

The Relationship between Teacher Candidates' Environmental Risk Perceptions and Problem Solving Skills

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Abstract

Problem Statement: Various environmental problems are related with wrong risk perception about the environment as well as insufficient interest, behavior, information and environmental perception. Although there are social concerns related with environmental problems, it can be seen that environmental problems have become a greater threat in time. People react to the threats they perceive. If their perceptions are not correct, their efforts for protecting society and environment may be misevaluated. The main goal of environmental education and risk communication can be summarized as making individuals and society understand and perceive the environment and environmental problems correctly (Hines, Hungerford and Tomera, 1986; Hungerford and Volk, 1990; Wilson, 1990; akt: Altunoğlu and Atav; 2009). However, there are limited studies were encountered on teacher candidates' environmental risk perceptions and their problem solving skills during literature review.

Purpose of the Study: The purpose of the study was to determine the relationship between elementary teacher candidates' environmental risk perceptions and their problem solving skills and answers were sought to the following questions: 1) What is the relationship between teacher candidates' environmental risk perceptions and their problem solving skills? 2) Is there a significant difference between teacher candidates' environmental risk perceptions and sub-dimensions of their problem solving skills and gender variable? 3) Is there a significant difference between teacher candidates' environmental risk perceptions and sub-dimensions of their problem solving skills and variable of the program they studied? 4) What is the relationship between teacher candidates' environmental risk perceptions and sub-dimensions of their problem solving skills?

Method(s): The sample of research was teacher candidates from the elementary class and science programs of education faculty in Siirt University 204 students participated in the research study. In the research by Slimak and Dietz (2006) developed risk scale which consists of 24 items and adapted to Turkish by Altunoğlu & Atay (2009) were used in order to collect information about environmental risk perception and problem solving skills inventory developed by Heppner and Peterson (1982) which consists of 35 items and adapted to

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Turkish by Şahin, Şahin & Heppner (1993). In order to understand the gathered data, besides the arithmetic mean and standard deviation of the variables, independent t-test and Pearson Moment Correlation Coefficient are used in the data analysis process.

Findings and Results: The findings, obtained from the Pearson's moment correlation analysis to determine the relationship between teacher candidates' environmental risk perceptions and problem-solving skills. A positive significant relationship (r = .308, p < 0.01), at a moderate level, was determined between teacher candidates' environmental risk perceptions and problem-solving skills.

Conclusions and Recommendations: When the relationship between teacher candidates' environmental risk perceptions and sub-dimensions of their problem solving skills were examined, it was identified that there was a positive significant relationship between their planned, considerate, self-confident, avoidant and evaluative approaches; however, it was found that there was a positive but not a significant relationship between teacher candidates' hasty approach and their environmental risk perceptions.

Keywords: Environmental education, attitude, a book reading, candidate of teachers.

INTRODUCTION

Man striving to form artificial environmental systems by human and financial activities has often resulted in environmental problems, which are very complicated and carry different characteristics, by laying the groundwork for negative change towards the environment along with the financial, social and technological developments. Acid rain, hole in the ozone layer, global warming, melting glaciers, draught in lakes and rivers, deforestation and increase in population are some of the problems today. According to Titiz (1995), environmental problems are states that all elements of ecosystem including human beings, animals, plants, stones, earth and all beings cannot provide a sustainable life. However, Özer (1993) asserts that environmental problems are the ones which result from the negative / adverse effects of artificial environment on the natural environment, lack of suitable health conditions in the artificial environment, excessive and improper use of natural resources and environmental problems resulting from the destruction in this way. However, Güler & Çobanoğlu (1997) states that environmental problems are deterioration caused by excessive and improper use of natural resources and pollution in the air, water and earth which are primary physical elements of the nature. Environmental problems regarded as the relationship between Man and natural environment in the past are today perceived as a multi-faceted and complex set of problems with psychological, sociological, technological, economic, political, legal, religious, philosophical, educational, and cultural dimensions. Within this respect, how environment and environmental problems are perceived and evaluated does not only depends on the data put forward by science; it changes with respect to individual and social perception and thoughts (Karger, 1996). Recent studies display that individuals are aware of environmental risks, and worry much more about those environmental risks day by day (Riechard & Peterson, 1998; Lazo, Kinnell & Fischer, 2000; Wals-Daneshmandii & Maclachlan, 2000; Lai et.al., 2003; Lemyre et. al. 2006; Slimak & Dietz, 2006; Gürsoy et.al. 2008). Environmental risks are, within the broadest sense, dangers occurs in a global or local level because of natural or human-induced causes. However, perception of risk is subjective judgments of the individuals about the severity and characteristics of the risks (Anantho, 2008).

People react in line with perceptions of environmental problems that threaten them. The fact that individuals' and community's perceptions of environmental risk is low or wrong leads to low or the wrong conclusion in efforts to protect the environment and society. Baldassare & Katz (1992) assert that perceptions of environmental risk are of great importance for individuals in order to form environmentally-conscious behavior and strengthen these behaviors. However, environmental problems remain to be addressed and solved on a global scale along with the size of the use of natural resources, the social dimension, economic and political dimensions, the size of the flora and fauna, climatic size, the size of human (anthropogenic) natural disasters. Problem-solving skills of individuals are very important at this stage. While the problem is defined as "individual's having difficulties in reacting against internal or external stresses" problem-solving is defined as "extensive cognitive and behavioral processes" such as selecting the appropriate solution and making a decision as a result of introduction to the effective ways to the solution (D'Zurilla ve Goldfried, 1971). Heppner & Petersen (1982) accept 'problem-solving' as a synonym for 'coping with the problems'. Problemsolving has also been expressed as "to know what to do when what to do is unknown" (Altun, 2003). Kuzgun (1982) indicates stages of problem-solving as perception of the problem, correct identification of the problem, practice and evaluation. Accordingly, each individual's perception of the problem differs. So, how a problem problem-solving behavior accordingly. solved changes condition/circumstance should primarily be perceived as a problem by the individual in order to be a problem for him/her. Perceiving the risks threatening the environment and offering solutions are quite important for environmental awareness, environmental consciousness and an effective environmental education. However, there are limited studies were encountered on teacher candidates' environmental risk perceptions and their problem solving skills during literature review. Therefore, this study aimed to shed a light on relationship between teacher candidates' environmental risk perceptions and their problem solving skills and answers were sought to the following questions:

- 1. What is the relationship between teacher candidates' environmental risk perceptions and their problem solving skills?
- 2. Is there a significant difference between teacher candidates' environmental risk perceptions and sub-dimensions of their problem solving skills and gender variable?
- **3.** Is there a significant difference between teacher candidates' environmental risk perceptions and sub-dimensions of their problem solving skills and variable of the program they studied?
- **4.** What is the relationship between teacher candidates' environmental risk perceptions and sub-dimensions of their problem solving skills?

METHOD

Participants

The study was conducted in the spring of 2011 academic year at Siirt University in Turkey. Participants were 204 pre-service teachers who were attending at class and science education department in faculty of education.

Data Collection

In this study, "The Scale of Environmental Risk Perception" and "Problem Solving Inventory" were used to determine the teacher candidates' environmental risk perceptions and their problem solving skills and "Personal Data Form", that was formed by the researcher, was used to determine the personal traits of the teacher candidates as data collection tools. The Scale of Environmental Risk Perception: It was developed by Slimak & Diets (2006) to measure teacher candidates' environmental risk perceptions. It was adapted to Turkish by Altunoğlu & Atay (2009), and it is a Likert-type scale composed of 23 items ranking between 1-5 points. Altunoğlu & Atay (2009) stated that the scale consists of four factors explaining the 57% of the total variance. They also cited that its Cronbach alpha reliability coefficient is 0.89. In our study reliability coefficient was calculated as 0.93. Problem Solving Inventory: it is a Likert-type scale composed of 35 items ranking between 1-6 points and was developed by Heppner & Peterson (1982). It was adapted to Turkish by Şahin, Şahin & Heppner (1993). Its Cronbach alpha reliability coefficient was .88. This is a self assessment scale that measures the perception of an individual in terms of his/her own problem solving skills. Items numbered 9, 22 and 29 were excluded while scoring. Point range was 32-192. High level of total points gathered from the scale proves the inefficient individual's perception in problem solving. There were six sub-dimensions listed as hasty, considerate, avoidant, evaluative, self-confident and planned approaches in the scale. As a result of study conducted by Sahin, Sahin & Heppner (1993), inventory's Cronbach alpha reliability coefficient was stated as follows: Hasty Approach (items 13, 14, 15, 17, 21, 25, 26, 30 and 32) = .78, Considerate Approach (items 18, 20, 31, 33 and 35) = .76, Avoidant Approach (items 1, 2, 3 and 4) = .74, Evaluative Approach (items 6, 7 and 8) = .69, Self-confident Approach (items 5, 11, 23, 24, 27, 28 and 34) = .64 and *Planned Approach* (items 10, 12, 16 and 19) = 0.59. In this study, Cronbach alpha reliability coefficient of the whole study was .85 in total. For sub-dimensions, Cronbach alpha reliability coefficient was calculated as follows: For hasty approach: .78, considerate approach: .87, avoidant approach: .48, evaluative approach: .48, self-confident approach: .78 and planned approach: .84.

Data Analysis

Arithmetic mean and standard deviation were used in analyzing the scores obtained from teacher candidates' environmental risk perceptions and problem solving skills scale and t test were used to determine differences between groups. Pearson Product-Moment Correlation Coefficient was used to examine whether there was a significant relationship between teacher candidates' environmental risk perceptions and problem-solving skills or not.

FINDINGS

The findings, obtained from the Pearson's moment correlation analysis to determine the relationship between teacher candidates' environmental risk perceptions and problem-solving skills, are given in Table 1.

Table 1. The results of Pearson Product Moment Correlation Coefficient to determine the relationship between teacher candidates' environmental risk perceptions and problem-solving skills.

		Problem-solving skills
Environmental Disk	Pearson Correlation	.308
Environmental Risk	Significance	000*
Perceptions	Number of Subjects	204

^{*} p<0.01

A positive significant relationship (r = .308, p <0.01), at a moderate level, was determined between teacher candidates' environmental risk perceptions and problemsolving skills, as shown in Table 1. t- test results related to teacher candidates' environmental risk perceptions and problem-solving skills according to gender are given in Table 2.

Table 2. t- test results related to teacher candidates' environmental risk perceptions and problem-solving skills according to gender

Factor	Gender	N	Average	SS	t	р
Environmental	Female	99	97.15	12.45	1.50	.115*
Risk perception	Male	105	94.33	12.97	1.58	
Hasty approach	Female	99	35.46	6.76	1.01	.312*
	Male	105	36.40	6.39	-1.01	
Considerate	Female	99	22.82	4.95	1 22	.185*
Approach	Male	105	21.90	4.96	1.32	
Avoidant	Female	99	16.00	4.63	2.4	.732*
Approach	Male	105	16.20	4.06	34	
Evaluative	Female	99	12.48	3.43	0.4	.968*
Approach	Male	105	12.50	3.70	04	
Self-confident	Female	99	28.90	5.74	102	.855*
Approach	Male	105	29.05	5.77	183	
Planned	Female	99	18.18	3.83	1 77	.077*
Approach	Male	105	17.20	3.97	1.//	
Self-confident Approach Planned	Female Male Female	99 105 99	28.90 29.05 18.18	5.74 5.77 3.83	183 1.77	

^{*} p > 0.05

As shown in Table 2, female teacher candidates' environmental risk perceptions mean (X = 97.45) was higher than male candidates' (M = 94.33). Accordingly, female teacher candidates' environmental risk perceptions said to be higher than males'. As a result of the t-test, it was identified that this difference was not statistically significant (t = 1.58, p > 0.05). When sub-dimensions of teacher candidates' problem-solving skills were examined according to gender variable, it was identified that female teachers' considerate and planned approaches means were higher than male teacher candidates' whereas male teachers' hasty, avoidant, evaluative and self-confident approaches means were higher than female candidates',

but it was not a statistically significant difference. t-test results, for sub-dimensions of teacher candidates' environmental risk perceptions and problem-solving skills according to the program they studied, are given in Table 3.

Table 3. t-test results for teacher candidates' environmental risk perceptions and

problem-solving skills according to the program they studied							
Factor	Program	N	X	SS	T	p	
Environmental	Class Teaching	153	36,45	6,44	.148	.882*	
Risk perception	Science Teaching	51	34,43	6,81	.148		
Hasty	Class Teaching	153	22,11	5,25	1.01	.058*	
Approach	Science Teaching	51	23,05	3,94	1.91		
Considerate	Class Teaching	153	16,48	4,28	-1.17	.242*	
Approach	Science Teaching	51	14,98	4,37			
Avoidant	Class Teaching	153	12,39	3,83	2.16	.032**	
Approach	Science Teaching	51	12,80	2,63	2.10		
Evaluative	Class Teaching	153	29,00	5,79	713	.477*	
Approach	Science Teaching	51	28,92	5,65	/15		
Self-confident	Class Teaching	153	17,54	4,08	001	.927*	
Approach	Science Teaching	51	18,09	3,43	.091		
Planned	Class Teaching	153	95,77	13,72	074	.383*	
Approach	Science Teaching	51	95,47	9,42	874	.363*	

^{*} p>0.05; **p<0.05

It was revealed that environmental risk perceptions mean (X=36.45) of class teacher candidates was higher than the perceptions mean (X=34.43) of science teacher candidates, as seen in table-3. After the t-test, It was found that this difference was not statistically significant (t= .882, p>0.05). However, it can be said that class teacher candidates' environmental risk perceptions were more sensitive than the science teacher candidates' perceptions. When sub-dimensions of teacher candidates' problem solving skills were examined, it was found that there was a significant difference between their avoidant approach means (t=2.16, p<0.05) according to the program they studied. On the other hand, it was found that there were not significant differences among their hasty, considerate, evaluative, self-confident and planned approaches means. On the one hand it was found that science teacher candidates' hasty, avoidant and self-confident approaches means were higher than class teacher candidates', but on the other hand class teacher candidates' considerate, evaluative and planned approaches means were higher than science teacher candidates'.

Table 5. Correlation between teacher candidates' perceptions of environmental risk and sub-dimensions of problem solving skills

		Hasty approach	Considerat e approach	Avoidant approach		Self- confident approach	Planned approach
Environmental	r	.109	.312	.191	.168	.217	.318
Risk perception	p	.121*	.000***	.006**	.017**	.002**	.000***
	N	204	204	204	204	204	204

^{*} p>0.05; **p<0.05; ***p<0.01

Positive significant relationships at a moderate level were determined between teacher candidates' planned (r= .318, p< 0.01) and considerate approaches (r=.312, p<0.01), and teacher candidates' environmental risk perceptions, as shown in Table-5. Positive significant relationships at a low level were determined between teacher candidates' self-confident (r=.217; p<0.05), avoidant(r=.191; p<0.05) and evaluative approaches(r=.168; p<0.05), and teacher candidates' environmental risk perceptions. However, it was found that there was a positive but not a significant relationship between teacher candidates' hasty approach (r= .109; p>0.05), and their environmental risk perceptions.

CONCLUSION AND SUGGESTIONS

In this research, It was determined that there was a positive significant relationship at a moderate level between teacher candidates' environmental risk perceptions and their problem solving skills. When sub-dimensions of teacher candidates' problem solving skills and their environmental risk perceptions were examined according to their gender, it was found that there was not a significant difference between female and male teachers. It was observed that teacher candidates' environmental risk perceptions were generally high. However, female teacher candidates' environmental risk perceptions were higher than males'. Therefore, it can be said that female teacher candidates were more sensitive about the risks of environmental problems than males. In the similar studies, Sam et al. (2010) stated that university students' environmental risk perceptions were high and there was a strong positive relationship between their environmental risk perceptions and environmental attitudes. Altunoğlu & Atav (2009) stated that high school students' environmental risk perceptions were above the moderate level and their environmental awareness was high. When sub-dimensions of teacher candidates' problem solving skills were examined according to their gender, it was found that there was not a significant difference among their hasty, considerate, avoidant, evaluative, self-confident and planned approaches. However, İnel et al. (2011) stated that there was not a significant difference between male and female teacher candidates' problem solving skills, but the mean of females was higher than the males. Küçükkaragöz et al. (2009) indicated that there was not a significant difference between male and female teacher candidates. In contrast, Yavuz, Aslan & Gülten (2010) found a significant difference between gender of teacher candidates studied at social sciences and primary teaching programs. Also, studies by Polat & Tümkaya (2010) on teacher candidates, and Keskin & Yıldırım (2008) on vocational high school students showed that there was a significant difference between gender and problem solving skills. When teacher candidates' programs and their problem solving skills were examined, it was found that there was a significant difference between science and class teaching programs according to avoidant approach, but there was not a significant difference according to hasty, evaluative, self-confident, considerate and planned approaches. In a related study, Serin (2001) stated that there was not a not a significant difference between university students' problem solving skills according to the programs they studied. In contrast, Taylan (1990) found a significant difference between university students' problem solving skills according to the programs they studied. When the relationship between teacher candidates' environmental risk perceptions and sub-dimensions of their problem solving skills were examined, it was identified that there was a positive significant relationship between their planned, considerate, self-confident, avoidant and evaluative approaches; however, it was found that there was a positive but not a significant relationship between teacher candidates' hasty approach and their environmental risk perceptions.

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Öğretmen Adaylarının Çevresel Risk Algıları ve Problem Çözme Becerileri Arasındaki İlişki

Özet

Problem Durumu: Farklı beşeri ve ekonomik faaliyetlerle yapay çevre sistemler oluşturmaya çalışan insanoğlu, ekonomik, toplumsal ve teknolojik gelişmeyle birlikte doğal çevreye yönelik olumsuz değişimlere zemin hazırlayarak, karmaşık ve çok çeşitlilik gösteren farklı karakterlerde çevre sorunlarının ortaya çıkmasına neden olmuştur. Asit yağmurları, ozon tabası deliği, küresel ısınma, buzulların erimesi, göl ve nehirlerin kuruması, ormanların yok olması, nüfus artışı günümüz çevre sorunlarından bazılarıdır. Son zamanlarda yapılan çalışmalarda bireylerin çevresel risklerin farkında olduğu ve çevresel risklere karşı endişelerinin her geçen gün arttığı belirtilmektedir (Riechard & Peterson, 1998; Lazo, Kinnell & Fischer, 2000; Wals-Daneshmandii & Maclachlan, 2000; Lai et.al., 2003; Lemyre et. al. 2006; Slimak & Dietz, 2006; Gürsoy et.al. 2008). Cevre risk en genis anlamıyla, doğal veya insan kaynaklı sebeplerden dolayı küresel veya yerel düzeyde ortaya çıkan tehlikelerdir. Bununla birlikte risk algısı kişilerin risklerin ciddiyeti ve özellikleri hakkındaki subjektif yargısıdır (Anantho, 2008). Bir durumun bireyin kendisi tarafından problem olabilmesi için öncelikle problem olarak algılanması gerekmektedir. Çevreyi tehdit eden risklerin algılanması ve bunlara çözüm önerilerinin getirilmesi çevre duyarlılığı, çevre bilinç ve etkili bir çevre eğitimi için oldukça önemlidir. Bununla birlikte yapılan literatür incelemelerinde öğretmen adaylarının çevresel risk algıları ve problem çözme becerileri üzerine herhangi bir çalışmaya rastlanılmamıştır.

Araştırmanın Amacı: Bu çalışmanın temel amacı, öğretmen adaylarının çevresel risk algıları ile problem çözme becerileri arasındaki ilişki ortaya konulmaya çalışılmış ve aşağıdaki sorulara cevap aranmıştır. 1) Öğretmen adaylarını çevresel risk algısı ile problem çözme becerileri arasında nasıl bir ilişki vardır? 2) Öğretmen adaylarının çevresel risk algıları ve problem çözme becerileri alt boyutları ile cinsiyet değişkenleri arasında anlamlı bir farklılık var mıdır? 3) Öğretmen adaylarının çevresel risk algıları ve problem çözme becerileri alt boyutları ile öğrenim gördükler program değişkenleri arasında anlamlı bir farklılık var mıdır? 4) Öğretmen adaylarını çevresel risk algısı ile problem çözme becerileri alt boyutları arasında nasıl bir ilişki vardır?

Yöntem: Öğretmen adaylarının çevresel risk algıları ve problem çözme becerileri arasındaki ilişkiyi belirlemeyi amaçlayan bu araştırmada, ilişkisel tarama modelinden (Karasar, 1998) yararlanılmıştır. Bu amaçla araştırmanın örneklem kümesi olan öğretmen adaylarının sahip oldukları risk algıları "Çevresel risk algıları ölçeği" ve problem çözme becerileri "Problem çözme becerileri envanteri" ile betimlenmeye

çalısılmıştır. Araştırmanın evrenini, Siirt Üniversitesi Eğitim Fakültesi İlköğretim Sınıf Öğretmenliği ve İlköğretim Fen Bilgisi öğretmenliği programında öğrenim gören öğretmen adayları oluşturmaktadır. Örneklem grubunu ise seçkisiz örnekleme yöntemine göre 153'ü Sınıf öğretmenliği ve 51'i Fen Bilgisi öğretmenliği programında öğrenim gören toplam 204 öğretmen adayı oluşturmaktadır. Araştırmada veri toplama aracı olarak Slimak ve Dietz (2006) tarafından geliştirilen ve Türkçeye uyarlaması Altunoğlu ve Atav (2009) tarafından gerçekleştirilen 24 maddeden oluşan 1-5 arasında puanlanan Çevresel Risk Algıları Ölçeği kullanılmıştır. Altunoğlu ve Atav (2009) tarafından yapılan çalışmada ölçeğin dört faktörden meydana geldiği bu faktörlerin toplam varyans'ın %57'sini açıklandığı ve güvenirlilik katsayısı Cronbach alpha'nın 0,89 olduğunu belirtilmiştir. Yaptığımız çalışma ise güvenirlilik katsayısı .93 olarak hesaplanmıştır. Bununla birlikte öğretmen adaylarının problem çözme becerilerini ortaya koymak için Heppner ve Peterson (1982) tarafından geliştirilen, 35 maddeden oluşturulan 1-6 arasında puanlanan Problem Çözme Envanteri kullanılmıştır. Ölçeğin Türkçeye uyarlaması Şahin, Şahin ve Heppner (1993) tarafından gerçekleştirilmiştir. Problem çözme envanteri, bireyin problem çözme becerileri konusunda kendini algılayışını ölçen, kendini değerlendirme ölçeğidir. Puan ranjı 32-192'dir. Ölçekten alınan toplam puanların yüksekliği bireylerin problem çözme konusunda kendini yetersiz algıladığını göstermektedir. Ölçekte aceleci yaklaşım, düşünen yaklaşım, kaçıngan yaklaşım, değerlendirmeci yaklaşım, kendine güvenli yaklaşım olmak üzere altı alt boyut vardır. Verilerin analizinde aritmetik ortalama, standart sapma ve gruplar arasındaki farklılıkların belirlenmesinde t testi kullanılmıştır. Öğretmen adaylarının çevresel risk algılarına ile problem çözme becerileri arasında anlamlı bir ilişki olup olmadığına, Pearson Momentler Korelasyon Katsayısından yararlanılarak incelenmistir.

Bulgular: Öğretmen adaylarının çevresel risk algıları ve problem çözme becerileri arasındaki ilişkiyi belirlemek için yapılan Pearson Momentler Korelasyon analizi sonuçunda öğretmen adaylarının çevresel risk algıları ile problem çözme becerileri arasında pozitif yönde orta düzeyde anlamlı bir ilişkinin olduğu (r= .308, p< 0.01) tespit edilmiştir. Öğretmen adaylarının cinsiyetlerine göre çevresel risk algıları ve problem çözme becerileri alt boyutlarına arasında anlamlı bir farklılığın olup olmadığını belirlemek için yapılan t- testi sonucunda, bu farkın istatistiksel olarak anlamlı bir farklılık olmadığı (t= 1.58, p>0.05) tespit edilmiştir. Öğretmen adaylarının problem çözme becerileri alt boyutları cinsiyete değişkenlerine göre incelendiğinde, bayan öğretmen adaylarının düşünen ve planlı yaklaşımı ortalamaları erkek öğretmen adaylarından daha yüksek olduğu buna karşın erkek öğretmen adaylarının aceleci, kaçıngan, değerlendirmeci ve kendine güvenen yaklaşımları ortalamalarının bayanlardan daha yüksek olduğu fakat bunun istatistiksel olarak anlamlı bir farklılık olmadığı tespit edilmiştir. Öğretmen adaylarının öğrenim gördükleri programa göre çevresel risk algıları ve problem çözme becerileri alt boyutlarına ilişkin t-testi sonuçlarına göre bu farkın anlamlı olup olmadığını belirlemek için yapılan t-testi sonucunda bu farkın istatistiksel olarak anlamlı olmadığı (t= .882, p>0.05) tespit edilmiştir.

Sonuç ve Öneriler: Yapmış olduğumuz çalışmada öğretmen adaylarının çevresel risk algıları ile problem çözme becerileri arasında anlamlı bir ilişkinin olduğu tespit edilmiştir. Genelde öğretmen adaylarının çevresel risk algılarının yüksek seviye olduğu görülmektedir. Bununla birlikte kız öğretmen adaylarının çevresel risk algıları erkek öğretmen adaylarından daha yüksektir. Bu durumda kız öğretmen adaylarının erkek öğretmen adaylarına göre çevre sorunlarına yönelik riskleri algılamada daha duyarlı olduğu söylenebilir. Yapılan benzer çalışmalarda Sam ve ark. (2010) üniversite öğrencilerinin çevresel risk algı düzeylerinin yüksek olduğunu ve çevresel risk algısı ile çevresel tutumları arasında pozitif yönde güçlü bir ilişkinin olduğunu belirtmiştir. Öğretmen adaylarının çevre risk algıları ile problem çözme becerileri alt boyutları arasındaki ilişki incelendiğinde, öğretmen adaylarının planlı, düşünen, kendine güvenen, kaçıngan ve değerlendirmeci yaklaşım arasında pozitif yönde anlamlı bir ilişkinin olduğu buna karşın aceleci yaklaşım ile çevresel risk algıları arasında pozitif yönde fakat anlamlı bir ilişkinin olmadığı tespit edilmiştir.

Anahtar Sözcükler: Çevre eğitimi, algı, problem çözme becerisi, öğretmen adayları.