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Career and Talent Development Self-Efficacy Scale: Adaptation and Validation in the Turkish Population

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ABSTRACT

The aim of the study is to adapt and conduct reliability and validity studies of the Career and Talent Development Self-Efficacy Scale. Participants were 1047 students in İstanbul. To assess content validity, expert consultancy was utilized and to assess construct validity confirmatory factor analysis was utilized. Reliability of the scale was examined with Cronbach's Alpha, split-half reliability, test of upper and lower 27% of the groups in terms of item mean differences. Confirmatory factor analysis results showed that chi-square was significant ($\chi2 = 719.30$, SD = 130, p = .00); and fit indices were as follows RMSEA = .066, GFI = .93, AGFI = .91, CFI = .93, IFI = .93, NFI = .91, RFI = .90, SRMR = .041. According to the model results provided a good fit to the data and factor structure in the Turkish form was parallel to the original factor structure. In terms of reliability, internal consistency reliability was. 92 and split-half reliability was. 86. Furthermore, corrected item total correlations were ranged between. 49 and. 67 and all the differences between upper and lower 27% groups were significant. The results of the analysis supported the conclusion that the Turkish form of Career and Talent Development Scale is a reliable and valid measurement tool.

Keywords:
Career and talent development, scale adaptation, reliability, validity, factor analysis

1. Introduction

Self-efficacy is a very important concept that affects the individual's career development process. Self-efficacy concept is described by Bandura (1986) as individuals' opinion and consideration of their ability to put in order and make goals of action required to gain performances and tasks (Kennedy & Chen, 2010). To succeed the purpose of self-directed orientation in learning, all students need to have confidence in their ability to learn, to solve problems, and to make decisions. Schools have a very important role in helping students to develop these vital "life skills" and values, and in promoting students' positive beliefs in their own efficacy (Yuen et al., 2003).

Hackett and Betz (1981), who referenced Bandura's (1977) self-efficacy theory, offer the career self-efficacy term.Career self-efficacy is a pupil's level of confidence about unfasten topic linked to following career planning. Betz and Hackett (1997) arrange fifteen years of concern literature and meta-analyses and verify that career self-efficacy could be used to effectually predict the choosing of academic and following career, academic performance, and whether people attach to their chosen career field (Mao, Hsu, & Fang, 2012).

All young people must comprehend the link between their school work and the real world and their future goals (Niles & Trusty, 2004; Schaefer, Rivera, & Ophals, 2010). The people who have positive work habits about their daily routines and works with workplace related will be more succeeding (Lapan, 2004; Yuen et. al., 2010). The concept of career and talent development states a positive approach to service young people reinforce and perform the optimum use of their abilities, with particular reference to (but not restricted to) preparation of specific expert skills (talents) necessary for working in a particular career field (Yuen et al., 2010).

1.1. Career Development

According to National Association of Career Development (2012), career development is a continuous life process through activities which individuals can explore, make decisions, and assume a variety of roles. Careers are formulated by the continuous evaluation of personal goals and the perception, assessment, and decisions regarding opportunities to achieve those goals. Career development occurs as educational and businesspursuits interact with personal goals. It continues over the life span. Career development is the total integration of psychological, sociological, educational, physical, economic, and chance factors that combine to influence the nature and significance of work in the total life span of any given individual (Connell, 2011).

Career development that progresses during a person's life, starts in early childhood. (Super, Savickas, & Super, 1996). According to Super (1990) and Super et al. (1996), the early stage of an individual's life can be characterized by the growth (ages 4 to 13) and exploration (ages 14 to 24) stages of the career development process. Throughout these developmental phases, young people begin to develop their career concept that involves being more realize of their interests and abilities, and they begin to use the information they have about themselves and the world of work to make indefinite decisions about their following educational and occupational goals. In course of critical middle grades times, young people require occasion to procure more self-awareness, to have more knowledge data about their academic career process alternative, and develop the ability and talent. They will be in need of to arrives purposes about their days to come (ASCA, 2005; Campbell & Dahir, 1997; Lapan, 2004; Schaefer, Rivera, & Ophals, 2010; Solberg, Howard, Blustein, & Close, 2002; Trusty, Niles, & Carney, 2005).

The literature of career development has emphasized the significance of multicultural perspective to the career counseling process (Flores & Heppner, 2002; Leong & Brown, 1994; Marsella & Leong, 1995; Melvin, Galles, & Lenz, 2012). Therefore, the researcher tried to adapt to Turkish Culture toCareer and Talent Development Self-Efficacy Scale which was developed for the Chinese students originally.

1.2. Talent Development

Talent and talent development have been investigated by a lot of researchers. There are several theories about talent and talent development (e.g. Bloom, 1985; Gagne. 2003). In Bloom's (1985) model of talent development, immensely talented people in six fields are examined. These fields are two in the arts (sculptors and concert pianist), two in sports (world-class tennis players and Olympic swimmers), and two in the academic field (mathematicians and neurologists). According to Bloom and his associates, best education for talent development consist of three phases. In the course of the first phase, young people are guided to get stuck on with a subject, idea or discipline. The second phase contains education in the skills, knowledge, and values of the domain. In the final phase, the talented young person find out to perform his or her ambition, and deep knowledge to create an unexampled manner, and message, and to explore authentic problems (Subotnik, Edmiston, Cook, & Ross, 2010). Gagne (2003) defined talent development as a dynamic continuum which inherent skills are transformed into aptitudes that are proper and required for occupations. According to Gagne, transformation emerges result of both training and self-learning (Yuen, Gysberg, Chan, Lau, & Shea, 2010).

Examining the literature about career and talent development, it is lacking on the availability of both a sound theoretical basis and scale for evaluation of applications for developing interventions aimed at adolescent career development. Thus, hoped that this study would provide a foundation for the derivation of a theory-based approach to researching and understanding adolescent career and talent development and

helping to enhance motivate for their career and talent development self-efficacy. So the aim of this present study is examining the psychometric properties of the Turkish version of the Career and Talent Development Self-efficacy Scale for adolescents.

2.Method
2.1. Participants
Participants of the study consisted of 1047 adolescent in Istanbul. Among the participants, 46% ($N = 477$) of them were female and 54% ($N = 570$) of them were male. All the participants, participated voluntarily in the study. Their ages were between 13-18. The perceived socio-economic status was 2,5% very high-level income, 31% high level income, 57% mid-level income, 7% lower-level income, and 2,5% very lower-level income.

2.2. Procedure
At first, the researcher kept in touch with the researcher who developed the scale, Mantak Yuen, via e-mail to gain necessary permission. A scale adaptation study contains several steps that should be carefully performed because of the contextual differences between cultures. The precision is especially important in the translation phase. If the adapted form of a scale lacks clarity or it is not realistic within a given social context, reliability and validity will be affected and using these types of measurement tools will be problematic. For the scale development studies, it is suggested that construct validity and content validity should be assessed to show scale validity. Content validity was assessed thorough expert opinions and construct validity was assessed through CFA. In addition, reliability was assessed with Cronbach's alpha, split half reliability, corrected item total correlations, and comparing 27% upper and lower groups with t-test methods were employed (Büyüköztürk, 2010; Çokluk, Şekercioğlu, & Büyüköztürk, 2010; Spahi, Yurtkoru, & Çinko, 2008). In addition, Şimşek (2007) asserts that factor structure that is identified through exploratory factor analysis can be analyzed with confirmatory factor analysis to understand the point where theory and "reality" diverge. Within the construct validity assessment, confirmatory factor analyses conducted to test the original factor structure. Reliability of the scale assessed through Cronbach's Alpha, split half reliability, corrected item total correlations and t-test. Reliability and validity analyses conducted via SPSS 15 and LISREL 8.51 (Jöreskog & Sörbom, 2001).

3.Results
3.1. Construct Validity
3.1.1. Confirmatory factor analysis. Within the construct validity studies, confirmatory factor analysis was used to investigate three factor structure of Career and Talent Development Self-Efficacy Scale. The results showed that χ2 was significant ($X^2 = 719. 30$, *DF* =130, *p* = 0.00) and the fit indices were as follows *RMSEA* = .066, *GFI* = .93, *AGFI* =. 91, *CFI* = .93, *IFI* = .93, *NFI* = .91, *RFI* = .90 and *SRMR* = .041. According to the generally accepted criteria model provided a good fit. Factor loadings are presented in Figure 1.
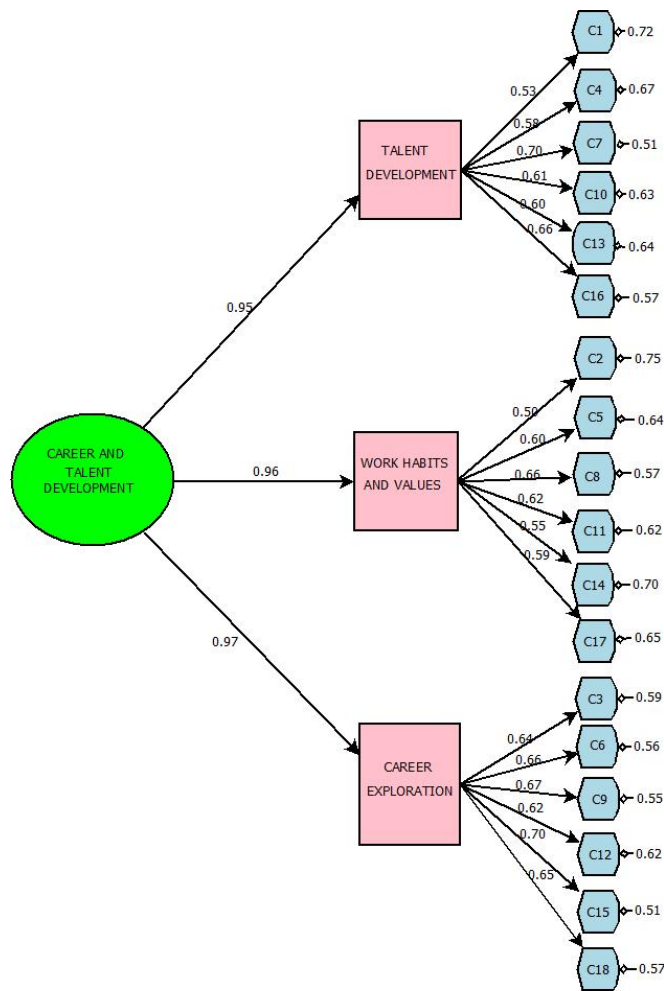
Figure 1. Path Diagram and Factor Loadings Related to the Turkish Form of Career and Talent Developent Self-efficacy Scale.

3.2. Reliability

Reliability of the scale was assessed through several estimates; namely, Cronbach's alpha, split-half reliability, corrected item total correlation, and t-test analysis to test upper and lower 27% groups in terms of mean differences. Internal consistency reliability of the scale was found as .92. Considering that the threshold suggested for a measurement tool to be used in scientific studies is. 60 (Büyüköztürk, 2010), present scale has satisfactory reliability level. Split-half reliability was. 86, and corrected item total correlations were ranged between. 49 and. 67. Finally, there was a significant difference in the scores of upper and lower 27% groups which were formed according to total score. T scores (*DF* = 564) ranged between 19.18 (*p< .001*) and 25.53 (*p< .001*). Hence, different estimates, internal consistency reliability, split-half reliability, corrected item total correlation, and t-test, support the satisfactory reliability level of the present scale. Findings are reported in Table 1.

Table 1. Items, Corrected Item Total Correlations, Cronbach's Alpha, T-test Results for Turkish Form of Career and Talent Development Self-Efficacy Scale

Number of Item	Corrected Item-Total Correlation				T test
	All of the Scale	TD	WHV	E	
1	.50	.51			21.30***
4	.55	.52			20.04***
7	.67	.60			25.53***
10	.58	.48			19.51***
13	.58	.54			23.79***
16	.62	.54			25.02***
2	.49		.40		19.18***
5	.58		.52		19.19***
8	.63		.59		20.95***
11	.59		.55		20.26***
14	.52		.46		21.11***
17	.55		.50		20.30***
3	.63			.59	24.09***
6	.64			.61	21.96***
9	.64			.56	22.63***
12	.59			.55	21.84***
15	.67			.64	24.22***
18	.62			.59	20.55***
Cronbach's Alpha	.92	.78	.76	.82	
Split-Half	.86	.76	.74	.79	

¹n=1047   ²n1 = n2 =283   ***$p<.001$

Note: TD: Talent Development, WHV: Work Habits and Values, CE: Career Exploration

4. Discussion

The aim of the present study was to adapt Career and Talent Development Self-Efficacy Scale into Turkish and to conduct reliability and validity studies. According to confirmatory factor analysis results model provided a good fit to the data and the original factor structure was similar to adapted version. Internal

consistency, split-half reliability, item total correlation and t-test methods were employed to assess scale reliability. These analyses yielded high and significant results, which lead to the conclusion that the scale is a reliable one. Considering the suggestion that minimum reliability level for a measurement tool used in scientific studies is. 70 (Tezbaşaran, 1996), it can be suggested that the present scale has enough reliability level. Items with. 30 and higher loadings are suggested to have ability to differentiate individuals on the variable assessed (Büyüköztürk, 2004). Thus, it can be concluded that the present scale has satisfactory item total correlations. T-test analysis showed that upper and lower 27% groups were significantly different from each other in terms of items and subscales.

All the results of the reliability and validity analysis support the Turkish form of the Career and Talent Self-Efficacy Scale is a reliable and valid measurement tool. This study has several limitations. First, the research has limited data only collected from 13-18 age students. This scale's reliability and validity can be examined by applying in different aged adolescents. This research should be repeated with different individuals, including adolescent participants in this study who live in other regions, have other races, grown up different environmental conditions, and have different family attitudes. In this way, researchers can reach valid information about adolescents.

There were some limitations in this study. First, the age ranges of samples were restricted. Second, the sample groups are only of Turkish adolescents in school. Further studies of adolescents randomly should be selected from diverse age groups, cultural backgrounds, educational backgrounds, and geographical areas should be undertaken to build the validity and reliability database of the Career and Talent Development Self-efficacy Scale. In conclusion, this research is an important first step in measuring a career and talent development self-efficacy among adolescents. This study was limited by our focus on youths residing in a single geographic region. And while we believe that respondents' subjective experiences are important to understand, this focus also has limitations, in that objective measures/observations (e.g., of career and talent development self-efficacy) might reveal a different pattern of results.

There can be some suggestions as a result of validity and reliability studies. Despite this initial adaptation of the Career and Talent Development Self-efficacy Scale suggests that it seems both a reliable and a valid measure of career and talent development self-efficacy, some important points indicate areas that require further research. First, the current study did not include behavioral or experimental correlates. For example, the generalizability of our findings is limited by our recruitment of only adolescent students who their age ranged from 13 to 18. Thus, the next goal will be to obtain a relatively heterogeneous group of participants rather than only groups of students in Turkey.

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Appendix A: Items of the The Turkish Form of Career and Talent Development Self-Efficacy Scale

1	Akademik konulardaki yeteneklerimi keşfedebilirim.
2	Bağımsız çalışabilirim.
3	Kariyer hedeflerimi ve bu hedeflere giden yolları keşfedebilirim.
4	Ders dışı etkinlikler aracılığıyla, güçlü yönlerimi tanıyabilirim.
5	Sorumluluk gerektiren görevleri üstlenebilecek cesaretim var.
6	Seçeceğim kariyere göre ilgi alanları geliştirebilirim.
7	Belirlediğim akademik hedeflere ulaşabilirim.
8	Verilen görevleri düzenli yapabilirim.
9	Farklı meslekler için gereken özellikleri anlayabilirim.
10	Eğlence faaliyetlerini, ilgi alanlarıma göre seçebilirim.
11	Verilen işleri zamanında bitirebilirim.
12	Gördüğüm derslerin, kariyer gelişimime olan katkısının farkındayım.
13	Deneyimlerimi zenginleştirmek için çeşitli etkinliklere ve yarışmalara aktif katılabilirim.
14	Başkalarına yardım için sorumluluk alabilirim.
15	Okul yaşamım, gelecekteki eğitimim ile kariyerim arasındaki ilişkiyi anlayabilirim.
16	Ders dışı etkinliklerde belirlediğim hedeflere ulaşabilirim.
17	Eğitim, oyun ve dinlenme zamanlarımı kendim belirleyebilirim.
18	Sevdiğim ve yapabileceğime inandığım mesleği, çevreme tanıtabilirim.

Music Performance Anxiety Scale for High School Students:

Validity and Reliability Study

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ABSTRACT

This study aims to develop a Music Performance Anxiety Scale (MPAS) for high school students, and to conduct a validity and reliability study. In this respect, a scale will be developed to be used for high school students (adolescents), and differences between the genders will be examined. The study was conducted on 546 high school students. Of these students, 185 (33.9%) were male, 361 (66.1%) were female, and the average age was 16.81 with the ages ranging from 15 to 20. Correlational values of the scale items among themselves and with item totals were examined as a preliminary analysis. As a result of the EFA's principal components technique, promax rotation technique and the analyses, a construct with three factors explaining a total of 42.74% of the total variance was attained. The structure attained was validated by CFA, and fit indices were found to be within the acceptance interval. In the reliability study, Cronbach's alpha internal consistency coefficient was calculated as .86 for the entire scale, 27% for the lower-upper group comparison and test-retest analyses were conducted. The t-test was performed to attain the difference between genders. As a result of the study, a valid and reliable scale was seen to have been developed and a difference between the genders was apparent.

Keywords:
Gender; high school students; music performance anxiety; reliability validity.

1. Introduction

Music Performance Anxiety (MPA) is one's feeling of being excessively anxious and stressed markedly and persistently with cognitive, affective, somatic and behavioral components while conducting a musical performance. MPA may occur at a controllable level or reach a more intense level. It may emerge only in limited conditions where a musical performance is being conducted or along with other anxiety disorders (Kenny, 2008).

MPA restrains the individual in such a state that he/she makes doubtful, tragic, persistently negative considerations about his/her performance like he/she will be inadequate and unsuccessful. MPA is manifested physically by difficulty in controlling breathing, blushing, trembling, dry mouth, inability to avoid trembling of hands and stomach cramps. Behaviorally, it causes conditions in the individual such as abstaining from the circumstances requiring performance, abandoning, loss of motivation, loss of memory, sleeping difficulty, distracted attention and fidgeting. Conditions like depression, panic and fear are observed in affective terms (Spahn, 2006). In this context, the provision of an MPA diagnosis and psychological assistance services should be considered important. MPA is not an indicator of only a problem limited to this condition, but also of the decline in coping capability. Cognitive therapies and behavioral approaches including drug use were found to be effective in reducing performance anxiety that significantly affects life satisfaction. Moreover, an assistance approach and the development of coping skills were found to be important for reducing MPA and the accompanying general anxiety level (Kenny, 2005). MPA may

lead to the development of various problems due to its presence and level (Kenny & Ackermann, 2008). Consequently, performance anxiety may exhibit effects that may cause an individual to isolate himself/herself, perceive other anxiety-causing conditions more severely and feel bad (Sanderson, DiNardo, Rapee, & Barlow, 1990). Furthermore, the MPA that is commonly observed among adolescents has been identified as a hard-to-bear condition. In this context, the importance of the provision of MPA measurement and assistance services may be considered (Osborne, Kenny, & Holsomback, 2005).

Performance anxiety is discussed in the psychology literature as an important research variable for different social circumstances and circumstances requiring interpersonal relations. In addition, theoretical frames of anxiety research are seen to vary according to the changes in the definitions of anxiety in the DSM-III that was published by the APA in 1980. In particular, distinguishing anxiety from depression and beginning to study it as sub-dimensions of Generalized Anxiety Disorder, Social Anxiety Disorder, Panic Attack, etc. have increased the tendency toward the study of specific topics. Along with this change, performance anxiety is addressed mostly together with social anxiety. However, performance anxiety needs to be studied separately in situational terms, as it can be influenced by generalized anxiety and social anxiety level, and in a process that runs characteristically. This perspective is known to increase the chance of developing more effective and economical interventions especially in the course of assistance.

Many different types of performance anxiety have been defined in the psychology literature. Pargman (2006) defines it as a special type of fear experienced by the individual before a performance. The performance term may generate subjective considerations in explanations of performance anxiety. For instance, while someone is very afraid of exams, another is afraid of speaking in front of his/her colleagues or eating in crowded environments. Performance anxiety is also defined as a continuous anxiety emerging during performances in front of an audience regardless of educational level, skill, gender, age or level of preparation (Salmon, 1990; Wesner, Noyes, & Davis, 1990). This anxiety may affect people regardless of their skill level and age (Steptoe et al., 1995).

When one mentions performance anxiety, the first thing that comes to mind is stage fright in performance arts. According to the psychology literature, stage fright and performance anxiety may be used in place of each other. MPA, a special type of performance anxiety, is a musician's fear of failure, or his/her fear that a potential problem that is likely to occur during a performance could be considered negatively by the audience. For instance, fear is triggered physiologically or psychologically by the expectations from events like a concert, audition or performance exam. Unfortunately, many musicians have discouraging experiences making them believe that they would not be able to fully use their capacities. Hence, their anxiety levels have increased so much that their automatic motor responses are inhibited (Allen, 2010).

Performance anxiety considerably increases before the performance. While trembling, sweating and stress are experienced, cognitive processes like focusing and attention are also affected under several conditions. For instance, even the sense of reality may change when performance anxiety is experienced. Most musicians have experienced having a dry mouth, feeling like they have been punched in their stomachs, having a lump in their throats while gulping, or experiencing a sense of tingling, chilling or sweating on their hands during or before their stage performances. These senses are usually regarded as evidence of performance anxiety (Kirchner, 2003).

Performance anxiety, also named stage fright, is a well-accepted condition that negatively affects many individuals. This fright and anxiety is so strong that the individuals affected by this condition have to abandon many activities like continuing their careers and enjoying life. Performance anxiety is a condition experienced by an individual in front of an audience of any class and size. Performance anxiety is a multi-dimensional phenomenon similar to fright and incorporating cognitive, behavioral and physiological responses. It emerges against a real threat, an inappropriate threat reality or several unknown actuators (Marye, 2011).

Despite studies being carried out on MPA for a long time, and the events and practices based on intensive performance in music teaching departments, faculties of arts or faculties of education in a great majority of universities, and at general and fine art high schools in Turkey, the available studies are limited (Egilmez, 2012; Kafadar, 2009; Teztel, 2007; Yöndem, 2007, 2012).

Studies on MPA have been conducted mainly on adults. Nevertheless, studies concerning the anxiety conditions of children and adolescents at their development stage have been increasing in the respective literature in recent years. A particular focus is placed on studies concerning coping efforts and gender (Boucher & Ryan, 2011). Many scales used to measure MPA are available in the psychology literature. One study incorporated 22 measurement tools developed for measuring performance scales (Osborne & Kenny, 2005). Most of these scales are measurement tools developed for adults and university students. In addition, there are a limited number of studies in Turkey, while there is no scale for measuring MPA. In this context, the present study has two objectives. The first objective is to develop a valid and reliable MPAS for high school students. The second objective of the study is to reveal the MPA of the students going to fine arts high schools and to find the difference between the genders. In this respect, the aim was to prepare a measurement tool capable of measuring the cognitive, affective, somatic and behavioral dimensions of MPA especially for adolescents.

2. Method

2.1. Participants

The sample of this study is comprised of 546 music department students studying at 13 state fine arts and sports high schools located in different regions of Turkey. The average age of the study group was 16.81, with 185 (33.9%) male and 361 (66.1%) female participants. The fact that the students participating in the study have been evaluated within the last six months and experienced music performance presentation as a real life experience was taken into consideration, and the scale was applied to the students representing this condition.

2.2. Procedure

In the course of preparing the scale items, firstly studies conducted on Music Performance Anxiety, Generalized Anxiety and Social Anxiety were examined, and an item pool of 33 items was created. In the next stage, these items were reviewed by three academics who are experts in psychological counseling and guidance and in music teaching fields. As a result of the reviews, a pilot application was initiated with a 33-item scale. The 33 items were applied to a pilot group and the preliminary evaluation showed that none of the items needed to be excluded. The MPAS that was developed was then used for the validity and reliability study. It utilized a 5-point Likert-type rating ("0" never, "1" seldom, "2" sometimes, 3 "often" and 4 "always") and it was administered to the students.

Explanatory factor analysis (EFA) and confirmatory factor analysis (CFA) were conducted with respect to the construct validity of the MPAS. The reliability of the MPAS was examined by Cronbach's alpha internal consistency method, lower-upper group examination and test-retest methods. SPSS 11.5 and Lisrel 8.54 programs were used for validity and reliability analyses.

3. Results

3.1. Results Intended for the First Objective

3.1.1. Construct Validity

Explanatory Factor Analysis: In the EFA conducted to examine the construct validity of the MPAS, first, the correlation matrix between all items was examined to check whether a highly significant correlation existed, and significant correlations appropriate to enable factor analysis were seen to exist. The appropriateness of the data for factor analysis was examined by Kaiser-Meyer-Olkin (KMO) coefficient and Bartlett's test. KMO must be higher than 0.60 and Bartlett's test must be significant (Çokluk, Şekercioğlu, & Büyüköztürk, 2010). In this study, the KMO sample appropriateness coefficient was found to be .92, Bartlett's test of sphericity X2 was found to be 2699.052 (p<.001), and factor extraction from the answers given to scale items was seen to be possible. In the literature, there is a common opinion that the minimum magnitude for the factor load value of an item must be .30. In addition, the decision as to what the cut-off point for magnitudes of the load must be to evaluate the factor load values is stated to be an issue concerning the researchers' preferences (Çokluk et al., 2010). Based on this opinion, a factor load value of .30 was adopted. In order to determine the factor load value before beginning factor extraction operation, EFA's principal components technique was used to gather more variables by reducing them under less components (Tabachnick & Fidell, 2007) as it gives

psychometric results (Stevens, 2009). Oblique rotation was used since a relation was considered between the items and possible sub-dimensions according to Ho (2006). When the oblique technique was used, the promax rotation technique was used because it was fast and economical (Tabachnick & Fidell, 2007). As a result of the scree plot, the factor analysis was limited to three factors. Thirteen items with factor loads below .30 or with overlapping factor loads were excluded from the scale. A three-factor construct explaining 42.74% of the total variance was attained. Factor loads of the items of each factor are given in Table 1.

Table 1. Music Performance Anxiety Scale Factor Loads

Item No	Pre-PA	In-PA	Post-PA
10	0.74		
22	0.71		
12	0.71		
7	0.70		
13	0.70		
17	0.69		
24	0.63		
26	0.58		
27	0.57		
20	0.55		
11	0.50		
9	0.43		
33		0.73	
32		0.65	
31		0.51	
5		0.42	
19		0.37	
25			0.73
18			0.61
30			0.60
(Eigenvalue)	5.96	1.45	1.14
Variance (%)	29.80	7.25	5.68

Pre-PA: Pre-Performance Anxiety, In-PA: In-Performance Anxiety

Post-PA: Post-Performance Anxiety

Confirmatory Factor Analysis: Three sub-dimensions were attained for the MPAS by explanatory factor analysis. Level 2 confirmatory factor analysis was conducted to test theoretically whether these three sub-dimensions attained are predicted by the high level variable Music Performance Indicator, which was determined to be the latent variable. In this context, the model was tested by level 2 confirmatory factor analysis to confirm the construct that is theoretically accepted to be correct. The literature states that the fact that the rate of x^2 value to degree of freedom is two or lower shows the model to be a good model, and the fact that it is five or lower shows the model has an acceptable goodness of fit. It is expressed that the fact that the RMSEA value is below .05 shows a good fit value, and that it is below .08 shows an acceptable goodness of fit value. Regarding other values, it is stated that the fact that GFI, AGFI and CFI values are higher than .90 can be considered as the indicator of an acceptable goodness of fit value, and that they are higher than .95 as the indicator of an optimal goodness of fit (Schermelleh-Engel, Moosbrugger, & Müller, 2003). When examining the output file containing the results obtained from the model created for level 2 confirmatory factor analysis, the Chi-square value ($x2=310.91$, sd=167, x2/sd=1.86) was found to be significant, fit index values were found to be RMSEA=.04, GFI=.95, AGFI=.93, CFI=.98, IFI=.98, NFI=.96, RFI=.95, SRMR=.03, and the model is seen to be readily acceptable in this form. Besides these, AIC (396.91) and CAIC (624.93) values

pertaining to the model are lower than the independence model values (7370.22 and 7476.27, respectively). The results are presented in Figure 1.
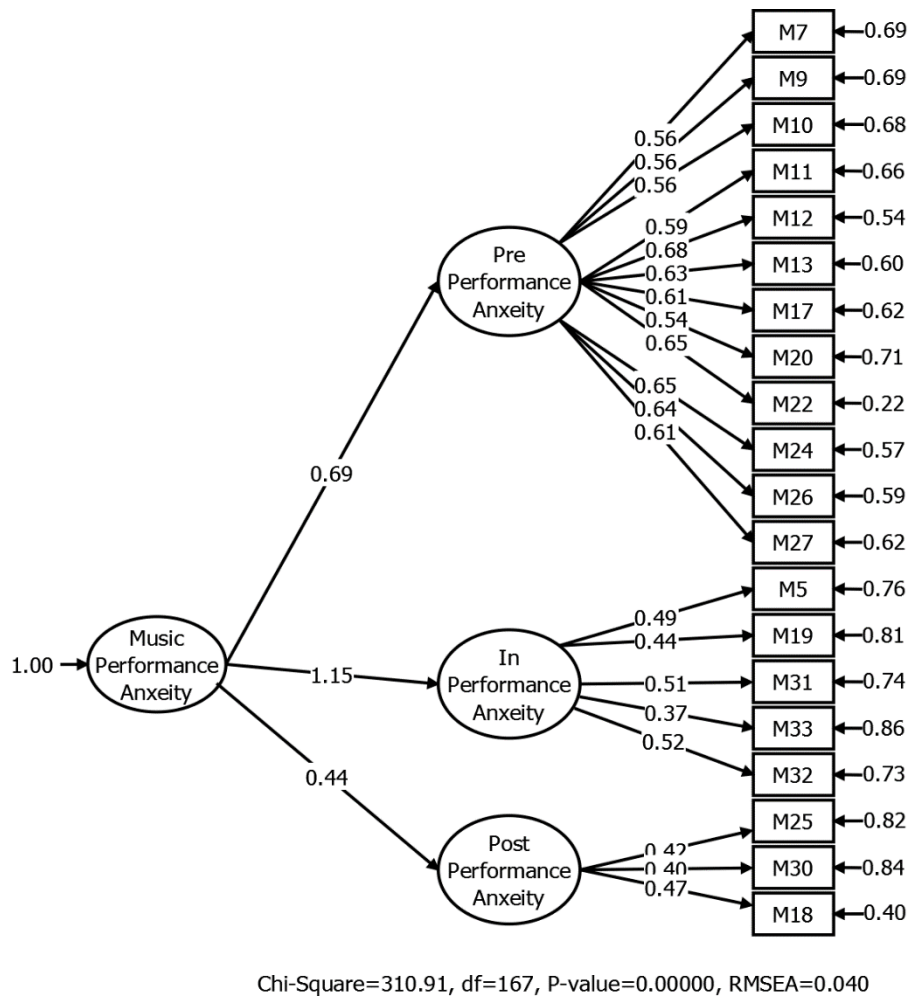

Chi-Square=310.91, df=167, P-value=0.00000, RMSEA=0.040

Figure 1. Music Performance Anxiety Scale Level 2 Confirmatory Factor Analysis

3.1.2. Reliability Study

Cronbach's alpha internal consistency coefficient and adjusted item-total correlation were used to determine the reliability of the scale, and an uncorrelated t-test was used to test the differences between the item average scores of lower 27% and upper 27% groups created according to the total scores of the test.

Cronbach's Alpha Reliability: Cronbach's alpha internal consistency coefficient values were referred to in order to determine the internal consistency of the scale. It was .86 for the entire scale, .87 for the "Pre-Performance" dimension, .80 for the "In-Performance" dimension, and .81 for the "Post-Performance" dimension. These results show that internal consistency of the scale is at an acceptable level.

Lower-Upper Group Reliability: One of the methods followed in reliability studies is comparison of the lower 27% and upper 27% groups. The t-test results of the 27% lower (n=147) and upper (n=147) groups taken from the study universe were checked to test whether there is a significant difference between the groups. According to the results of the t-test, a significant difference (p<.001) was found to exist between the lower and upper groups.

Test-Retest Reliability: The test-retest method was used to determine the reliability of the scale. Two applications were conducted four weeks apart on a group of 30 people. Pearson's product-moment correlation coefficient was calculated for the reliability study. As a result of the pre-test and the post-test conducted two weeks later, Pearson's product-moment correlation coefficient was found to be .82. According to Tavşancıl (2002), the reliability coefficient is expected to be positive and a minimum of 0.70. Based on this information, the scale can be considered as reliable. The all reliability results are presented in Table 2.

Table 2. Adjusted Item-Total Correlation, T-Values, Cronbach's Alpha Values of Music Performance Anxiety Scale

Item No	Adjusted Item-Total Correlation				t-values			
	For Entire Scale	Pre-P	In-P	Post-P	For Entire Scale	Pre-P	In-P	Post-P
7	.50	.54			-13.22***	-15.75***		
9	.53	.51			-14.41***	-14.31***		
10	.50	.53			-14.07***	-14.83***		
11	.54	.54			-13.63***	-13.62***		
12	.61	.64			-14.91***	-16.85***		
13	.54	.59			-13.52***	-15.11***		
17	.54	.57			-13.45***	-15.56***		
20	.46	.49			-12.30***	-13.14***		
22	.58	.61			-14.98***	-17.07***		
24	.57	.59			-14.46***	-15.28***		
26	.57	.58			-14.78***	-16.37***		
27	.58	.57			-17.27***	-15.70***		
5	.42		.33		-10.84***		-16.10***	
19	.37		.30		-8.51***		-11.47***	
31	.43		.37		-11.47***		-15.28***	
32	.42		.40		-9.82***		-14.08***	
33	.30		.30		-8.32***		-12.43***	
18	.22			.24	-6.04***			-18.60***
25	.17			.27	-4.28***			-13.25***
30	.18			.23	-5.45***			-18.52***
Internal Consistency Coefficient (Alpha)	.86	.87	.80	.81				

n= 546 n1=n2=147 ***p<.001

Pre-PA: Pre-Performance Anxiety, In-PA: In-Performance Anxiety, Post-PA: Post-Performance

3.2. Results Intended for the Second Objective

The second objective of our study is to find the difference between the genders with respect to MPA. The results of the t-tests conducted for independent samples for this purpose are given in Table 3.

Table 3. T- test for MPA by Gender

Factor	Gender	N	Mean	Ss	t	p
Pre-PA	Female	280	20.06	10.86	2.33	.02*
	Male	131	17.51	8.97		
In-PA	Female	280	9.54	4.37	1.29	.19
	Male	131	8.94	4.41		
Post-PA	Female	280	7.63	2.65	1.40	.16
	Male	131	7.22	2.79		
MPA	Female	280	37.24	14.79	2.35	.01*
	Male	131	33.69	13.02		

* p<.05 MPA: Music Performance Anxiety Pre-PA: Pre-Performance Anxiety

In-PA: In-Performance Anxiety Post-PA: Post-Performance Anxiety

A significant difference is observed between genders in respect to the pre-performance anxiety of the students studying in the music department of fine arts high schools [t(409)=2.33, p<.05]. The pre-performance anxiety of female students (=20.06) is higher compared to male students (=17.51). No significant difference was found between in-performance anxiety [t(409)=1.29, p>.05] and post-performance anxiety [t(409)=1.40, p>.05] of the students. In addition, a significant difference is observed when the MPAS is considered as a whole. The MPA of female students (=37.24) is higher compared to male students (=33.69).

4. Discussion and Conclusions

Although numerous scales for MPA are available and they have been studied for many years abroad, no Turkish example is available. Hence, a scale of 20 items was created from the draft scale of 33 items concerning MPA. This scale was then administered to 546 students in the study. The construct validity of the scale was checked in the validity study. Explanatory factor analyses were conducted to determine the construct validity. Çokluk et al. (2010) state that the fact that the total variance declared in scale development studies is higher than 41% and that factor loads of the items are higher than .32 is enough to consider the scale as valid. In order to achieve the declared total variance of 41%, items with factor loads higher than .32 were kept in the scale. When the results attained from the explanatory factor analysis conducted in the study are reviewed in this respect, 20 items included under three factors in the scale are seen to have factor loads higher than .32, and 42.74% of the total variance is seen to be explained. Afterwards, confirmatory factor analysis was conducted for construct validity. As a result of level 2 CFA analyses, optimal fit indices were seen to be attained. The three-dimensional construct attained as a result of the explanatory factor analysis is confirmed by the CFA. Furthermore, the level 2 CFA showed that it was possible to use the scale as a one-dimensional and multi-dimensional scale. Consequently, factor loads, declared variance percentage and CFA fit indices of the MPAS are adequate for construct validity in scale development studies. Thereby, the development of a scale that has simply determined dimensions, that is easy to answer and that is suitable for students through this study is thought to make an important contribution to this field. In this respect, this study could be considered to have achieved its original objective.

The test-retest method was applied to the scale in the reliability study. In the test studies conducted four weeks apart, Pearson's product-moment correlation coefficient was found to be .82. The result attained demonstrated that the scale had an adequate reliability level.

The three-factor construct attained shows similarity with the "Kenny Music Performance Anxiety Inventory (K-MPAI)", which was developed by Kenny, Davis, and Oates (2004) for adult musicians, and the three-dimensional construct of the "Music Performance Anxiety Inventory-Adolescent (MPAI-A)", which is an adaptation of the same scale by Osborne and Kenny (2005) for adolescents. The scale was developed according to Barlow's affective-based anxiety disorders theory. It incorporates the physical and cognitive characteristics dimension including the fright and anxiety of making a fault before and during performance, and the Performance Evaluation dimensions including the Performance Status involving playing solo or as a group, which refers to the nature of the audience, the evaluation as to what is understood by the audience and the performer from the performance, the conclusions derived from this evaluation (especially when a fault is made), and concentration difficulties while performing in front of the audience. Sub-dimensions and most items of the scale designed as pre-in-post-performance by the researchers show similarity with those of the MPAI-A. The item "I cannot avoid trembling and sweating of my hands and body before and while I am on the stage" contained in the pre-performance sub-dimension is similar to the item "Before I perform, I tremble or shake" contained in the physical and cognitive sub-dimension of the MPAI-A. The item "performing in chorus is always better than solo" contained in the in-performance sub-dimension is similar to the item "I would rather play in a group or ensemble" contained in the performance status sub-dimension of the MPAI-A.

Each survey to be conducted with this scale will contribute to the scale's capability to make further reliable measurement. Furthermore, validity and reliability studies may be conducted by adapting the scale to be applied to music students studying at university, professional musicians and other musicians. The short- and long-term prediction validity of the scale should be investigated. In addition, the scale must be applied in adult samples besides student samples to determine whether it can be used validly and reliably.

A difference was found to exist between the genders in terms of MPA in the t-test. Female students somehow experience more anxiety compared to male students in all age groups from six to 25 (Ryan, 1998). In contrast, the study revealed that male students' performance anxiety was higher compared to female students. While there are studies like this supporting that male students experience higher anxiety, when examining the literature, female students are seen to experience more MPA (Abel & Larkin, 1990; LeBlanc,

Jin, Obert, & Siivola, 1997; Nagel, 1988; Widmer, Conway, Cohen, & Davies, 1997). In all of these studies, the MPA of females is higher than the MPA of males.

The results also point out another conclusion. The MPA experienced by the students is higher before performance. It gradually decreases during performance and drops to the lowest level after performance. This result is consistent with the definition given by Pargman (2006). Pargman defines performance anxiety as a special type of fear experienced by the individual before a performance. Moreover, Beck and Emery (1985) provide a similar definition. According to them, performance anxiety is defined as the anxiety of being evaluated that is experienced by the individual before a performance. The individual's anxiety increases with the thought that he/she will be evaluated. In the study conducted by Kokotsaki and Davidson (2003), a similar conclusion was attained. Female students experience more anxiety before performance. This anxiety decreases after performance. The anxieties of male students vary before and after performance as well.

Although it has been studied for a long time abroad, the available results are important as this is the first study conducted on adolescent students studying at fine arts high schools and the first scale developed in Turkey. Future studies are important for the development of the psychometric characteristics of the scale.

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The Attitudes of Prospective Teachers towards Homosexuality: A Case Study in Konya

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ABSTRACT

Sexuality has played a natural and significant role in human life throughout history and the interpretations of the values related with sexuality have varied in time and place (Pınar, Pınar, Doğan, Karahan, Algier, at all, 2009). Homosexuality is also interpreted in various ways. In modern Turkey, homosexuals are among the discriminated and marginalised groups (Gelbal, & Duyan, 2006; Oksal, 2008)This study tried to determine the attitudes of prospective teachers towards homosexuality. The aim of the study is to investigate whether the attitudes of the participants vary according to gender, age and domains. The study group consists of 488 students who were studying at Ahmet Kelesoglu Education Faculty, Necmettin Erbakan University, in Konya, Turkey in the academic year 2011-2012. The number of female participants was 319 and the number of males was 169. The age of participants ranged from 19 to 22. The Attitudes towards Lesbians and Gay Men Scale (ATLG) and Personal Information Form were used as data gathering instruments.As regards the studies into gender variable, the males have been found to have more negative attitudes than females.As for the findings related to the age variable, the 21-22 year old participants were found to have more positive attitude towards homosexuals than other age groups. The findings about the domain of the participants showed that the students with equal-weighted had more positive results towards homosexuality.

Keywords:
Teacher candidates, homosexuality, attitude.

1.Introductıon

Homosexuality is romantic or sexual attraction and/or sexual behaviour between the people of the same sex. Also, it refers to the sense of identity deriving from those attractions and behaviours. Homosexuality dates back to a long time ago and various controversial methods were used to treat it for some time in the past. Today, it is not considered as an illness by scientists. Firstly, in 1973, the American Psychiatry Association, and then the World Health Organization, in 1990, decided to exclude homosexuality from the list of illnesses. In 1992, this decision was registered officially in the list of ICD-10 and from 1994 onwards all the member countries of WHO began to use the new classification (Çabuk, 2010). It was ascertained by medical science that homosexuality, which may be inmate or may develop by 3 or 4 years old, is not a disorder but an involuntary tendency out of three sexual types. This conclusion has been accepted widely and homosexuals have achieved many rights equal with heterosexuals in developed countries, including official marriage (Çabuk, 2010). The number of studies on homosexuality has also increased in time.

On the other hand, negative attitudes towards homosexuals still prevail. The origin of the negative attitude is that people see the sexual choices except for heterosexuality "abnormal" or "diverted" due to the social

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beliefs, rules and norms, which cause some feelings about homosexuals such as fears, anxiety, concerns, and intolerance (Göregenli, 2004; Saraç, 2008).

In literature, the terms like homophobia, sexual prejudgement and gender discrimination have been used to state the negative attitudes towards homosexuals (Göregenli, 2004; Saraç, 2008).

In Turkey, homosexuality began to be discussed and drew attention in the mid 1980s (Çabuk, 2010). Although homosexuality and homosexual affairs are known to date back to old times in Turkey, homophobia is still very common among Turkish people and negative attitude has usually been exhibited against homosexuals in society (Gelbal, & Duyan, 2006; Mitrani 2008). As for the Western societies, the attitude of public towards sexuality is said to approve and support homosexuality (Özeruz, 1999).

In the literature review, a number of studies on homosexuality have been found. The findings of the studies have revealed some significant points. In terms of age variable, it was found that negative attitude increases as the age advances (Ekşi, 1990; Herek, 2002; Özeruz, 1999). Another finding is that females display more positive attitude than males (Aosved and Long, 2006; Davies, 2004; Gormley and Lopez, 2010; Heath, & Goggin, 2009; Herek, 1988; Herek and Gonzalez-Rivera, 2006; Herek and Glunt, 1993; Jenkins, Lambert and Baker, 2009; Kite, 1984; Kite and Deaux, 1986; La Mar and Kite, 1998; Nagoshi, Adams, Terrell, Hill, Brzuzy, & Nagoshi, 2008; Nelson and Krieger, 1997; Nierman, Thompson, Bryan and Mahaffey, 2007; Schellenberg, Hirt and Sears, 1999; Simoni and Walters, 2001; Steffens and Wagner, 2004; Swank and Raiz, 2010). It was also found that positive attitude increases in parallel with the rise of education level (Jenkins, Lambert and Baker, 2009; Lewis and Taylor, 2001; Shackelford and Besser, 2007). As for religious beliefs, negative attitude was found to increase as the religious beliefs get stronger (Gelbal and Duyan 2006). Another finding is related to the relationship between financial status and attitude towards homosexuality, which revealed that negative attitude increases as the financial status gets worse (Okutan, 2010). As for occupational group variable, it was found that the most negative attitude was exhibited by police officers, doctors and teachers (Akdas-Mitrani, 2008). Findings related with homosexual friends have shown that positive attitude increases if a friend is homosexual (Sakallı, 2002a ; (Ballard, & Morris 1998). Some other studies have revealed that conservative attitudes contribute to negative attitude towards homosexuals (Ekşi, 1990; Özeruz, 1999). The other two variables that contribute to negative attitude towards homosexuals were family expectancy and media (Gelgeç and Öktem, 2008).

Furthermore, family values, cultural factors and biological structure play role in sexual identification, sexual orientation and sexual behaviours as well as the set up of masculinity and femininity (Kaplan and Sadock, 2004).

This study tried to determine the attitudes of prospective teachers towards homosexuality. The aim of the study is to investigate whether the attitudes of the participants vary according to gender, age and domains. Regarding this aim, the following research questions were put forward:

1. Do the attitudes of the participants vary according to gender?

2. Do the attitudes of the participants vary according to age?

3. Do the attitudes of the participants vary according to domains?

2. Method:

This study employed a quantitative methodology. Survey method was used in this study. Survey is a method of sociological investigation that uses question based or statistical surveys to collect information about how people think and act. Simple random sampling was used in selecting university students that will participate in the study. Students completed the data-collecting tools anonymously and voluntarily.

2.1. Participants:

The study group comprised of 488 students who were studying at Ahmet Kelesoglu Education Faculty, Necmettin Erbakan University, in Konya, Turkey in the academic year 2012-2013. The number of female participants was 319 and the number of males was 169. The age of participants was between 19 and 22. In

Turkey, education faculties place students in various departments according to four different intelligence groups: verbal, computational, equally weighted and artistic. The randomly chosen participants from these groups took part in the study voluntarily.

2.2. Instruments

The Attitudes towards Lesbians and Gay Men Scale (ATLG-R) and Personal Information Form(gender,age,domain) were used as data gathering instruments

2.2.1. The Attitudes towards Lesbians and Gay Men Scale (ATLG-R)

The scale was developed by Herek (1998) and translated into Turkish with validity and reliability tests by Duyan and Gelbal (2006). This scale includes ten statements. Statements such as are rated on a 5-point scale that ranges from 1 (strongly disagree) to 5 (strongly agree). Positively worded items are reverse coded, such that higher scale scores indicate more negative attitudes. The ATLG-R subscales have high levels of internal consistency. alpha > .80 for 5-item versions and alpha > .70 for 3-item versions. Test-retest reliability (rs > .80) has been demonstrated with alternate forms.

2.3. Statistical analysis

In the study, Variance analysis and t test were used as statistical method. SSPS 17 program was used in analysing the datas.

3.Results

The results of the study are presented in the following part. The t-test results related with the participants' attitudes towards homosexuality according to their gender are in the table below.

Table 1. The results of t test regarding the attitudes of participants towards homosexuality according to gender variable

Attitude	Group	N	X	Ss	t	p
ATLG	Female	219	25.01	10.08	3.61	.00
	Male	169	21.32	11.89		

p<.05

The findings revealed that the female participants had more positive attitudes than the males towards homosexuals, which means that females approve homosexuality much more than males and do not reveal discriminative attitude towards it.

Table 2. The results of Anova test regarding the attitudes of participants according to their age.

Attitude	Age	N	X	Ss	F	P	DBF
ATLG	19	96	23.21	7.96			
	20	73	19.45	8.17	5.24	.00	21- 22 age and 20 age
	21	118	25.38	11.01			
	22	199	24.58	12.50			

p<.05

The results of one way ANOVA test showed that there was a significant difference in the participants' attitudes towards homosexuality according to age variable (p<.05). The Scheffe test was done to determine the reason for this difference and it was found that the attitudes of the participants between 21 and 22 years old were significantly higher than the 20 year-old participants

Table 3. The results of Anova test regarding the attitudes of participants according to their domains.

Attitude	Domains	N	X	Ss	F	P	DBG
ATLG	1.Computational	90	19.97	7.60			
	2.Verbal	98	20.36	8.31	22.72	.00	3 and 1-2 and 4
	3.Equal weighted	156	29.09	13.60			
	4.Artistic	139	22.46	8.22			

p<.05

According to the results of one way ANOVA test, there was a significant difference in the participants' attitudes towards homosexuality according to domain variable (p<.05). The Scheffe test that was done to determine the reason for this difference showed that the participants in equal weighted domain revealed significantly higher attitudes than the others in computational, artistic and verbal domains.

4.Discussion

The results of the study revealed that the female participants had more positive attitude towards homosexuals than the males. It was also found that 21 – 22 year olds were more positive towards than the other age groups and the ones whose domain was equal weighted revealed more positive attitudes than those in the other domains.

As regards the findings on gender variable, the males have been found to have more negative attitudes than the females. The results of this study regarding the gender is supported by the similar studies. Dominant male roles in our country, the identification of masculinity with individuality, social pressure, the effect of peers and media, religious and social factors might have played role in this result. Boratav (2006) states that the gender roles children acquire through family, peer groups, media and school contribute to developing homophobia, and that homosexuality is considered as disgusting and abnormal state. It is also a fact that due

to the socio-cultural structure of Turkish society and some value judgements regarding sexuality, there are differences between males and females in their attitudes towards sexuality (Pınar et all., 2009).

As for the findings related with age variable, the 21-22 year old participants were found to have more positive attitude towards homosexuals than other age groups. The studies on the age variable shows that as the age advances, the negative attitude towards homosexuality increases (Adamczyk and Pitt, 2009; Heath and Goggin, 2009; Herek and Gonzalez-Rivera, 2006). The fact that the age intervals in this study were very close to each other might have played role in this finding.

The findings about the domain of the participants showed that the students with equal-weighted had more positive results towards homosexuality. The fact that the students at the Departments of Elementary School Teaching and Psychological Counselling and Guidance come from equal-weighted domain may have been significant in this result due to the curriculum implemented in these departments.

Prospective teachers are in the period of youth. In this period, health habits and sexual behaviours are formed and individuals pass from childhood to adulthood.

The education given to the young on sexual health will help them participate in sensible and responsible activities and make the best choices, which will preserve and improve sexual health in society (Pınar et al., 2009). Roche (1998) claims the lack of knowledge, skills, values and positive attitudes about sexuality may cause dire effects on individuals. A study into the occupation groups found that the most negative attitude towards homosexuality was exhibited by policemen, doctors and teachers (Akdaş and Mitrani, 2008). This finding supports the conclusion reached in the study.

5.Conclusion And Recommendations

The aim of the study was to investigate the attitudes of the prospective teachers towards homosexuality in terms of gender, age and discipline variables. It was also found that the 21 – 22 year olds were more positive towards homosexuality than the other age groups and the ones whose domain was equal weighted revealed more positive attitudes than those in the other domains. If the prospective teachers have positive attitudes towards homosexuality, it might be considered that in future, they can guide their students in an appropriate way and recognize individual differences, which is very important to integrate them with society.

In view of the findings, the following recommendaitons are made:

Prospective teachers should be provided training on sexuality and homosexuality. The content of ongoing training, if any, should be revised. Research should be held to determine the reasons for the negative attitude towards homosexuality among prospective teachers.

Negative attitudes towards hoomosexuality among men should be reduced through training on homosexuality.

Students with computational, verbal and artistic skill should also be informed about homosexuality to foster positive attitude towards it. As a result, it is recommended that prospective teachers should be given supportive education so that they can develop positive attitude towards homosexuality.

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