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RELATIONSHIPS BETWEEN TEST ANXIETY AND TEST-TAKING STRATEGIES

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ABSTRACT

Many studies on test anxiety, test performance, and test taking have performed, whereas only a few studies have dealt with the relationship between test anxiety and test-taking skills. This study aimed to examine relationships between test anxiety and test-taking strategies. The participants of the study were 237 high school students studying in two high schools in the city in the Western Black Sea region in Turkey. Multiple Regression Analyses was conducted to find out the predictors of test anxiety. The results of the study indicated that there were statistically significant low correlations between test anxiety and during-test, after-test. Furthermore, the results revealed that test-taking strategies were not important predictors of test anxiety of students.

Keywords: Test anxiety, Test-taking Strategies, Standardized tests, High School students

TEST KAYGISI VE TEST YANITLAMA STRATEJİLERİ ARASINDAKİ İLİŞKİLER

ÖZ

Test kaygısı, test performansı ve test yanıtlama stratejileri ile ilgili birçok çalışma yapılmıştır. Ancak test kaygısı ve test yanıtlama stratejileri arasındaki ilişki çok az sayıda araştırmada incelenmiştir. Bu çalışmada test kaygısı ile test yanıtlama stratejileri arasındaki ilişki incelenmiştir. Araştırma, Türkiye'nin Batı Karadeniz Bölgesinde yer alan bir şehirdeki iki lisede öğrenim gören 237 öğrenci ile yapılmıştır. Araştırmada test kaygısını yordayan değişkenleri belirlemek için çoklu regresyon analizi yapılmıştır. Araştırma sonuçları test kaygısı ile test yanıtlama stratejileri arasında anlamlı düşük bir ilişki olduğunu göstermektedir. Ayrıca araştırma sonuçları test yanıtlama stratejilerinin test kaygısını yordamada önemli değişken olmadığını ortaya koymaktadır.

Anahtar Sözcükler: Test kaygısı, Test yanıtlama stratejileri, Standart testler, lise öğrencileri

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1. INTRODUCTION

In Turkey, the students are selected and placed for undergraduate programs by centrally administered examination, which is prepared and administered by the Student Selection and Placement Centre in Turkey (ÖSYM, 2006). The examination aims to measure candidates' verbal and quantitative reasoning abilities for their selection and placement in higher education institutions in Turkey. It requires academic knowledge of Turkish language, basic mathematics, natural science, and social science in the high school curricula (ÖSYM, 2011). The students who take these tests for higher education commonly study for the exam themselves or take private courses in order to increase their knowledge of content. Content knowledge is a prerequisite, but not sufficient, for the success of the students in this test. Test preparation, test-taking strategies, and test anxiety are related factors which affect the test performance of students in test. Kubistant (1981) reported that test performance depends not only on content knowledge but also on cognitive and motivational preparation. In the literature, there are many studies investigating the relationships between test anxieties, test-taking skills, and test performance (Bornholt, 2002; Hong and Karstensson, 2002; Samson, 1985; Schutz and Davis, 2000; Tobias, 1979). The findings of these studies indicated that test anxiety lowered, whereas test-taking strategies positively affect the test performance of students. Tobias (1985) reported that test anxiety lowered the performance by reducing the cognitive capacity for task solution. The students who have content knowledge and test-taking strategies might have low test anxiety, thus their test performance can increase. Test anxiety can be reduced by training or exercises.

1.1. Test-taking Strategies

Selection systems increasingly include test content that students must study and learn during the preparation period before the exam. Test preparation is defined as a factor affecting test performance beyond the ability measured by the tests (Clause, Delbridge, Schmitt, Chan, and Jennings, 2001). Test preparation strategies comprise variables related to the adaptation of cognitive, metacognitive, and social learning strategies to the test preparation. For instance, during test preparation, students may rehearse information, create mnemonics to meet verbatim reproduction, generate questions, or reorganize learning materials when deep understanding is required (Broekkamp and VanHout-Wolters, 2007). Allalouf and Ben-Shakhar (1998) stated that one of the elements of test preparation is test-taking strategies. Test-taking means how the students start the test, how they use content knowledge for the test, as well as their test-taking plans (Paris and Winograd, 1990; Paris and Van Kraayenoord, 1992). Furthermore, Alderson (1990) reported that the test-taking behavior of the students involved how the students solve reading comprehension tests and what kind of strategies they use while they are solving the test questions. Students can use strategies such as narrowing their choices on items, properly checking their answers, skipping items, and keeping track of testing time (Paris, Lawton, Turner and Roth, 1991). Test-taking behavior and tactics are generally used to reach a specific goal. For example, a student may underline key words in test questions to focus on the test (Schutz and Davis, 2000). The literature indicated that high and low test achievers differed from each other in terms of test-taking strategies. For instance, high test achievers used more test-taking strategies such as reading test instruction, planning, understanding questions, and eliminating difficult questions than low achievers did (Kim and Goetz, 1993; Kitsantas, 2002; McClain, 1983; Parham, 1997). Test-taking

strategies positively affect the test performance of the students (Bornholt, 2002; Samson, 1985; Smith, 2002). For instance, Bornholt (2002) investigated the effects test-taking strategies have on test performance. The results showed that there was a positive relationship between the test-taking strategies and the test performance of the students. The results also showed that some test-taking strategies affected the test performance more than other strategies. Thus, it is clear that students should select and use effective test-taking strategies in order to increase their test performance. Samson (1985) examined the effects of teaching test-taking strategies on the academic achievement of elementary and high school students. The results in the study indicated that the students in the experimental group had higher academic achievement than those in the control group. In light with the findings of the above-mentioned literature, test-taking strategies are an essential factor affecting test performance. Test anxiety is the other factor which will affect the test performance of the students.

1.2. Test Anxiety

Test anxiety has long been a concern of researchers, teachers, and educators. Test-anxious children are more likely to receive lower scores, repeat a grade, and perform more poorly on tasks requiring next learning (Beidel, Turner & Troger, 1994; Birenbaum & Pinku, 1997; DeRosa & Patalano, 1991; Zeidner, 1998). Tobias (1979) reported that 20% of test-anxious students drop out of school because of repeated academic failure.

Lewis (1970: 63) defined anxiety as “an unpleasant emotion experienced as dread, scare, alarm, fright, trepidation, horror or panic.” Spielberger (1966) reported that anxiety consists of a two-dimension construct: state and trait anxiety. State anxiety is defined as a transitory emotional state that varies in intensity and fluctuates over time. It is subjective and consciously perceived feelings of tension and apprehension. Trait anxiety refers to relatively stable individual differences in anxiety. It is a reaction to stimulus situations as dangerous and threatening (Spielberger, 1972). The traditional definitions of trait and state test anxiety are used to define test emotions more generally. Test anxiety is a situation-specific personality trait (Spielberger, Anton & Bedell, 1976). Zeidner (1998) defined test anxiety as “anxiety subjectively relating to taking tests and exams, including anxiety related to the threat of failing an exam and is associated with negative consequences.”

There are studies on investigating the factors related to the test anxiety (Aydin, 2013; Hayes and Embretson, 2013; Hong and Karstensson; 2002; Shobe, Brewin and Carmack, 2005; Zeidner, 1998). For example, Nunez-Pena, Suarez-Pellicioni, and Bono (2013) examined the effects of math anxiety on students' success in higher education. The results showed that low performance on the course was related to math anxiety. Hong and Karstensson (2002) examined the relationships among state test anxiety and its possible antecedents by the structural equation model. The variables in the model included gender, math ability, trait test anxiety, statistics achievement, and perceived test difficulty. The results of the study showed that female students reported higher trait test anxiety and statistics course anxiety than did males. Also, the results indicated that both trait and statistics test anxiety were related to the students' math ability, statistics achievement, and perceived test difficulty. Students with low math ability perceived statistics course as difficult, which in turn strongly influenced their statistics course anxiety. Shobe, Brewin, and Carmack (2005) examined the effects of a simple visualization exercise on

test anxiety. The results showed that the visualization exercise reduced test anxiety in easy and difficult test conditions. Also, the results showed that the use of simple, feasible, and sustainable exercises was effective for reducing test anxiety. Dykeman (1993) examined the effects of a preventive intervention program for first-time university students participating in a cognitive behavioral treatment on test anxiety and study skills. The results showed that the students belonging to the treatment group were more likely to have less test anxiety and better study skills than the students in the control group.

It has long been assumed that test anxiety impedes students' recall of prior learning on examination. Test anxiety weakens performance by means of reducing the cognitive capacity for task solution. However, test anxiety can have only an indirect effect of learning by impacting on the cognitive process. Test-taking skills virtually promote learning and test performance (Tobias, 1985). Tobias (1985) implied that the lower test scores of test-anxious students are reasoned by inadequate study habits and test-taking skills rather than test anxiety. A low test performance of the students is caused by deficiencies in students' test-taking skills and a high test anxiety of students during tests is likely caused by students' awareness of doing poorly.

The relationships between test anxiety, test-taking skills, and test performance have been examined in the literature. For example, Bruch (1981) examined the test-taking strategies of the groups which had high and low test anxiety by the questionnaire. The results showed that test-taking strategies were significantly related to the college achievement of the students, whereas anxiety was unrelated to school achievement. Bruch, Juster, and Kafowitz (1983) investigated the relationships between anxiety, test-taking skills, and test performance. The results indicated that test-taking strategies significantly affected performance on simulated essay and multiple choice examinations. Unexpectedly, test performance was not related to students' anxiety. This result contradicted with the results of the previous studies, which showed that test-anxious students have greater cognitive interference. Hayes and Ebmretson (2013) examined the impact of personality and test conditions on mathematical test performance. The findings indicated that individuals with high test anxiety were more vulnerable to the negative impact of cognitive distractions on math test performance. Kirkland and Hollandsworth (1980) compared the effects of treatments to reduce test anxiety and training for test-taking skills. The results showed that the group taking training on test-taking skill reported less attention anxiety reduction treatments. Also, the result implied that both test anxiety and test-taking skills influenced the test performance of the students. In the literature, there are many studies examining the relationships between test performance and test anxiety and test-taking skills. According to the literature on relationships between test anxiety, test-taking strategies, and test performance, it is expected that test anxiety would be related to the test-taking strategies. However, there are a few studies investigating the relationships between test anxiety and test-taking strategies. The hypothesized model indicating relationships between test anxiety and test-taking strategies was shown in Figure 1

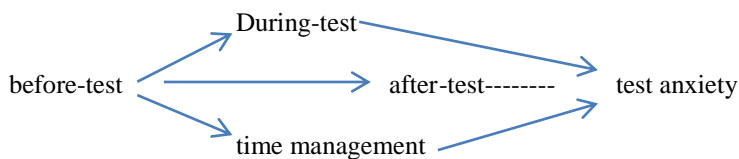


Figure 1. The hypothesized model of test anxiety and test-taking strategies

According to the model in Figure 1, it was assumed that there was a relationship between test anxiety and test-taking strategies. The model indicates that before-test is related to during-test, time management and after-test strategies. Moreover, before-test, during-test and time management factors are related to test anxiety. It means that these factors have impact on test anxiety. However, after-test factor is not related to test anxiety. It is expected that test-taking strategies will positively influence the test anxiety of the students taking tests. The students, who apply test-taking strategies before the test and during the test, as well as time management strategies, might have less test anxiety. As a result, it was hypothesized that the students who use test-taking strategies have less test anxiety than the students who do not effectively use test-taking strategies. It means that the students who know test-taking strategies can control and reduce test anxiety. The test-anxious students spent a restless night, felt distaste, and had mental confusion before the test (Ringeisen and Buchwald, 2010; Stowell, Tumminaro and Attarwala, 2008). This study aimed to examine relationships between test anxiety and test-taking strategies. The research question of this study is the following: What are the relationships between test anxiety and test-taking strategies?

2. METHOD

2.1. Participants

The participants in this study were 237 high school students from two high schools in the Western Black Sea region in Turkey. All of the students took the Entrance Examination to Higher Education (YGS), which is a test administered for selecting students for undergraduate programs in Turkey by the Student Selection and Placement Centre in Turkey (ÖSYM). 52.3% (n=124) of the students were female, 47.7% (n=113) were male. The age average of the students was 18.27 and the standard deviation was 0.95. All of the students reported that they prepared for this test by means of coaching, such as taking private courses, seeking help from their teachers, parents and school mates, or studying on their own. The social and cultural backgrounds of students were similar. All the students voluntarily participated in the research.

2.2. Data Collection Instruments

2.2.1. Test-taking strategies scale

The data on test taking strategies were collected by “Test-Taking Strategies Scale” developed by Dodeen (2008). The scale consists of four factors which are before-test (8 items), time management (12 items), during-test (6 items), and after-test (5 items). The scale ranges from 1 (never) to 5 (always). Cronbach’s alpha values for the four categories

were as follows: before-test 0.71, time management 0.75, during-test 0.76, and after-test 0.81.

All the items in the scale were translated into Turkish by the author, measurement and evaluation specialists, and English language teachers through cross-checking and back-translation processes. The disagreements on the items were solved through discussion sessions planned by the author. The agreement rate on the items of scale was 100%. Confirmatory Factor Analyses (CFA) was conducted to confirm the four sub-dimensions of the scale in the sample of the study. However, it was observed that five items in the scale had non-significant parameter estimations ($p > .05$): two items from before-test sub-dimension, two items from time management sub-dimension, and one item from during-test sub-dimension were excluded from the analysis. These items were “I drink lots of coffee or soda drinks before the test”, “When other students leave the test room, I feel I should leave it too”, “I mark the question that I do not know”, “If I do not know the answer, I make some intelligent guesses”, “If something is unclear, I ask for clarification”. As a result the goodness-of-fit statistic significantly improved. The goodness-of-fit statistic: The rate of chi-Square/df= 1.82<2, root-mean-square error of approximation (RMSEA=.05<.08), comparative-of-fit index (CFI=0.91>0.90), goodness-of fit index (GFI=0.83>0.80), adjusted goodness-of-fit index (AGFI=0.93>0.90) is, normed-of-fit index (NFI=0.84<0.90). The scale with 26 items was conducted in the present study. The goodness-of-fit statistic results showed that the scale was convenient for the present study.

2.2.2. Test-anxiety scale

The data on test anxiety were collected by “Test Anxiety Inventory (TAI)” developed by Spielberger, Gorsuch, Lushene, Vagg and Jacobs (1983). The TAI is a 20-item Likert-type scale with four response categories from strongly disagree to strongly agree. The total score of TAI ranged from 20 to 80. Low total scores are associated with low test anxiety. The Cronbach’s alpha reliability coefficient for the 20-item TAI was .93. All the items in the scale were translated into Turkish by the author, measurement and evaluation specialists, and English language teachers through cross-checking and back-translation processes. The disagreements on the items were solved through discussion sessions planned by the author. The agreement rate on the items of scale was 100%. The Confirmatory Factor Analyses (CFA) was conducted to confirm the four sub-dimensions of the scale in the sample of the study. The goodness-of-fit Statistics: The rate of chi-square/df=1.59<2, root mean square error of approximation (RMSEA=.05<.08), comparative-of-fit index (CFI=0.97≥.90), goodness-of-fit index (GFI=0.90≥0.80), adjusted goodness-of-fit index (AGFI=0.87<0.90) is, normed fit index (NFI=0.94≥0.90). The goodness-of-fit statistic results showed that the scale was convenient for the present study.

The Test-taking Strategies and Test Anxiety Scales were conducted to the students after the YGS exam.

2.3. Data Analysis

Multiple Regression Analyses was conducted to find out the predictors of test anxiety. Multiple regression is one type of complex associational statistical method. The purpose of multiple regression is to predict an interval dependent variable from a combination of

several independent/predictor variables (Leech, Barrett and Morgan, 2008). In this study, the test-anxiety as dependent variable could be predicted from the combination of the independent variables such as before-test, time management, during-test and after-test.

3. RESULTS

The descriptive statistics and Intercorrelations for test anxiety and predictor variables were presented in Table 1.

Table 1.
Means, Standard Deviations, and Intercorrelations for Test Anxiety and Predictor Variables

Variable	<i>M</i>	<i>SD</i>	1	2	3	4	5
Test Anxiety (1)	49.70	10.88	1	.09	.00	.13*	.20**
Predictor variable							
Before-test (2)	20.44	3.76		1	.30**	.06	.32**
Time management (3)	34.33	5.31			1	.49**	.43**
During-test (4)	27.02	3.38				1	.53**
After-test (5)	15.97	4.19					1

* $p < .05$; ** $p < .01$

The correlation matrix in Table 1 indicated that there were statistically significant low correlations between test anxiety and during-test ($r = .13$; $p < .05$), after-test ($r = .20$; $p < .01$). However, there were no significant correlation between test anxiety and before-test ($r = .09$, $p > .05$), time management ($r = .00$, $p > .05$). Furthermore, the results showed that there are moderate correlation between predictors, independent variables, with each other; that is, before-test and time management ($r = .30$; $p < .01$), before-test and after-test ($r = .32$; $p < .01$), time management and during-test ($r = .49$; $p < .01$), time management and after-test ($r = .43$; $p < .01$), during-test and after-test ($r = .53$; $p < .01$). However, there was no significant correlation between before-test and during test ($r = .06$; $p > .05$).

Table 2.
Multiple Regression Analysis for Before-test, Time management, During-test and After-test Predicting Test Anxiety

Variable	<i>B</i>	<i>SEB</i>	β	<i>t</i>	<i>p</i>
Before-test	.21	.20	.07	1.05	.295
Time management	.31	.15	.15	1.98*	.049
During-test	.31	.26	.09	1.17	.243
After-test	.51	.21	.19	2.45*	.015

$R = .24$; $R^2 = .06$; $F(4;232) = 3.77$; $p = .005$

* $p < .05$

The multiple regression analysis results in Table 2 showed that the correlation coefficient (R), using all the predictors, was .24 and R^2 was .06, meaning that 6% of the variance in test anxiety might be predicted from before-test, time management, during-test and after-test strategies. The ANOVA results showed that $F = 3.77$ and was significant. This indicates that the combination of all predictors significantly predict test anxiety. The t values in Table 2 indicated that time management and after-test were the only variables

that are significantly adding anything to the prediction when the other variables are considered.

4. DISCUSSION

This study examined the relationships between test anxiety and test-taking strategies. The results of the study indicated that there were statistically significant low correlations between test anxiety and during-test, after-test. However, there were no significant correlation between test anxiety and before-test, time management. The multiple regression analysis results revealed that 6 % of the variance in test anxiety might be predicted from test-taking strategies. Time management and after-test were the only predictors of test anxiety. The hypothesized model, the students who have test-taking strategies and skills would have low test anxiety, was not supported by the data. It means that test-taking strategies do not affect test anxiety of the students. The findings of this study were parallel with the literature, which implied that test anxiety was not related to the test-taking strategies and skills of the students. For example, Bruch (1981) reported that test-taking strategies were significantly related to the college achievement of the students whereas anxiety was unrelated to test-taking strategies. Hong and Karstensson (2002) examined the relationships among state-test anxiety and its possible antecedents by the structural equation model. The results indicated that both trait and statistics test anxiety were related to the math ability, statistics achievement, perceived test difficulty. However, test-taking skills were not included as a factor affecting anxiety. Also, Kirkland and Hollandsworth (1980) examined the effects of reduction test anxiety treatments and training test-taking skills. The finding of the study showed that the test anxieties of the students were not related to the test-taking skills of students.

The findings of the study indicated that there was no significant relationship between test anxiety and before-test strategy. In other words, the findings of the study pointed out that before-test strategies such as sleeping, nutritional behaviors, and cognitively preparing were not a predictor of test anxiety. Factors such as content knowledge, previous test performance, and cognitive capacity of students might be related to the test anxiety of the students (Bruch, 1981; Kirkland and Hollandsworth, 1980; Shobe, Brewin and Cormach, 2005). Tobias (1985) reported that test anxiety lowered the performance by reducing the cognitive capacity for task solution. The students taking tests should improve content knowledge and cognitive capacity for controlling their test anxiety.

The correlation results of the study indicated that there was no relationship between test anxiety and time management. However, the regression analysis results showed that time-management might be a predictor of test anxiety. The students who have test anxiety might inefficiently spend more testing time. They might spend more time for a question than what is enough to solve the problem in a task during a test. Farr, Pritchard, and Smitten (1990) emphasized that most of the students taking standardized tests directly focused on the test questions and try to find the answers. Students taking standardized tests have to finish the test on due time. Hence, they try to answer the questions as soon as possible and they do not spend any time for planning before they begin to solve the questions. Time management strategies in tests might be considered a factor for test anxiety of the students.

One of the most interesting findings of the study was that there was no relationship between test anxiety and during-test strategy. It means that during-test strategies were not

predictor of the test anxiety of the students. This result was not consistent with the literature, which implied that test anxiety constrained the cognitive process and recall of previous knowledge (Tobias; 1985; Zeidner, 1998). It is considered that solving a question in a test might mainly depend on other factors such as content knowledge, test preparation, and test-taking strategies rather than test anxiety of the students.

The result of the study showed that after-test strategy was related to test anxiety. The hypothesized model, the after-test factor have not impact on test anxiety, was not supported by the data. It means that after-test strategy might be predictor of test anxiety. In this case, test anxiety might be related to the after-test strategy, which includes fulfilling deficiency of learning and test-preparation. Students who solve the learning problems and prepare for tests in future might take control their test anxiety and improve their test performance.

5. CONCLUSION AND RECOMMENDATIONS

In conclusion, the findings of the present study indicated that test-taking strategies and skills were not important predictors of test anxiety of students. There might be many factors (e.g. previous test performance, content knowledge, test environment, test difficulty, testing time) affecting the test anxiety of the students. Students who attend tests should consider all of these factors in order to control test anxiety. Researchers should investigate the effect of these factors on test anxiety. Moreover, the findings of some experimental studies in the literature (Shobe, Brewin and Carmack, 2005; Dykeman, 1993) demonstrated that there were relationships between test anxiety, test-taking strategies, test motivation, and test performance. Researchers interested in test anxiety and test-taking should take into account the effects of test-taking, test motivation, and test anxiety on the test performance of the students taking the tests. Finally, the study should be repeated, with bigger samples taking tests in Turkey.

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GENİŞ ÖZET

1. GİRİŞ

Türkiye’de öğrenciler lisan programlarına Öğrenci Seçme ve Yerleştirme Merkezi (ÖSYM) tarafından merkezi sınav ile seçilmekte ve yerleştirilmektedir. Bu sınavlarda öğrencilerin lise programında yer alan Türkçe dil bilgisi, temel matematik, fen bilimleri ve sosyal bilimler ile ilgili bilgileri ölçülmektedir. Öğrenciler sınavlarda başarılı olmak için içerik bilgilerini arttırmaya yönelik bireysel olarak veya özel dersler alarak hazırlanmaktadır. Sınavlarda başarılı olabilmek için içerik bilgisi önemlidir ancak yeterli olmamaktadır. Test hazırlık ve yanıtlama stratejileri, test kaygısı öğrencilerin testlerdeki performansları ile ilişkili faktörler olarak görülmektedir. Kubistant (1981) test performansının sadece içerik bilgisine bağlı olmadığını aynı zamanda bilişsel ve motivasyon açısından iyi bir hazırlığa bağlı olduğunu belirtmektedir. İlgili literatürde test performansı ile test yanıtlama becerileri ve test kaygısı arasındaki ilişkileri inceleyen bir çok çalışma bulunmaktadır (Bornholt, 2002; Hong ve Karstensson, 2002; Samson, 1985; Schutz ve Davis, 2000; Tobias, 1979). Bu araştırmaların sonuçları, test kaygısının öğrencilerin bilişsel kapasitelerini kullanmayı engelleyerek test performansını düşürdüğünü buna karşın test yanıtlama stratejilerinin test performansını arttırdığını ortaya koymaktadır. İçerik bilgisine sahip olan ve test yanıtlama stratejilerini kullanan öğrenciler daha düşük test kaygısına sahip olabilir ve bunun sonucunda da test performansları artabilir. Konu ile ilgili literatür sonuçlarına dayalı olarak öğrencilerin test öncesi hazırlık stratejilerini kullanma durumlarının test sırası, test sonrası stratejileri ve zaman yönetimi stratejileri ile ilişkili olduğu düşünülmektedir. Ayrıca test öncesi, test sırası ve zaman yönetimi stratejilerinin test kaygısı ile ilişkili olduğu ancak test sonrası stratejilerin test kaygısı ile ilişkisinin olmadığı düşünülmektedir. Bu araştırmada literature dayalı olarak; test yanıtlama stratejileri olarak adlandırılan test öncesi, test sırası, test sonrası ve zaman yönetimi stratejileri ile test kaygısı arasındaki ilişkiye yönelik oluşturulan teorik model test edilmiştir. Araştırmanın amacı test yanıtlama stratejileri ile test kaygısı arasındaki ilişkiyi ve test kaygısını yordayan test yanıtlama stratejilerini belirlemektir.

2. YÖNTEM

Araştırma, Türkiye’nin Batı Karadeniz Bölgesinde yer alan iki genel lisede öğrenim gören 237 öğrenci ile yapılmıştır. Araştırmanın katılımcıları, üniversiteye giriş için ÖSYM tarafından yapılan Öğrenci seçme ve Yerleştirme sınavlarına katılmış olan öğrencilerdir. Araştırmaya katılan tüm öğrenciler sınavlara özel ders alarak, öğretmenlerinden, anne-babalarından, arkadaşlarından yardım alarak ve kendi kendilerine hazırladıklarını belirtmişlerdir. Öğrencilerin %52, 3’ü bayan, %47,7’si erkektir. Tüm öğrenciler araştırmaya gönüllü olarak katılmışlardır.

Araştırmada öğrencilerin test yanıtlama stratejilerini ölçmek için Dodeen (2008) tarafından geliştirilen “Test Yanıtlama Stratejileri Ölçeği” kullanılmıştır. Ölçek test öncesi, test sırası, test sonrası ve zaman yönetimi stratejilerini içeren dört boyuttan oluşmaktadır. Ölçek, 5’li Likert tipindedir. Ölçeğin Türkçe’ye çevirisi ve adaptasyon çalışması araştırmacı tarafından yapılmıştır. Ölçeğin adaptasyon çalışması sonrasında 5 maddesi uygun istatistiksel değerler taşımadığı için çıkarılmıştır. Ölçeğin alt boyutlarının

Cronbach Alpha güvenilirlik değerleri 0.71 ile 0.81 arasında değişmektedir. Ölçeğin Türkçe versiyonunun uygun istatistiksel değerler taşıdığı belirlenmiştir.

Öğrencilerin test kaygılarını ölçmek için Spielberger, Gorsuch, Lushene, Vagg ve Jacobs (1983) tarafından geliştirilen “Test Kaygısı Envanteri” kullanılmıştır. Envanter 4 seçenekli Likert tipinde olup 20 maddeden oluşmaktadır. Envanterin Türkçe’ye çevirisi ve adaptasyonu araştırmacı tarafından yapılmıştır. Türkçe’ye adaptasyon çalışması sonucunda tüm maddelerin istatistiksel olarak uygun değerler taşıdığı ve uyumlu olduğu bulunmuştur. Envanterin Cronbach Alpha güvenilirlik değeri 0.93 olarak bulunmuştur. Araştırmada kullanılan tüm ölçekler öğrenciler sınava girdikten sonra uygulanmıştır.

Araştırmada test yanıtlama stratejileri ile test kaygısı arasındaki ilişkileri belirlemek için Pearson momentler çarpımı korelasyon katsayısı hesaplanmıştır. Ayrıca test kaygısını ortaya çıkaran yordayıcı değişkenleri belirlemek için ise çok regresyon analizi yapılmıştır. Araştırmada test kaygısı bağımlı değişken, test öncesi, test sırası, test sonrası ve zaman yönetimi stratejileri ise yordayıcı bağımsız değişkenler olarak tanımlanmıştır.

3.BULGULAR

Araştırmada test kaygısı ile test yanıtlama stratejileri arasındaki ilişkiyi belirlemek için yapılan korelasyon analizi sonuçları şunları bulguları ortaya koymaktadır: Test kaygısı ile test sırası ve test sonrası stratejileri arasında istatistiksel olarak anlamlı ancak düşük düzeyde bir ilişki bulunmuştur. Ancak araştırma sonuçları, test kaygısı ile test öncesi ve zaman yönetimi stratejileri arasında istatistiksel olarak anlamlı bir ilişki olmadığını ortaya koymaktadır. Ayrıca araştırma sonuçları, yordayıcı değişkenlerin kendileri arasında istatistiksel olarak anlamlı ve orta düzeyde ilişkiler olduğunu ortaya koymuştur.

Araştırmada bağımlı değişkeni yordayan değişkenleri belirlemek için yapılan çoklu regresyon analizi sonuçlarına göre ise tüm değişkenlerin birlikte test kaygısını anlamlı olarak yordadığını ortaya koymaktadır. Değişkenler tek tek ele alındığında ise sadece zaman yönetimi ve test sonrası stratejilerinin test kaygısını anlamlı yordayan değişkenler olduğu bulunmuştur.

4.TARTIŞMA

Araştırmanın sonuçları test kaygısı ile test sırası ve test sonrası stratejileri arasında ilişki olduğunu ancak test kaygısı ile test öncesi ve zaman yönetimi stratejileri arasında bir ilişki olmadığını ortaya koymuştur. Araştırmada tüm test yanıtlama stratejilerinin birlikte test kaygısı ile ilgili varyansı % 6 düzeyinde açıkladığı bulunmuştur. Bu sonuçlara göre öğrencilerin test yanıtlama stratejilerinin test kaygılarını yordayan değişkenler olduğu yönünde oluşturulan teorik model araştırma verileri tarafından doğrulanmamıştır. Buna göre test yanıtlama stratejilerini kullanma durumunun test kaygısını etkilemediği söylenebilir. Araştırmanın sonuçları test kaygıları ile test yanıtlama stratejileri arasında bir ilişki olmadığını (Bruch, 1981; Kirkland ve Hollandsworth, 1980) ve test yanıtlama stratejilerinin test kaygısını etkileyen bir faktör olmadığını (Hong ve Karstenson, 2002) ortaya koyan literatür sonuçları ile paralellik göstermektedir. Araştırmanın en ilgi çekici sonuçlarından birinin test kaygısı ile test sırasında kullanılan stratejiler arasında ilişki olmamasıdır. Bu sonuç test kaygısının test sırasında öğrencilerin bilişsel süreçlerini etkileyerek, bilgileri hatırlamalarını zorlaştırdığı ve test yanıtlama stratejilerini

kullanmalarını engellediđi yönündeki araştırma bulguları (Tobias, 1985; Zeidner, 1998) ile çelişki göstermektedir.

5. SONUÇ VE ÖNERİLER

Sonuç olarak bu araştırmanın bulguları test yanıtılama stratejilerinin test kaygısını yordayan önemli deđişkenler olmadığını ortaya koymaktadır. Ancak öğrencilerin önceki test performansı, içerik bilgisi, testlerin güçlük düzeyi, testin yapıldığı ortam ve zaman gibi öğrencilerin test kaygısını etkileyen başka faktörler olabilir. Araştırmacılar test yanıtılama stratejileri ile birlikte tüm bu faktörlerin test kaygısı üzerindeki etkisini incelemelidir. Ayrıca test yanıtılama stratejileri, test performansı, test motivasyonu gibi faktörlerin test kaygısı üzerine etkisini araştıran deneysel çalışmalar yapılmalıdır. Bu araştırma, üniversiteye giriş sınavına katılan daha büyük örneklem üzerinde tekrar edilmelidir.