

Anxiety of the Pre-service Teachers towards the Central Exam

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Abstract

The main purpose of the present research is to detect the exam anxiety of senior students of Sakarya University Faculty of Education” The Anxiety Scale of Central Exam of Teachers”, was applied to Sakarya University Faculty of Education senior students and the relations between central exam anxiety and variables of gender, age, types of graduated high school, cumulative grade score average, economic status, department number of siblings were detected. SPSS programs was used in analyzing of research data , the results of t-test, anova results and Pearson correlation analysis were interpreted for the groups according to the variables. Coefficient of cronbach’s alpha was accounted and it is found reliable. It is detected that data and the value of Skewness and Kurtosis datas are in normal distribution. Confirmatory Factor Analysis (CFA) was applied to detect whether the scale will be used in two-dimensional or not. According to the factor analysis the scale shows a structure with 15 items and two factors. As a result of Pearson correlation analysis, a significant difference and negative correlation were found between economic status of pre-service teachers and time dimension of Central Exam Anxiety Survey. It will be clear that economy affecting anxiety level on this exams.

Keywords: anxiety, pre-service teacher, central exam

1. Introduction

Individuals react to the events that they experience in different emotional ways. These shown reactions can be depended on the event that was experienced in the past or will be experienced in the future. While the sad reaction to an upsetting event happened last week focuses on the past, the excitement of buying a new car next week is an emotional reaction that focuses on the future. One of the most common emotional reactions focusing on the future that we face is “anxiety.” In the late night, unfinished presentation of project that must be prepared till tomorrow morning or passing extreme dry season in a country, the economy of which is depended on agriculture, brings about anxiety focusing on the future for the individuals (Özsarı, 2008). We can say that Freud (1856-1938) was the scientist who did the first researches about anxiety and used the word “anxiety” in Psychological Literature. According to Freud, anxiety attributes to the life-sustaining functions that warn the individuals against the hazards that occur in physical and social life, and also attributes to the harmony that it needs (Geçtan, 1981; Davaslıgil, 1994). In Turkey Oner (1997) who has done comprehensive researches about anxiety explained it as “a mental state that occurs in individuals as result of an environmental stimulus which individuals perceive as dangerous and threatening and think that their effects are not pleasant.” When the researches that were done about the explanation of anxiety are examined, we can say that anxiety is the extreme excited state in terms of mental, physical and emotional condition when the individual faces with the stimulus. Generally, anxiety is explained as uneasiness or fear that individual feels when he/she faces with an event that threaten the individual (Spielberger, 1980; Scovel, 1978 and 1991). Because of these reasons anxiety is used with the condition of sadness, doubt, tension and fear (Atkinson et al., 2006).

As dictionary meaning or in daily life usage types, “anxiety” is mostly comprehended as negative mood but although all of these negative sides, “anxiety” has stimulative, preservative and motivating factors (Akgün et al., 2007). Generally, people explain “anxiety” with futureoriented pessimism, not being successful, being anxious, hopelessness and confusion. And also, the reason of anxiety can occur because of the pent-up subconscious moment against the fearful stimulant or generalization of stimulants (Morgan, 2004). Exam anxiety is one of the most outstanding situations that leads future-oriented anxiety mood for individuals. Negative thoughts lie behind the exam anxiety. The thoughts like “If I am not successful in the exam, my life will be ruined” mostly occupy many anxious students’ mind. Exam anxiety can be defined as “intense anxiety that hinders using the information, acquired before exam, effectively during the exam and brings about the decrease in academic success. In their research, Horwitz et al. (1991) found that studying hard for exam increases the students’ anxiety level and that can be seen in their speech or that also increases the risk of making mistakes in exams. People take many exams during their lives. The exams that start in primary schools continue in elementary and high schools in many countries like in Turkey. Exams that are related to the careers are taken in some occupational groups like profession of teacher. From primary school to years of higher education, even after graduating from higher education, central exams that we can face results in anxiety and hopelessness on the

individuals that are taking the exams (Tümkeya et al., 2007). Getting into higher education is like turning over a new leaf for individuals in their lives. A big hurdle for higher education is

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crossed by individual and now he or she is in the final phase to get a job. But with getting into higher education anxiety of students does not finish, and plans about future and completing their education lead to other anxiousness. Especially the students in their senior years are in their most important transition period in terms of their conditions. Because completing their education and beginning of their career or unemployment come into question (Akkaya, 1999).

Starting their jobs for students who graduated from faculties of education is a difficult period like the other students who are graduated from many other faculties because many internal or external factors can be obstacle for pre-service teachers to start working as a teacher. Even if individual becomes academically successful with accomplishing all the personal liability and takes the central exam that will make appointment to be teacher, he or she needs to be taking the education of the department that will be appointed or needs to get enough mark for the contingent number that will be appointed (Özsarı, 2008). The biggest future and career-oriented anxiety of the pre-service teachers in Turkey is about the problems of appointment and the Public Personnel Selection Examination that is held before the occupation (Kızılcıaoğlu, 2003; Tümkaya et al., 2007; Baştürk, 2007). The exam is held by The Ministry of National Education for the pre-service teachers who want to work at state schools in terms of the needs and the appointment of teachers is done in accordance with the exam that is held. Among the pre-service teachers who do not take the exam or do not get enough mark or who graduate from a not-needed branches are seeking for job opportunities in private sector (Özoğul et al., 2005). In this rocky road, pre-service teachers take courses to be successful in Public Personnel Selection Examination, cancel many of their plans and hobbies, reduce the time that they spend with their friends and make effort to get an enough mark in the exam but getting a specific high mark in the exam is not enough to start working at state school, it is also important to get into a specific quantile in terms of ranking branches (Ergün, 2005).

In the research done by Sezgin & Duran (2011) they stated that Public Personnel Selection Examination that is the criteria for appointment of pre-service teachers is a period that leads to anxiety in families and pre-service teacher. The uncertainty of pre-service teachers' appointments leads to feeling of dissatisfaction of life and feeling of deficiency for struggling for being successful (Şar et al., 2012).

Because of these reasons, the main purpose of the research is to detect the anxiety level of the senior students in the faculty of education to the central exam. As parallel to this purpose, the questions that the research is searching answers for are these.

1. Do the pre-service students in faculty of education have future anxiety that is “central exam-oriented”?
2. Does the anxiety level of the pre-service about Public Personnel Selection Examination (KPSS) has significant differences according to:
 - Gender
 - Department
 - Cumulative grade score average
 - Socio-economic status
 - Number of siblings
 - Types of high school graduated from ?

3. Are there correlations between Pre-service Teachers' Central Exam Anxiety and independent variables ?

2. Method

Survey method was used in the research. "Correlational scanning method is a method that aimed to detect the level or the existence of change in two or more variables" (Karasar, 2007). In the research, the exam anxiety level of the Faculty of education's senior students about the Public Personnel Selection Examination, in which the future anxiety is intense, was analyzed.

2.1. Sample and Data collection tool

The sample of the research was consisted of the senior students who are studying in the Hendek Faculty of Education, 2018-2019 academic years in Sakarya. 232 students involved in the research sample in terms of rules of neutrality. In the research, Personal Information Form that was based on the form prepared by Ozsarı (2008) was used. In the form Students' ages, genders, departments, economic status, types of high schools graduated from and numbers of siblings were examined. Teacher Central Exam Anxiety Survey created by Özsarı (2008) is a scale, composed of 15 items, the second of which is reversing entry and in quintet likert scale. For total values for the sub-dimensions of scale and data analysis process; The data that is coded with numbers as "Strongly Agree" 1, "Agree" 2, "Neither Agree Nor Disagree" 3, "Disagree" 4, "Strongly Disagree" 5 were entered to SPSS and from the scale three different scores as exam perception sub-dimension, time sub-dimension and total score were obtained. Information Form and Survey, used in the research, were randomly applied to the 232 preservice teachers who study different department at Sakarya University Faculty of Education in their senior year, 2018-2019 academic year.

Two different data collection tools (Personal Information Form and the Anxiety Scale of Central Exam of Teachers) were used in research. "Personal Information Form" is a form that was composed of seven questions and prepared by the researchers to get information about the students in sample group. In the form, students' gender, age, types of graduated high school, cumulative grade score average, economic status, department number of siblings were examined. The scale that was improved by the researcher is consisted of two subdimensions. The items in the first sub-dimension states the content of Public Personnel Selection Examination and, as a whole, the opinions of pre-service teacher about the matters of the exam. Because of that the researcher named the first sub-dimension is as "exam perception sub-dimension." The items in the second sub-dimension reflect the opinions about the

"period" in preparation of Public Personnel Selection Examination and after the exam. Because of that the second sub-dimension was named as "time subdimension." Some of the items in the Exam Anxiety Sub-dimension are "I feel ready for the exam for teacher" "I feel uneasy when I think there are many subjects for the exam." Some of the items in time subdimension are "The priority of this last year is to study for exam" "I do not want to attend the faculty classes and I want to study for the exam."

“The Anxiety Scale of Central Exam of Teachers” is a scale that was improved by Ismail Ozsarı (2008) in order to measure the anxiety level of pre-service teachers about the Public Personnel Selection Examination that pre-service teachers take to be a teacher at a state school. The owner of the scale first calculated the reliability of Chronbach’s alpha for 15 items and found $r = 0,861$, and also was calculated as $r = 0,840$ with the Guttman Split-Half technique. These findings show the reliability for the scale. The final state of the scale ,consisted of 15 items, was applied to the group consisted of 31 individuals on 15 days intervals and the re-test values were obtained on the basis of total score. For example the total score continuity coefficient was found as $r = 0,866$ ($p < .01$), this findings supports that the scale is reliable. In addition to that, 1. and the 5. items under the exam anxiety subdimension were coded as reverse. By categorizing cumulative grade score averages that belong to pre-service teachers, the numerical values are detected as; between 0.00 and 1.80 is FF, between 1.81 and 2.49 is DD, between 2.50 and 2.99 is CC, between 3.00 and 3.49 is BB, between 3.50 and 4.00 is AA.

3. Results

In the current research, 200 reliable data that was obtained from 232 senior students from Faculty of Education was installed into computer in order to do analyzing after necessary regulating and removing the deficient/incorrect data. After that section, data was examined whether they meet the preconditions of the given parametric tests with the Skewness and Kurtosis (normal distribution of the data) values. In terms of total perception dimension, the Skewness value is observed with the difference between .485 and .172 and Kurtosis values is observed between .110 and .342. In terms of time sub-dimension, the Skewness value is observed with the difference between .791 and .172 Kurtosis values is observed between 1,320 and .342. If Kurtosis and Skewness values are between -1.5 and +1.5, it is accepted as normal distribution (Tabachnick & Fidell, 2013). Then in the research, the level of reliability about the teachers’ central exam anxiety survey is found $\alpha = .735$

In order to detect whether the scale is used in two dimension structure or not, for Confirmatory Factor Analysis was done. As it is understood from the diagram below, the scale has a structure with 15 items and 2 factors. LISREL programmes was used for Confirmatory Factor Analysis. In obtained data, RMSE values were examined. RMSEA is another criterion that begins to be admitted as “the most informative fit indices.” RMSEA shows how the model fits the sample covariance matrix. The RMSEA values are evaluated as; the values below 0.03 are “perfect fit”, the values below 0.05 are “dense fit” or “good fit”, the values 0.07 and below

are “good” or “acceptable fit”, values between 0.08 and 0.10 are “mediocre fit” , values above 0.10 are “weak fit” (Arbuckle, 2007; Brown, 2008; Byrne, 2010; Hooper, 2008; MacCallum, 1996; Steiger, 2007). χ^2/df value was calculated as 3,07. But a consensus was not reached about which threshold would be taken into consideration. While some sources admit high value like $\chi^2/df = 5$ (Wheaton et al., 1977), some sources admit low value like $\chi^2/df = 2$ (Tabachnick & Fidell, 2007: 285). And also some sources admit this value (χ^2/sd) as; between “2 – 3” is “good”, between “4 – 5” is “acceptable” (Kayacan & Gültekin, 2012; Kline, 2011). And also at the end of the research, the survey that belongs to Ozsarı was translated into English by English teachers and was enclosed herewith.

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It is found that with the overwhelming percentage, %74 of 200 individuals' age who participated in research, is between 21-23. 137 (%68,5) of the participants are female and 63 (%31,5) of the participants are male. In items of the departments of the participants the branches are seen as respectively; Branch of Elementary Mathematics Teaching 39, Branch of Psychological counseling and guidance 28, Branch of Primary school teaching 25, Branch of preschool teaching 19, Branch of Turkish teaching 15, Branch of Computer and Technology Teaching 14, Branch of English Teaching 11. When the cumulative grade score averages of the participants are examined it is found that the minimum grade is 2,15 and the maximum grade is 3,93. When we examine the data of other independent variable that we named as economic status, it is found the just %1 of the participants' economic status is very good, %31,5 is good, %65 is standard and %2,5 is bad. When data about the independent variable of sibling number is examined, it is found that %7 of participants are only child, %37,5 are two siblings, %38 are three siblings, %17,5 are four or more siblings. In the last independent variable that is the type of graduated school, it is stated that over half of the participants (%52,5) are Anatolian High school Graduate. Respectively, this school type is followed by Anatolian Teacher High School (%15,5), Vocational and Technical Anatolian High School (%13) and Religious Vocational High School (%8).

Table 1: Mean and Standard Deviation Value of Participants

	Time Dimension	Dimension of Exam Perception
Mean	2,2358	2,3889
Std. Deviation	,65617	,60827
Minimum	1,00	1,11
Maximum	4,83	4,33

Scores that Teachers got from Dimensions of Central Exam Anxiety Survey are given above. According to this, arithmetic mean scores of time dimension is calculated as 2,2358 , standard deviation is ,65617 and arithmetic mean of Perception Dimension is 2,4278 standard deviation is ,55458.

Table 2. The Frequency Values of Time and Exam Perception Sub-Dimensions

Items	Strongly Agree		Agree		Neither Agree Nor Disagree		Disagree		Strongly Disagree			SD
	f	%	f	%	f	%	f	%	f	%		
Item 1	56	28,0	95	47,5	31	15,5	13	6,5	5	2,5	2,0800	,95822
Item 2	55	27,5	75	37,5	40	20,0	23	11,5	7	3,5	2,2600	1,09011
Item 3	62	31,0	72	36,0	20	10,0	29	14,5	17	8,5	2,3350	1,28492
Item 4	44	22,0	93	46,5	29	14,5	29	14,5	5	2,5	2,2900	1,04468
Item 5	47	23,5	49	24,5	30	15,0	59	29,5	15	7,5	2,7300	1,30984
Item 6	91	45,5	88	44,0	11	5,5	6	3,0	4	2,0	1,7200	,85748
Item 7	24	12	52	26,0	70	35,0	43	21,5	11	5,5	2,8250	1,07244

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Item 8	56	28,0	107	53,5	26	13,0	9	4,5	2	1,0	1,9700	82614
Item 9	36	18,0	91	45,5	36	18,0	22	11,0	15	7,5	2,4450	1,13287
Item 10	58	29,0	83	41,5	29	14,5	25	12,5	5	2,5	2,1800	1,06455
Item 11	37	18,5	58	29,0	53	26,5	41	20,5	11	5,5	2,6550	1,15874
Item 12	53	26,5	91	45,5	26	13,0	27	13,5	3	1,5	2,1800	1,02118
Item 13	24	12,0	93	46,5	42	21,0	35	17,5	6	3,0	2,5300	1,01204
Item 14	36	18,0	81	40,5	38	19,0	33	16,5	12	6,0	2,5200	1,14286
Item 15	61	30,5	80	40,0	29	14,5	19	9,5	11	5,5	2,1950	1,13730

First six items, shown in table above, about Time Dimensions of Central Exam Anxiety were asked to the pre-service teachers and these pre-service teachers made evaluations about these attitudes. In terms of the answers that pre-service teachers gave, the arithmetic mean of all items changes between ($x = 1.720$) and ($x = 2.335$) and general arithmetic mean is calculated as ($x = 2.235$). It is seen that the answers that were given to the questions about Time Sub-Dimension focuses on “Agree”. With the mean of item 6 that is the minimum ($x = 1.720$), most of pre-Service teachers stated that they feel uncomfortable in their free times because they do not study for Public Personnel Selection Examination, with the choice “Strongly Agree”. With the mean of item five that is the maximum ($x = 2.335$), most of Pre Service teachers stated that they ignore some lectures in faculty because they will not be asked in the exam, with the choice “Agree”.

Last nine items, shown in table above, about Exam Perception Dimensions of Central Exam Anxiety were asked to the pre-service teachers and these pre-service teachers made evaluations about these attitudes. In terms of the answers that pre-service teachers gave, the arithmetic mean of all items changes between ($x = 1.970$) and ($x = 2.825$) and general arithmetic mean is calculated as ($x = 2.388$). It is seen that the answers that were given to the questions about Exam Perception Sub-Dimension focuses on “Agree”. With the mean of item 2 ($x = 1.970$) that is the minimum most of Pre -service teachers stated that they worry when they think that there are too many exam subjects, with the choice “Agree”. With the Exam Perception mean of item 1 ($x = 2.825$) most of Pre -service teachers stated that they hesitate about whether they will be successful in Public Personnel Selection Examination easily, with the choice “Neither Agree Nor Disagree”.

In order to calculate the difference between Cumulative Grade Score Average (CGSA) of Pre-service teachers and Central Exam Anxiety Sub-Dimension, Cumulative Grade Score Average was divided into five groups again. In new groups the numeric values are detected as; between 0.00 and 1.80 is FF, between 1.81 and 2.49 is DD, between 2.50 and 2.99 is CC, between 3.00 and 3.49 is BB, between 3.50 and 4.00 is AA and anova test was done and a significant difference was not found as statistically ($p > 0.05$).

When the other Anova results are examined it is seen that there is no significant difference between Time Dimension and independent variables of age, economic status, type of graduated school and number of siblings ($F(199) = 1,122 p > 0.05$). Anova results between Exam perception Dimension and all independent variables were examined and a significant difference is not detected ($p > 0.05$). And also, as a result of independent group t test that was done in order to detect whether there is a significant difference between Time and Exam Perception Dimension in terms of the genders of Pre-service Teachers, a



significant difference was not statistically detected ($t(198)=,585$; $p.>0.05$).

Table 3. Pearson Correlation Results That Was Done to Detect the Relation Between Pre-Service Teachers' Economical Status and Central Exam Anxiety Survey and Its Sub-Dimensions

		Exam Perception Sub-Dimension	Time Sub-Dimension	Total
Economic	r	-,058	-,142*	-,124
2,6900Status		2,3889	2,2358	2,3124
,53416	SD	,60827	,65617	,51872

** p<.01 *p<.05

In the sample, Pre-Service Teachers' Economic Status arithmetic Mean was found as 2.69. It can be said that the economical status of Pre-service teachers is generally medium-level. There is a significant difference and inverse correlation between Pre-Service Teachers' Economic Status and Central Exam Anxiety Survey. That is, the worse Pre-Service Teachers' Economic Status become, the greater their anxiety becomes about Public Personnel Selection Examination in Time Sub-Dimension. On the other hand, in other correlation analysis ,done between other independent variables and sub-dimensions, a significant correlation was not found.

4. Discussions and Suggestions

When the related area is examined, it is detected that there are results that match up with or contradict with the findings of the research. According to the findings obtained in Ozsari' research (2008), it is found out that the anxiety level of females to Public Personnel Selection Examination is higher than the anxiety level of males. And also in related area, some researches, in which the anxiety level of female pre-service teachers is higher that male preservice teachers in terms of different variation (Çakmak & Hevedanlı, 2005; Mergen., 2014; Saban et al., 2004; Taşgın, 2006). In research (2013) done by Çetin, it is found out that the anxiety level of males to Public Personnel Selection Examination, future and general is lower.

According to the research results, done by Akgün et al. (2007), it is found out that anxiety level of female pre-service teachers is higher.

On the other hand, in the research done by Basturk (2007) , Aküzüm et al. (2015) in order to detect how the level of pre-service teachers' anxiety about Public Personnel Selection Examination changes in terms of gender variable, it was found that the anxiety level of males is higher than anxiety level of females. According to the findings of the research, there is not a significant difference in anxiety level about Public Personnel Selection Examination in terms of gender variable. This result shows a difference with many orther research.

In addition to that, in the research done by Ozsari (2008), the finding that the variations like number of siblings, types of graduated high school of pre-service teachers do not affect the anxiety level of Public Personnel Selection Examination, shows a parallel with this research. According to the result of other research that shows the worse Pre-service teachers economic status become, the higher their anxiety level become in terms of time Dimension of Central Exam Anxiety Survey, a different but an expected result shows up.

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On the basis of this research results, the suggestions that are offered are; pre-service teachers expect support from their faculties for Public Personnel Selection Examination because whole program of senior students in the faculties are shaped in terms of Public Personnel Selection Examination. Because every teaching branch has their own department lectures, there are differences between the lectures that students take in their last year and content of Public Personnel Selection Examination. Because of these reasons, instead of completing their lectures in faculties with high grades, senior students focus on of Public Personnel Selection Examination and they expect understanding from their university teachers for their lectures in faculties for Public Personnel Selection Examination.

Pre-service teachers' feeling about that they have to study for Public Personnel Selection Examination or feeling under stress by thinking that their friends are studying more is a point that should be considered. While pre-service teachers' feeling of an obligation to study for is a psychological pressure, feeling of obligation to study more than their friends is another factor. Because of that, as an alternative to holding of Public Personnel Selection Exam after graduating from faculties of education, teachers appointment can be done according to the several exams done in different times by evaluation of these exams so feeling intense anxiety can be blocked.

The Pre-service teachers who graduated from teaching branches which are not appointed or appointed a few give up being a teacher and try different alternatives because their appointment will not be done or they show tendency to be individuals who have much anxiety or who study harder because there are few appointments for their branches. Because of this reason, in Faculty of Education ,acceptance of students to the departments which are not appointed or appointed few should be limited and in long-range plans should be done with balancing the student quota in Faculty of Education and the number of required teacher number in the future in terms of branches. Moreover, techniques of coping with the exam

anxiety should be taught to the Pre-service Teachers who have intense central exam anxiety and seminars about central exam anxiety should be given in Faculty of Education.

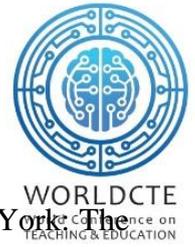
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