and these two concepts were formed with the studies of Spielberger (1966). Spielberger defines state anxiety as temporary emotional reactions that occur when people interpret private situations as threatening and whose severity and length are related to the extent of perceived threat and how permanent these threatening situations are interpreted by a person, and also people display these temporary emotional reactions for rare situations (Özusta, 1995:33). It is the subjective fear which is felt because of a stressful condition a person is in. When the stress is intense, state anxiety level increases and when the stress disappears, it decreases. Trait anxiety/Chronic anxiety is the tendency a person has for an anxious life. Anxiety occurs when a person considers the situation he is in stressful, or regards a normal condition dangerous and supposes that self-worth is threatened (Öner ve Compte, 1983:2; Ehtiyar & Üngüren 2008:165).

People associate anxiety with feelings such as negativity, pessimism, failure, worry, or despair about future. Besides, warning people against dangers coming from physical and social environment motivates people by contributing to their required adaption and survival. Furthermore, it involves a multi dimensional feeling that includes adaptive, scientific elements, subjective feelings, and behaviors in order to deal with dangers (Özusta, 1995:33; Güleç ve Köroğlu, 1997:450).

As it is mentioned above, anxiety has also positive aspects and different levels such as mild, moderate and severe levels, and moderate anxiety can be useful in providing motivation (Beser and Öz, 2003:48). However, severe anxiety is one of the most unbearable feelings that a person may experience, because an anxious person always feels desperate. This condition is

common in people who give great importance to some notions such as gaining power, advancing, and dominating (Horney, 1999:36).

There are various studies regarding anxiety. According to the findings of a study carried out by Yaprak, Hamurcu, and Armağan in 2014 about analyzing the state and trait anxiety levels of class teachers, it was concluded that teachers' state and trait anxiety levels did not differ significantly in terms of their marital status and academic success. State anxiety levels of those studying in evening classes were significantly different from their peers studying in day classes. Also, female teachers' trait anxiety levels were significantly different from male teachers' anxiety levels. Regarding open-ended questions, it was found out that teacher candidates were worried about not getting a job, failing in Public Personnel Selection Examination, and not meeting the expectations of their family and the social environment.

Çakmak and Hevedanlı (2004) received different results in their study in which they analyzed the anxiety levels of biology teacher candidates. Researchers who applied the anxiety scale developed by Öner and Le Compte (1998) on 141 teacher candidates studying in Dicle University determined that anxiety levels were affected by class, academic success, etc whereas it wasn't affected by gender, number of siblings, and economic situation. Apart from these studies, there are also different studies applied to high school students, teachers, and teacher candidates in terms of state, trait, exam, and other anxiety types (Erözkan, 2004; Başaran, Taşgın, Sanioğlu & Taşkın, 2009; Kartopu, 2012). However, only the study carried out by Baştürk (2007) and applied to teacher candidates preparing for Public Personnel Selection Examination about their anxiety will be discussed briefly since this study is limited. 192 teacher candidates studying in the Faculty of Education in Pamukkale University participated in the study. Sample included primary school (n:150) and secondary school (n:42) teacher candidates and it was found out that their exam anxiety was generally high. Exam anxiety level of male teacher candidates (n:55) was higher than female candidates (n:137). Besides, it was determined that not only secondary school teacher candidates had higher anxiety levels than primary school candidates but also those who were going to attend Public Personnel Selection Examination for the first time had higher exam anxiety levels than those with previous experience. Researchers noted that this situation was related to the difficulty of being appointed as a teacher.

Having analyzed the literature, it can be observed that this study is of particular importance as there are not many studies about the anxiety levels of teacher candidates studying in the School of Physical Education and Sports. In this study, anxiety states of candidates who were going to attend special talent examination in the School of Physical Education and Sports were analyzed in terms of various variables such as age, gender, residence and socio-economic level of the family, parents' educational levels and professions, active sports status, the number of exams taken, and applied training methods.

Materials and Methods

Data gathered during the research process were analyzed through extreme value and normality analyses, and it was checked if the required criteria for the parametric tests were met or not. Accordingly, t test and one-way analysis of variance (ANOVA) were applied for variables with parametric value and independent samples. Kruskal Wallis test was implemented for variables with no parametric value. In order to determine the source of

difference between the means, Post Hoc Tukey test was applied. All the analyses during the research process were carried out by SPSS 20.00 package program.

Findings

Table 1. Findings about the gender variable

	Gender	n	X	Ss	T	P
Anxiety	Female	54	49,50	5,13	.795	.428
	Male	190	48,85	5,26		

In order to determine whether there is a significant difference among the anxiety scores of candidates applying for special talent examination, t test was applied for independent variables and the results were shown in Table 1.

Analyzing Table 1, it can be observed that anxiety scores of candidates applying for special talent examination did not differ significantly in terms of their gender ($t_{242} = .795$, $p > .05$).

Table 2. Variance analysis result related to age variable

	Groups	Mean total	Sd	Mean-square	F	P
Age	Inter-groups	33,841	3	11,280	.409	.747
	Intra-groups	6626,159	240	27,609		
	Total	6660,000	243			

Table 2 indicates that anxiety scores of candidates applying for special talent examination did not differ significantly in terms of their age ($F_{240} = .409$, $p > .05$).

Table 3. Variance analysis results related to the places where candidates' families live

	Groups	Mean total	Sd	Mean-square	F	p
Place	Inter-groups	19,138	3	6,379	.231	.875
	Intra-groups	6640,862	240	27,670		
	Total	6660,000	243			

In Table 3, ANOVA was applied in order to determine whether there is a significant difference among the means of candidates' anxiety scores and the obtained data was illustrated in Table 3.

Table 3 shows that anxiety scores of candidates applying for special talent examination did not differ significantly in terms of the places where their parents live ($F_{240} = .231$, $p > .05$).

Table 4. Variance analysis result related to socio-economic levels

	Groups	Mean total	Sd	Mean-square	F	p
Socio-economic Levels	Inter-groups	77,031	4	19,258	.699	.593
	Intra-groups	6582,969	239	27,544		
	Total	6660,000	243			

In Table 4, it can be noted that anxiety scores of candidates applying for special talent examination did not differ significantly in terms of their socio-economic level variable ($F_{239}=.699$, $p>.05$).

Table 5. Variance analysis result related to candidates' mothers' educational levels

	Groups	Mean total	Sd	Mean-square	F	p
Educational Levels of Candidates' Mothers	Inter-groups	207,242	4	51,811	1.919	.108
	Intra-groups	6452,758	239	26,999		
	Total	6660,000	243			

Table 5 indicates that anxiety scores of candidates applying for special talent examination did not differ significantly in terms of their mothers' educational levels ($F_{239}= 1,919$, $p>.05$).

Table 6. Variance analysis result related to candidates' fathers' educational levels

	Groups	Mean total	Sd	Mean-square	F	p
Educational Levels of Candidates' Fathers	Inter-groups	91,700	4	22,925	.834	.505
	Intra-groups	6568,300	239	27,482		
	Total	6660,000	243			

Table 6 demonstrates that anxiety scores of candidates applying for special talent examination did not differ significantly in terms of their fathers' educational levels ($F_{239}= ,834$, $p>.05$).

Table 7. Variance analysis result related to candidates' mothers' occupations

	Groups	Mean total	Sd	Mean-square	F	p
Occupations of Candidates' Mothers	Inter-groups	268,203	4	67,051	2.507	.043
	Intra-groups	6391,797	239	26,744		
	Total	6660,000	243			

In Table 7, it can be observed that anxiety scores of candidates applying for special talent examination differed significantly in terms of their mothers' occupations ($F_{239} = 2,507, p < .05$).

In order to determine the source of difference among means, Post Hoc Scheffe test was applied and it was found out that anxiety scores of those whose mothers were farmers or self employed was significantly higher than the scores of others whose mothers were either merchants or officers.

Table 8. Descriptive values related to candidates' fathers' occupations

	Occupation	N	Mean Rank	X ²	p
Occupations of Candidates' Fathers	Worker	7	104,14	4.784	.310
	Farmer	10	137,50		
	Self- employed	217	121,62		
	Merchant	2	59,25		
	Officer	8	159,50		

Kruskal Wallis test was implemented in order to determine whether there was a significant difference between candidates' fathers' occupations and their anxiety scores and the gathered data was shown in Table 8.

Table 8 indicates that anxiety scores of candidates applying for special talent examination did not differ significantly in terms of their fathers' occupations ($X^2 = 4,784, p > .05$).

Table 9. Variance analysis result related to candidates' active sports status

	Groups	Mean total	Sd	Mean-square	F	p
Active Sport Status	Inter-groups	81,601	4	20,400	.741	.565
	Intra-groups	6578,399	239	27,525		
	Total	6660,000	243			

In Table 9, it can be noted that anxiety scores of candidates applying for special talent examination did not differ significantly in terms of their active sports status ($F_{239} = .741, p > .05$).

Table 10. Descriptive values related to candidates' previous examination experience

	Examination Experience	N	Mean Rank	X²	p
The number of examination experience	First time	142	123,55	2.130	.712
	1-2 times	85	124,25		
	3-4 times	12	105,75		
	5-6 times	4	118,75		
	7 and more	1	40,50		

Table 10 demonstrates that anxiety scores of candidates applying for special talent examination did not differ significantly in terms of their previous examination experience ($X^2=4,784$, $p>.05$).

Table 11. Descriptive values related to applied training methods

	Applied Training Methods	N	Mean Rank	X²	p
Training	Private training	34	123,25	4.576	.334
	I train myself	74	134,77		
	I train with a group or a club	108	118,33		
	Private training + I train myself	25	102,86		
	I don't train	3	125,00		

In order to determine whether there was a significant difference between candidates' anxiety scores and the training applied for the special talent examination, Kruskal Willis test was implemented and the results were illustrated in Table 11.

Table 11 indicates that that anxiety scores of candidates applying for special talent examination did not differ significantly in terms of the applied training variable ($X^2=4,576$, $p>.05$).

Discussion and Conclusion

In this study, anxiety states of candidates who were going to attend special talent examination in the School of Physical Education and Sports were analyzed in terms of various variables such as age, gender, residence and socio-economic level of the family, parents' educational levels and professions, active sports status, the number of exams taken, and applied training methods.

According to data obtained from Table 1, gender can be considered as a variable which didn't have a significant effect on the candidates' anxiety scores ($t_{242} = .795$, $p > .05$). While the findings of this research are supported by the state anxiety levels of athletes' by Özbekçi (1989), the effect of success motivation on state anxiety by Engür (2002), and a study by Yücel (2003) on state and trait anxiety levels of taekwondo athletes, it still contradicts with some other studies. In their study, Segal and Weinberg (1989) found out that females had a higher level of trait anxiety compared to males. Başaran et al. (2009) determined that male athletes had a higher level of state anxiety than female athletes. In his study, Şahin (2009) analyzed the anxiety states of candidates applying for the special talent examination held by the School of Physical Education and Sports and found that female candidates' state anxiety was $X = 41.85 \pm 12.78$ whereas it was $X = 37.03 \pm 10.20$ for male candidates. Also, female candidates' trait anxiety was $X = 40.35 \pm 9.09$ while it was $X = 38.10 \pm 7.87$ for male candidates. Regarding state and trait anxiety, it can be stated that female candidates' means were higher than male candidates' means.

Analyzing the data gathered from Table 2, it can be noted that age didn't have a significant effect on the candidates' anxiety scores ($F_{240} = .409$, $p > .05$). Concerning the literature review, it can be remarked that there are several studies supporting the findings of this study. Arseven and Güven (1992) analyzed the data related to anxiety levels of athletes who were divided into two age groups (over 20 and under 20) and were from different branches (basketball, handball, volleyball, and athletics) during the competition, and they couldn't find a significant relationship between the results. Although these results seem to support our study, it should be highlighted that it is necessary to increase the number of such studies concerning the existence of some opposite findings.

Results related to place variable ($F_{240} = .231$, $p > .05$) in Table 3 and the socio-economic level variable in Table 4 ($F_{239} = .699$, $p > .05$) can be assessed as factors which didn't have a significant effect on the candidates' anxiety scores.

Data obtained from Table 5 can be regarded as an element which also didn't affect candidates' anxiety scores significantly ($F_{239} = 1,919$, $p > .05$). Similarly, candidates' fathers' occupations variable in Table 6 can also be noted as a factor which didn't have a significant effect on the candidates' anxiety scores ($F_{239} = .834$, $p > .05$).

However, in Table 7 it can be observed that anxiety scores of candidates differed according to their mothers' occupations ($F_{239} = 2,507$, $p < .05$). Post Hoc test was applied to determine the source of difference between means and it was found out that anxiety scores of those whose mothers were farmer or self-employed were higher than the others whose mothers were merchant or officer. On the other hand, it can be remarked that candidates' fathers' occupations didn't have a significant effect on their anxiety scores ($X^2 = 4,784$, $p > .05$). In a study by Öztürk (2008), it was concluded that both mothers' and fathers' occupations affected the anxiety levels. Varol (1990) found that anxiety levels of those whose parents were farmer, worker, tradesman were higher compared to others whose parents were self-employed, soldier, or officer. Also, it was highlighted that the anxiety levels of those whose parents had a "democratic" attitude were lower than the others whose parents had an "uncaring" or "authoritative" attitude. In addition to this, according to families' economic conditions it was found that students coming from "low-income" or "middle income families" had higher anxiety levels than students coming from "high income" families. Yet, participants in this study were those who got the required score in the university entrance exam while in Varol's

study it was the senior high school students. Considering the fact that these students feel physically, mentally, and socially more relaxed, this result cannot come as a surprise.

It can be stated that doing sports actively which was one of the sub questions of the study did not have a significant effect on the candidates' anxiety scores ($F_{239} = .741, p > .05$). A similar study by Öztürk (2008) supported this result. In this study applied to 140 students studying the School of Physical Education and Sports and aged between 18-23, no significant relationship was found between the students' active sports status and their anxiety levels. According to research results, whether doing sports actively or not didn't affect their anxiety levels. It can be noted that this result was supported for candidate students applying for special talent examination in the School of Physical Education and Sports.

Regarding Table 10, it can be suggested that the number previous examination experience didn't have a significant effect on the anxiety scores of candidate students applying for special talent examination in the School of Physical Education and Sports ($X^2 = 4,784, p > .05$). The study carried out by Şahin (2009) on candidate students applying for special talent examination in the School of Physical Education and Sports supports this result. In their study about the anxiety states of candidates students, Lök et al. (2008) determined that anxiety scores of those who were going to attend the exam for the first time was higher than the others who had two or more previous examination experience.

Concerning the findings in Table 11, it can be stated that training applied for the special talent examination didn't have a significant effect on candidates' anxiety scores ($X^2 = 4,576, p > .05$). Regarding the results of this study, it can be concluded that anxiety scores of candidates applying for special talent examination in the School of Physical Education and Sports did not differ significantly. It can be inferred that candidates' feeling relaxed since they got the required score in university entrance examination affected this situation. Generally, it can be noted the number of studies on candidates applying for special talent examination in the School of Physical Education and Sports in terms of anxiety is not sufficient. Therefore, it can be suggested that this subject should be supported by numerous studies in order to determine the anxiety state extensively.

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