Vol. 13(12), pp. 447-463, 23 June, 2018
DOI: 10.5897/ERR2018.3541
Article Number: 273606057517
ISSN: 1990-3839

http://www.academicjournals.org/ERR

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Full Length Research Paper

Investigation of music teacher candidates' individual instrument burnout, perceived family support in instrument training and individual instrument training habits with regard to various variables

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Received 8 April, 2018; Accepted 11 June, 2018

In the research, "Questionnaire on Individual Instrument Course Burnout" developed by Girgin, "Questionnaire on Individual Instrument Training habits" developed by Küçükosmanoğlu, Babacan, Babacan and Yüksel, and "Questionnaire on Perceived Family Support for Individual Instrument Course" developed by Girgin were used. Statistical package for social science (SPSS) 21.00 software package was used for data analysis. Since the research data did not show a normal distribution, Mann Whitney U analysis was used for binary variables; and Kruskal Wallis and Spearman Brown's Rank Correlation analyses were used for variables more than two. Music teacher candidates' individual instrument burnout scores showed statistically significant difference depending on university and individual instrument variables; their family support scores showed significant difference depending on grade, university, high school and individual instrument variables; and their training habits showed significant difference depending on gender, university and individual instrument variables. A significant negative correlation at a low rate was found between music teacher candidates' burnout scores and their family support scores. A significant negative and moderate correlation was found between teacher candidates' burnout scores and their studying habit scores. A significant positive moderate correlation was found between teacher candidates' family support scores and their training habit scores.

Key words: Burnout, family support, training habits, individual instrument, music teacher candidate.

INTRODUCTION

Art is a phenomenon that fulfills the aesthetical needs of humans. Art has been defined in a variety of ways throughout history. Edman (1977) defined art as: "giving shape to life by the hand of a mind that understands it". Aesthetical reflection of sound onto art emerges in the form of music. Music has several contributions on emotional life of humans. It has a positive impact on individuals' ability to maintain their lifes in a healthy, satisfied and happy manner, realize themselves in their lives and live a balanced life (Uçan, 1996).

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Societies' art lives are to a large extent formed by art educators. In close connection with the subject of this research, the majority of music teachers in Turkey complete their professional education at the fine arts education departments of faculties of education. A wide variety of courses are provided regarding the field and pedagogic professional knowledge at Music Education Departments. The courses related to the field are also divided into two as individual and group courses. Piano training, vocal training and individual instrument training are examples of individual courses. Individual instrument is the personal instrument of music teacher candidates, willingly chosen among other instruments, and they are held responsible for developing their technique and musicality for a period of four years using this instrument, which can be also be used throughout their professional lives.

In this context, it can be considered to have an important place in music teacher candidates' musical lives. However, as in all fields, undesired situations may also occur in instrumental training and have adverse impacts on the quality of music. One of these factors is the feeling of burnout experienced by teacher candidates. The concept of "burnout" was initially introduced to the scientific world by Herbert Freudenberg in a 1974 issue of "Journal of Social Issues". Two years later, Chiristina Maslach performed a more detailed study on concept. Several studies on the subject were introduced in the "1st International Conference on Burnout" (Peker, 2002 as cited in Karacan, 2012). It was defined in the most concise and simple way as "the mental and physical burnout of energy" (Budak and Sürgevil, 2005).

Burnout, or emotional exhaustion, is frequently encountered among people who are engaged in professions with peer to peer communication. The most prominent symptom of the burnout syndrome is the increasing feeling of emotional exhaustion. Working individuals feels like they cannot engage in their works when they fall short of emotional sources. Accordingly, they display negative and sarcastic attitudes and behaviors against their working group (Maslash and Jackson, 1981).

Several reasons may underlie burnout which has undesired effects on individuals' personal and working lives. These underlying reasons may be personal or administrative. Personal sources of burnout involve demographic characteristics and expectations, whereas administrative sources of burnout involve human relations, conflicts, competency, agreement, work overload and relationship with superiors (Izgar, 2003).

It is stated in the related literature that burnout has been more commonly encountered in specific areas of profession. Education and service sectors are among these areas (Ertürk and Kececioğlu, 2012). Reportadly, it has been even more severely experienced among professions such as nursery, medicine, and teaching that require peer-to-peer and face to face communacition as a result of the overwhelming burden of increasing workload and worsening living conditions (Kell, 1993 as cited in Altay et al., 2010).

Teachers' burnout may manifest itself in a variety of ways depending on physical or emotional conditions. Inadequate classroom conditions, failing to have access required materials and teaching aids, crowded classrooms, overwhelming working hours and physical conditions can be shown as some of the underlying factors. Emotional conditions, on the other hand, may involve the unconcernedness and incuriousness of students, being deprived of administrators' support, inconsiderate and careless parents, or the lack of interest in the field. Several studies have been conducted on teachers' burnout in Turkey or the other countries (Akten, 2007; Otacıoğlu, 2008; Bilgen and Genç, 2014; Çelik and Yılmaz, 2015; Tümkaya, 2016; Yong and Yue, 2007; Grayson and Alvarez, 2008; Skaalvik and Skaalvik, 2010; Karahan et al., 2011; Droogenbroeck et al., 2014; Joy and Dikes, 2015).

The concept of burnout is not specific to occupational groups alone. It may also be experienced by students. The feeling of burnout may arise particularly among university students due to the feeling of uncertainty followed by graduation, challenges related to being away from their families, the overwhelming workload of homeworks and projects, crowded classrooms, challenges related to getting acquianted with a new environment and the intensity of technical courses. It leads to a negative mood which is effective on both teachers and students. The feeling of exhaustion may lead to undesired impacts on individuals such as stress symptoms, the negative influence on working life, the symptoms of exhaustion and behavioral disorders (Izgar, 2003). In this context, the feeling of exhaustion induced by the feeling of underachievement can be alleviated through adopting organized working or training habits, since academic success depends on the extent to which a student works systematically or orderly (Subaşı, 2000).

Training habits are expected to be adopted at early ages. Küçükahmet (2002) exemplified students' training habits and attitudes as; their feelings during the process of learning or their feelings towards homeworks; their training methods, their ways of utilizing libraries, their relationships with their families and friends, and their arrangements as to their working environment. Students' training habits and attitudes are largely influenced by their own study approaches, assignments and homeworks, their working environment, works at school and teacher-student relationships.

Pressey and Robbinson (1970) summarized the important points of their work on students' training habits as; keeping the physical and mental health at reasonable grounds for working, effective usage of time, paying strict attention to taking and keeking the notes in a proper way as well as the rules for a good literacy, and carrying out their studies within the frame of a well organized

program (as cited in Dilek, 1993).

Students' being informed as to what and how to study as well as their ability to make the required study plan and their perseverance in pursuing is closely associated with acquisition of the right study habits. One of the most important rules of effective learning is carrying out a planned work. Making a working plan is related to determination of working priorities and their realization within the frame of a calender. The initial step of a working plan is determination of the priorities. Students who determine their priorities in a clear and effective way also know how to use their time efficiently (Uluğ, 2012).

In their study on students' study habits in Turkey, Küçükahmet (1987) reported that, students in this country have low attitudes towards training and inadequate training habits, and those with positive attitudes towards teachers and education have better study habits (Dilek,1993). Other studies on training habits include Ergene (2011) research which was performed with 510 senior high school students to determine their study habits, exam anxienties, achievement motives and academic success levels. Significant correlations were found between the exam anxiety inventory's delusion subscale scores and academic success level; between the scores received from the questionnaire on study habits and academic success level; and between study habits and achievement motives.

Accordingly, study habits are supported by a positive study environment at home and school. Learners' being fully aware of their families' support is highly important for their affective availability, since individuals' current attitudes and behaviors are considered to have direct connection with their family experiences. Children's first social environment is their family (Girişken, 2010). Several studies on the effect of family support are available at various fields (Yıldırım, 2000; Altay et al., 2010; Tan, 2000).

In light of this, the convenience of some of the internal and external conditions becomes essential for learning individuals to achieve their targets. Music education involves the collective and continuous use of cognitive and psycho-motor skills and an efficient music education is possible through systematic daily works. In this field, individual instruments of music teacher candidates are their means of teaching throughout their professional lives and means of learning throughout their four years education in music education departments. This feeling of burnout that they undergo during their instrument training is likely to impair their skills and pose a serious impediment for achieving the desired quality.

In addition to this, the support they receive from their family holds great importance for their emotional lives, since family is their first social environment. The interest of their families in art, music, music education and individual instrument may have a positive or negative effect on teacher candidates' motivation. Another important factor which may have an impact on individual instrumental skills is certainly the teacher candidate's study habits. A teacher candidate working within the frame of an applicable and realistic working program with specified priorities can easily gain access to the outcomes of individual instrument courses. Consequently, answers were sought to the following questions within the framework of these three concepts which constitute a cornerstone with respect to a music teacher candidate's individual instrument:

(1) Do the music teacher candidates' instrument burnout scores show significant difference depending on their;

(a) Genders,
(b) School grades,
(c) Universities that they receive education from,
(d) High schools that they graduated from,
(e) Their individual instruments?

(2) Do the music teacher candidates' family support total and subscale scores show significant difference depending on their;

(a) Genders,
(b) School grades,
(c) Universities that they receive education from,
(d) High schools that they graduated from,
(e) Their individual instruments?

(3) Do the music teacher candidates' instrumental study habits total and subscale scores show significant difference depending on their;

(a) Genders,
(b) School grades,
(c) Universities that they receive education from,
(d) High schools that they graduated from,
(e) Their individual instruments?

(4) Is there a significant relationship between music teacher candidates' burnout scores related to their individual instrument courses, family support scores, and study habit scores?

METHODOLOGY

Study group

The study group consisted of 255 students receiving education in Fine Arts Education Music Education Departments of Balıkesir University Necatibey Faculty of Education (N:84), Muğla Sıtkı Koçman University Faculty of Education (76) and Adnan Menderes University Faculty of Education (95), as of the spring term of 2016 to 2017 academic year. 154 of these participants are male and 101 are female. 55 students were 1st grade students, 64 were 2nd grade students, 71 were 3rd grade students and 65 were 4th grade students.

Data collection tools

"Questionnaire on Individual Instrument Course Burnout",

Table 1. Gender-based distribution of Instrument burnout scores of music teacher candidates.

Variable	Gender	N	Mean Rank	Sum or Ranks	U	P
	Female	154	132.80	20450.50		
Burnout total score	Male	101	120.69	12189.50	7038.500	0.199
	Total	255	-	-		

developed by Girgin (2015), was used to measure the burnout levels of teacher candidates regarding their individual instruments. Cronbach's Alpha Burnout Coefficient of the burnout scale, consisting of 36 items, was 0.97 and it involved a single factor. Cronbach's Alpha Reliability Coefficient of this scale was calculated as 0.98 for the present research. The second measurement tool used in the research to measure the teacher candidates' individual instrument study habits was the "Questionnaire on Individual Instrument Study Habits" developed by Küçükosmanoğlu et al. (2016). Cronbach's Alpha Reliability Coefficient of the scale consisting of 18 items was 0.89. The questionnaire consistes of 4 factors namely; Attaching Value on Studying, Interest and Willingness, Preparedness to Training and Correct Use of Time. Cronbach's Alpha Reliability Coefficients of these factors were found as .82, .85, .82 and .80 respectively. Reliability coefficient of this scale for the present research was found as .69. Lastly, the "Questionnaire on Perceived Family Support in Instrument Training" was found to determine the teacher candidates' family support for their instrument training. The questionnaire developed by Girgin (2016) consists of 23 items with a Cronbach's Alpha Reliability Coefficient of 0.96. The questionnaire comprised of two factors as Sensitivity and Involvement in the Process and their Cronbach's Alpha Reliability Coefficient were 0.93 and 0.92, respectively. Cronbach's Alpha Reliability Coefficient of this scale for the research was calculated as 0.80. Additionally, a personal information form was applied to determine the students' demographic properties.

Collection of data

Research data were gathered from the music education departments of three different universities. These universities are Adnan Menderes University (ADU), Balıkesir University (BU) and Muğla University (MU). The required approvals were received from the related academician on the date and hours of the research. This was followed by the data collection process.

Analysis of data

SPSS 21.00 software package was used for analysis of the research data. Vasious statistical operations were applied to determine whether the music teacher candidates' total burnout scores displayed a normal distribution. Kolmogorov Simirnov test was conducted for examining the normality of data obtained from all scales. Kolmogorov Simirnov test result was found as $p< 0.05$, which indicated that the research data fulfilled the normality assumption. Accordingly; Mann Whitney U Test was applied as the gender variable ($P<0.05$); Kruskal Wallis H Test was applied as the school grade variable ($P<0.05$); Kruskal Wallis H Test was applied as the university variable ($P<0.05$); Kruskal Wallis H Test was applied as the high school graduation variable ($P<0.05$); and Kruskal Wallis H Test was applied as the individual instrument variable ($P<0.05$). Since the research data did not show normal distribution, Mann Whitney U test was used for binary variables, and Kruskal Wallis and Spearman Brown Rank Correlation Test were used for variables more than two.

Findings and discussions related to the sub-problem

Mann Whitney U and Kruskal Wallis H tests were applied since the music teacher candidates' gender, grade, university and high school variables were at $P<0.05$ level. Gender-based burnout scores of music teacher candidates related to individual instrument courses are shown in Table 1.

Gender-based burnout mean rank scores of music teacher candidates received from Mann Whitney U Test are shown in Table 1. As shown in the table, gender-based burnout scores of music teacher candidates do not show a significant difference ($U=7038.500$, $P <0.05$). School grade-based burnout scores of music teacher candidates related to individual instrument training are shown in Table 2. The mean rank values calculated for the burnout scores of teacher candidates using Kruskal Wallis test are shown in Table 2. As indicated in the table, music teacher candidates' burnout scores did not show a significant difference depending on their school grade ($H_3=4.376$, $p>0.05$). Burnout scores of music teacher candidates based on their universities are shown in Table 3.

Burnout mean rank values of teacher candidates calculated on the basis of their universities are shown in Table 3. As indicated in Table 3, music teacher candidates' burnout scale scores did not show a significant difference based on their universities ($H_3=12.359$, $P<0.05$). In this respect, the highest burnout score belonged to the music teacher candidates receiving education in ADU, which was followed by those receiving education in BAU and MU, respectively. Individual instrument burnout scores of music teacher candidates based on the high schools they graduated from are shown in Table 4.

Burnout Mean rank values of teacher candidates received from Kruskal Wallis H test on the basis of their high school graduation are shown in Table 4. As shown in the table, burnout scale scores of music teacher candidates did not show a significant difference based on their high school graduations ($H_3=0.597$, $p>0.05$). Individual instrument-based burnout scores of music teacher candidates are shown in Table 5.

Teacher candidates' mean rank scores calculated based on their individual instrument-based burnout scores received from Kruskal Wallis H Test are given in Table 5. As shown in the table, music teacher candidates' burnout scale scores do not show a significant difference depending on their individual instrument ($H_3=17.091$, $P<0.05$). Accordingly, burnout scores of the students that play piano are significantly higher than those who play other instruments. The 2nd and 3rd highers scores were received by viola and violin players respectively. The other instrument groups are shown in Table 5.

The findings and discussions related to the 2nd sub-problem

Mann Whitney U and Kruskal Wallis H tests were applied since music teacher candidates' gender, school grade, university, high school graduation and individual instrument variables were at

Table 2. School grade-based distribution of music teacher candidates' instrument burnout scores.

Variable	Sınıf	N	Sıra ort.	H	sd	P
Burnout total score	1st grade	55	113.81	4.376	3	0.224
	2nd grade	64	141.45			
	3rd grade	71	130.06			
	4th grade	65	124.52			
	Total	255	-			

Table 3. Distribution of music teacher candidates' instrument burnout scores based on the universities they receive education.

Variable	University	N	Mean rank.	H	sd	P
Total burnout score	ADU	95	144.37	12.359	2	**0.002**
	BAU	84	130.51			
	MU	76	104.76			
	Total	255	-			

Table 4. Distribution of music teacher candidates' instrument burnout scores based on the high schools that they graduated from.

Variable	High school	N	Mean rank.	H	sd	P
Total burnout scores	General high school	23	119.50	0.597	3	0.897
	Fine arts high school	203	128.20			
	Vocational high school	13	138.96			
	Anatolian high school	16	128.72			
	Total	255	-			

Table 5. Distribution of music teacher candidates' instrument burnout scores based on their individual instruments.

Variable	Ind. Instrument	N	Mean rank.	H	sd	P
Total burnout score	Violin	71	138.46	17.091	8	0.029
	Viola	21	139.95			
	Violoncello	20	132.08			
	Baglama	20	99.23			
	Flute	35	124.60			
	Vocal	28	104.29			
	Guitar	30	134.28			
	Piano	21	157.19			
	Qanun	9	70.44			
	Total	255	-			

P<0.05 level. Music teacher candidates' family support scores are shown in Table 6. Music teacher candidates' gender-based family support scores are shown in Table 6.

Music teacher candidates' mean rank values related to their total family support, sensitivity and "involvement in the process" sub-scale scores are shown in Table 6. As indicated in the table, music teacher candidates' gender based total family support scores as well as their family support sub-scale scores (sensitivity and involvement in the process) do not show a statistically significant difference (U=6765.500, U=6976.000, U=6709.000, P >0.05). School grade-based distribution of music teacher candidates' family support scores are shown in Table 7.

Music teacher candidates' mean rank values calculated for their school grade-based Total Family Support and family support

Table 6. Gender-based distribution of music teacher candidates' family support scores.

Variable	Gender	N	Mean rank.	Sum of ranks	U	P
Total family support score	Female	154	134.57	20723.50	6765.500	0.079
	Male	101	117.99	11916.50		
	Total	255	-	-		
Family support sensitivity	Female	154	133.20	20513.00	6976.000	0.164
	Male	101	120.07	12127.00		
	Total	255	-	-		
Family support - involvement in the process	Female	154	134.94	20780.00	6709.000	0.063
	Male	101	117.43	11860.00		
	Total	255	-	-		

Table 7. School-grade based distribution of music teacher candidates' family support scores.

Variable	School grade	N	Mean rank	H	sd	P
Total family support score	1st grade	55	137.74	7.700	3	0.053
	2nd grade	64	115.65			
	3rd grade	71	116.56			
	4th grade	65	144.42			
	Total	255				
Family support sensitivity	1st grade	55	132.48	5.094	3	0.165
	2nd grade	64	119.41			
	3rd grade	71	118.31			
	4th grade	65	143.25			
	Total	255	-			
Family support being sensitive to the process	1st grade	55	144.46	11.592	3	0.009
	2nd grade	64	111.73			
	3rd grade	71	114.64			
	4th grade	65	144.68			
	Total	255	-			

subscale scores using Kruskal Wallis H test, are shown in Table 7. As shown in the table, music teacher candidates' Total Family Support and family support subscale scores do not show a statistically significant difference depending on their school grade (H_3=7.700, H_3=5.094, P>0.05).

However, music teacher candidates' scores received from family support scale family support- involvement in the Process subscale score was found to significantly differ depending on their school grade (H_3=11.592, P<0.05). Accordingly, the highest family support involvement in the Process score belonged to 4th grade students, which was followed by 1st, 3rd and 2nd grade students, respectively. University-based family support scores of music teacher candidates are shown in Table 8.

Music teacher candidates' university-based mean rank values calculated for their total family support and family support subscale scores using Kruskal Wallis H test, are shown in Table 8. As shown in the table, music teacher candidates' total family support and family support subscale scores do not show a statistically significant difference depending on their school grade Teacher candidates' mean rank values calculated for total family support and family support. As shown in the table, music teacher candidates' family support subscale scores (Sensitivity and Involvement in the Process) do not show a statistically significant difference depending on the university that they receive education from (H_2=5.149, H_2=5.312, P>0.05).

However, teacher candidates' total family support scale scores exhibit a significant difference based on the universities they receive education (H_2=6.582, P<0.05). Accordingly, MU students received the highest family support total score, which was followed by ADU and BAU students. Distribution of music teacher candidates' family support scores based on their high school graduations is shown in Table 9.

Teacher candidates' high school graduation-based mean rank scores obtained from Kruskal Wallis H Test with relation to total family support and family support subscales are shown in Table 9. As indicated in the table, music teacher candidates' score Family

Table 8. University-based distribution of music teacher candidates' family support scores.

Variable	University	N	Sıra ort.	*H*	*sd*	*P*
Total family support	ADU	95	133.13	6.582	2	0.037
	BAU	84	111.55			
	MU	76	139.76			
	Total	255	-			
Family support sensitivity	ADU	95	131.77	5.149	2	0.076
	BAU	84	113.70			
	MU	76	139.10			
	Total	255				
Family support involvement in the process	ADU	95	134.04	5.312	2	0.070
	BAU	84	112.97			
	MU	76	137.07			
	Total	255	-			

Table 9. Distribution of music teacher candidates' family support scores based on their high school graduation.

Variable	Lise	N	Sıra ort.	*H*	*sd*	*P*
Family support total	General high school	23	76.83	19.181	3	0.000
	Fine arts high school	203	137.88			
	Vocational high school	13	103.50			
	Anatolian high school	16	96.09			
	Total	255				
Family support sensitivity	General high school	23	86.09	16.138	3	0.001
	Fine arts high school	203	137.26			
	Vocational high school	13	101.62			
	Anatolian high school	16	92.16			
	Total	255	-			
Family support involvement in the process	General high school	23	71.37	20.205	3	0.000
	Fine arts high school	203	137.77			
	Vocational high school	13	104.62			
	Anatolian high school	16	104.47			
	Total	255	-			

Support Total and family support subscale scores based on their high school graduation do not a statistically significant difference (H_3=19.181, H_3=16.138, H_3=20.205, P<0.05).

In this regard, the highest score received by teacher candidates belongs to the graduates of fine arts high school, who were respectively followed by Vocational high school and Anatolian high school graduates. The highest score received from the sensitivity subscale of family support scale belongs to the graduates of Fine Arts High School as well. They were followed by Vocational High School and Anatolian high school graduates. The highest score received from the "involvement in the process" subscale of the family support scale also belongs to Fine Art High School graduates, followed by Vocational High School and Anatolian high school graduates by a narrow margin. Distribution of music teacher candidates' family support total scores based on their individual instruments is shown in Table 10.

Music teacher candidates' mean rank scores related to their family support total scores calculated using Kruskal Wallis H test based on their individual instruments are shown in Table 10. As shown in the table, music teacher candidates' family support total scores show a statistically significant difference depending on the type of their individual instrument (H_8=15.545, P<0.05).

Accordingly, Qanun players family support total scores are significantly higher than those playing other individual instruments. Qanun players were followed by violoncello and viola players respectively. The other instrument groups are shown in Table 10. Music teacher candidates' family support scale sensitivity subscale scores depending on their individual instruments are shown in Table 11.

Teacher candidates' individual instrument based Kruskal Wallis H

Table 10. Distribution of music teacher candidates' family support total scores based on their individual instruments.

Variable	Individual instrument	N	Sıra ort.	*H*	*sd*	*P*
Family support total score	Violin	71	135.68	15.545	8	0.049
	Viola	21	135.79			
	Violoncello	20	150.88			
	Baglama	20	109.43			
	Flute	35	133.31			
	Vocal	28	132.23			
	Guitar	30	92.95			
	Piano	21	108.21			
	Qanun	9	168.83			
	Total	255	-			

Table 11. Distribution of music teacher candidates' family support sensitivity subscale scores depending on their individual instruments.

Variable	Individual Instrument	N	Mean rank	*H*	*sd*	*P*
Family support sensitivity	Violin	71	135.66	15.902	8	0.044
	Viola	21	135.83			
	Violoncello	20	152.73			
	Baglama	20	113.05			
	Flute	35	131.27			
	Vocal	28	132.95			
	Guitar	30	91.78			
	Piano	21	107.36			
	Qanun	9	168.33			
	Total	255	-			

Test results with relation to their family support sensitivity subscale scores are shown in Table 11. As indicated in the table, music teacher candidates' Family Support Sensitivity subscale scores show a significant difference based on the individual instruments that they play (H_8=15.902, P<0.05).

Accordingly, family support sensitivity subscale scores of the students that play Qanun is significantly higher than those of the student that play other instruments. Qanun players were followed by violoncello and viola players respectively. The scores of the players of other individual instruments are given in Table 11. Distribution of music teacher candidates' family support scale, "involvement in the process" subscale scores, based on their individual instruments, is shown in Table 12.

Teacher candidates' individual instrument Kruskal Wallis H Test results with relation to their family support "involvement in the process" subscale scores are shown in Table 11. As indicated in the table, music teacher candidates' Familu Support Scale Involvement in the Process Subscale scores do not show a statistically significant difference based on their individual instrument (H_8=9.194, P>0.05).

Findings and discussions related to the 3rd sub-problem

Mann Whithey U and Kruskal Wallis H tests were applied since music teacher candidates' gender, school grade, university, high school graduation and individual instrument variables were at p<.05 level. Gender-based distribution of music teacher candidates' scores related to their individual instrument training habits are shown in Table 13.

Mann Whitney U test results

Music teacher candidates' total training habits scores and mean ranks values for the subscales are shown in Table 13. As shown in the table, total training habits scores as well as "attaching value on training", "preparadness for training", and "correct use of time" subscale scores do not show a statistically significant difference (U=7757.000, U=7431.500, U=6673.500, U=7159.500, P >0.05).

As shown in the table, music teacher candidates' gender based training scale, interest and willingness subscale scores show a statistically significant difference (U=6594.500, P<0.05). Accordingly, female music teacher candidates' interest and willingness subscale scores are significantly higher than those of male teacher candidates. School grade-based distribution of music teacher candidates' individual instrument training habit scores are shown in Table 14. Mean rank values of teacher candidates' Kruskal Wallis H Test results calculated with relation to training habits total and its subscales based on the school grade variable are shown in Table 14. In the table, music teacher candidates' training habits total scores and subscale scores do not show a significant difference based on the school grade variable (H_3=1,586, H_3=7,659, H_3=6,924, H_3=2,189, P>0.05). University-based distributions of music teacher candidates' individual instrument training habits are shown in Table 15.

Table 12. Distribution of music teacher candidates' family support scale "involvement in the process" subscale scores based on their individual instruments.

Variable	Individual instrument	N	Mean rank	*H*	*sd*	*P*
Family support involvement in the process	Violin	71	133.36	9.194	8	0.326
	Viola	21	133.31			
	Violoncello	20	142.83			
	Baglama	20	111.73			
	Flute	35	133.00			
	Vocal	28	130.63			
	Guitar	30	102.30			
	Piano	21	114.71			
	Qanun	9	165.61			
	Total	255	-			

Table 13. Gender-based istribution of music teacher candidates' individual instrument training habit scores.

Variable	Gender	N	Mean rank	Sum of Ranks	U	P
Tranining habits total	Female	154	127.87	19692.00	7757.000	0.972
	Male	101	128.20	12948.00		
	Total	255	-	-		
Attaching value on training	Female	154	130.24	20057.50	7431.500	0.548
	Male	101	124.58	12582.50		
	Total	255	-	-		
Interest and willingness	Female	154	120.32	18529.50	6594.500	0.036
	Male	101	139.71	14110.50		
	Total	255	-	-		
Preparadness for training	Female	154	135.17	20815.50	6673.500	0.054
	Male	101	117.07	11824.50		
	Total	255	-	-		
Correct use of time	Female	154	123.99	19094.50	7159.500	0.281
	Male	101	134.11	13545.50		
	Total	255	-	-		

Mean rank values of teacher candidates' Kruskal Wallis H test results calculated with relation to training habits total and subscale scores based on their university are shown in Table 15. Significant differences are observed depending on the university variable (H_2=12.514, H_2=23.958, H_2=8.511, H_2=6.803, P<0.05). However no significant difference is observed between the scores in "correct use of time" subscale (H_2=5.213, P>0.05). As indicated in Table 15, the music teacher candidates, receiving education in MU, received the highest total training habits score calculated on the basis of the university variable. This was followed by ADU and BU students, respectively.

As shown in the table, the music teacher candidates receiving education in MU also received the highest "attaching value on training" subscale score which was calculated in relation to the university variable. They were respectively followed by ADU and BU students. As indicated in the table, the highest "interest and willingness" subscale score calculated on the basis of the university variable, belongs to ADU students. This university was followed by BU and MU, respectively. According to the table, the highest "preparedness for training" subscale score was received by MU students, who were followed by the students of ADU and BU, respectively. Distribution of music teacher candidates' individual instrument training habits, on the basis of high school graduation variable, is presented in Table 16.

Mean rank values of high-school-graduation-based Kruskal Wallis H Test results calculated in relation to the training habits total and subscale scores are shown in Table 16. According to the table, music teacher candidates' Training Habits Total and subscale scores do not differ significantly depending on their high school graduation (H_3=3.454, H_3=2.014, H_3=3.562, H_3=7.674, H_3=1.503, p>0.05). Distribution of music teacher candidates' individual instrument training habit total scores is shown in Table 17.

Table 14. School grade-based distribution of music teacher candidates' individual instrument training habit scores.

Variable	*Grade*	*N*	*Mean rank*	*H*	*sd*	*P*
Training habits total	1st grade	55	137.84	1.586	3	0.662
	2nd grade	64	121.11			
	3rd grade	71	126.17			
	4th grade	65	128.46			
	Total	255	-			
Attaching value on training	1st grade	55	150.40	7.659	3	0.054
	2nd grade	64	113.72			
	3rd grade	71	126.77			
	4th grade	65	124.45			
	Total	255	-			
Interest and willingness	1st grade	55	105.55	6.924	3	0.074
	2nd grade	64	135.52			
	3rd grade	71	135.32			
	4th grade	65	131.59			
	Total	255	-			
Preparedness for training	1st grade	55	135.56	2.283	3	0.516
	2nd grade	64	117.00			
	3rd grade	71	127.78			
	4th grade	65	132.67			
	Total	255	-			
Correct use of time	1st grade	55	120.86	2.189	3	0.534
	2nd grade	64	136.16			
	3rd grade	71	132.58			
	4th grade	65	120.99			
	Total	255	-			

Table 15. University-based distribution of music teacher candidates' training habit scores.

Variable	University	N	Mean rank	H	sd	P
Training habits total	ADU	95	122.10	12.514	2	0.002
	BAU	84	112.68			
	MU	76	152.31			
	Total	255	-			
Attaching value on training	ADU	95	113.52	23.958	2	0.000
	BAU	84	113.02			
	MU	76	162.66			
	Total	255	-			
Interest and willingness	ADU	95	137.73	8.511	2	0.014
	BAU	84	135.23			
	MU	76	107.86			
	Total	255	-			

Table 15. Cont'd.

Preparedness for training	ADU	95	126.53	6.803	2	0.033
	BAU	84	114.54			
	MU	76	144.72			
	Total	255	-			
Correct use of time	ADU	95	139.82	5.213	2	0.074
	BAU	84	127.21			
	MU	76	114.11			
	Total	255	-			

Table 16. Distribution of music teacher candidates' individual instrument training habits, depending on their high school graduation variable.

Variable	High school	N	Mean rank	H	sd	P
Training habit total	General high school	23	103.89	3.454	3	0.327
	Fine arts high school	203	131.83			
	Vocational high school	13	114.92			
	Anatolian high school	16	124.66			
	Total	255	-			
Attaching value on training	General high school	23	113.76	2.014	3	0.570
	Fine arts high school	203	131.26			
	Vocational high school	13	113.12			
	Anatolian high school	16	119.22			
	Total	255	-			
Interest and willingness	General high school	23	121.76	3.562	3	0.313
	Fine arts high school	203	126.42			
	Vocational high school	13	164.27			
	Anatolian high school	16	127.53			
	Total	255	-			
Preparedness for training	General high school	23	104.76	7.674	3	0.053
	Fine arts high school	203	134.00			
	Vocational high school	13	89.12			
	Anatolian high school	16	116.84			
	Total	255				
Correct use of time	General high school	23	124.63	1.503	3	0.682
	Fine arts high school	203	126.37			
	Vocational high school	13	150.15			
	Anatolian high school	16	135.47			
	Total	255	-			

Table 17. Distribution of music teacher candidates' individual instrument training habit total scores based on their individual istruments.

Variable	Individual Instrument	N	Mean rank	*H*	*sd*	*P*
Training habits total	Violin	71	127.38	12.819	8	0.118
	Viola	21	123.64			
	Violoncello	20	146.90			
	Baglama	20	146.73			
	Flute	35	133.83			
	Vocal	28	119.63			
	Guitar	30	106.82			
	Piano	21	106.24			
	Qanun	9	184.22			
	Total	255	-			

Table 18. Distribution of music teacher candidates training habits "attaching value on training" subscale scores based on the individual instrument variable.

Variable	Individual instrument	N	Mean rank	*H*	*sd*	*P*
Attaching value on training	Violin	71	123.54	16.468	8	**0.036**
	Viola	21	116.55			
	Violoncello	20	139.10			
	Baglama	20	145.28			
	Flute	35	133.93			
	Vocal	28	124.63			
	Guitar	30	122.17			
	Piano	21	97.19			
	Qanun	9	205.67			
	Total	255	-			

Teacher candidates' mean rank values for Kruskal Wallis H test results calculated with relation to their training habit total scores based on their individual instrument are shown in Table 17. As shown in the table, music teacher candidates' training habits total scores do not significantly differ depending on the individual instrument variable (H_8=12.819, P>0.05). Distribution of music teacher candidates' individual instrument training habits "attaching value on training" subscale scores based on the individual instrument variable are shown in Table 18.

The mean rank values of teacher candidates related to the training habits scale, "attaching value on training-preparedness for training" subscale results obtained from Kruskal Wallis H test based on individual instrument variable are shown in Table 18. As shown in the table, music teacher candidates' "attaching value on training-preparedness for training" subscale scores show a significant difference depending on the individual instrument variable (H_8=16.468, P>0.05). Accordingly, the highest "preparedness for training" score belongs to qanun players, which were followed by baglama and violoncello players respectively. Distribution of music teacher candidates' individual instrument training habits based on the university variable is shown in Table 19.

Teacher candidates' mean rank values calculated using Kruskal Wallis H test with relation to their training habits scale interest and willingness subscale scores based on the individual instrument variable are shown in Table 19. As indicated in the table, music teacher candidates' interest and willingness subscale scores do not display a statistically significant difference on the basis of their individual instrument (H_8=2,799, P>0.05). Distribution of music teacher candidates' instrument training habits scale preparedness for training subscale scores based on the individual instrument variable are shown in Table 20.

Teacher candidates' mean rank values related to their training habits scale-preparedness for training subscale scores calculated using Kruskal Wallis H test, are shown in Table 20. As indicated in the table, music teacher candidates' preparedness for training subscale scores exhibit a significant difference based on the individual instrument variable (H_8=16.929, P<0.05). In this regard, the highest preparedness for training subscale score was received by qanun players, which was respectively followed by baglama and violin players. Distribution of music teacher candidates' individual instrument training habits "correct use of time" subscale scores based on the individual instrument variable are shown in Table 21.

Teacher candidates' mean rank values calculated with relation to their training habits scale-correct use of time subscale scores using Kruskal Wallis H test based on their individual instrument, are shown in Table 21. As shown in the table, music teacher candidates "correct use of time" subscale scores do not significantly differ based on their individual instrument (H_8=11.817, P>0.05).

Findings and discussions related to the 4th sub-problem

The correlation scores between music teacher candidates' burnout, family support and traning habit scores are shown in Table 22.

Table 19. Distribution of music teacher candidates' training habits interest and willingness subscale scores based on the individual instrument variable.

Variable	Individual instrument	N	Mean rank	*H*	*sd*	*P*
Interest and willingness	Violin	71	126.52	2.799	8	0.946
	Viola	21	133.93			
	Violoncello	20	119.20			
	Baglama	20	122.05			
	Flute	35	132.30			
	Vocal	28	131.75			
	Guitar	30	129.53			
	Piano	21	139.24			
	Qanun	9	98.89			
	Total	255	-			

Table 20. Distribution of music teacher candidates' instrument training habits preparedness for training subscale scores based on the indivirual instrument variable.

Variable	Individual instrument	N	Mean rank	*H*	*sd*	*P*
Preparedness for training	Violin	71	138.09	16.929	8	0.031
	Viola	21	125.10			
	Violoncello	20	136.20			
	Baglama	20	144.43			
	Flute	35	126.66			
	Vocal	28	124.96			
	Guitar	30	86.68			
	Piano	21	116.95			
	Qanun	9	178.61			
	Total	255	-			

Table 21. Distribution of music teacher candidates' individual instrument training habits "correct use of time" subscale scores based on the individual instrument variable.

Variable	Individual Instrument	N	Mean rank	*H*	*sd*	*P*
Correct use of time	Violin	71	121.49	11.817	8	0.160
	Viola	21	145.50			
	Violoncello	20	138.33			
	Baglama	20	125.13			
	Flute	35	126.11			
	Vocal	28	103.16			
	Guitar	30	148.67			
	Piano	21	148.33			
	Qanun	9	90.28			
	Total	255	-			

Table 22 shows that, there is a significant low level (r=-0.203) negative correlation between music teacher candidates' burnout scores and family support scores (P<0.01). Also, there is a significant medium level (r=-0.342) negative correlation between music teacher candidates' burnout scores and their training habit scores (P<0.01), and there is a significant medium level (r=0.392) positive correlation between music teacher candidates' family support and training habits scores (P<0.01).

RESULTS

The following results was obtained regarding music

Table 22. The correlation scores between music teacher candidates' burnout, family support and traning habit scores.

Variable			Burnout	Family support	Tranining habits
		Correlation coefficient (r)	1.000	-0.203**	-0.342**
	Burnout	P	.	0.001	0.000
		N	255	255	255
		Correlation coefficient (r)	-0.203**	1,000	0.392**
Spearman's rho	Family support	P	0.001	.	0.000
		N	255	255	255
		Correlation coefficient (r)	-0.342**	0.392**	1.000
	Tranining habits	P	0.000	0.000	.
		N	255	255	255

**The correlation is at 0.01 significance level.

teacher candidates' burnout related with individual instrument training courses; burnout scores do not significantly differ based on their genders, school grades and high school graduations. However, their burnout scores differ depending on the university and individual instrument variables.

The highest burnout score belongs to the music teacher candidates receiving education in ADU. This was followed by BAU and MU students. The highest individual instrument burnout scores belong to the piano players, who were followed by viola and violing players respectively. The scores related to music teacher candidates family support scores, as the second sub-problem of the research, are as follows; family support total and subscale scores do not differ significantly based on students' gender. Contrary to this, significant results were obtained for the school grade, university, high school graduation and individual instrument variables.

The participants' family support total and family support sensitivity subscale scores do not differ significantly based on the student's school grade. On the contrary, the scores received from family support scale's family support involvement in the process subscale show a significant difference. According to this result, the highers family support involvement in the process subscale score was received by 3rd grade students, who were followed by 4th, 2nd, and 1st grade students, respectively.

The participants' family support sensitivity and family support involvement in the process subscale scores do now show a significant difference based on the university variable. However, there is a significant difference between their family support total scores. Accordingly the highers score was received by the music teacher candidates receiving education in ADU, who were followed by BAU and MU students.

The family support total and subscale (involvement in the process and sensitivity) scores received by the research sample significantly differ based on their high school graduation. In this regard, the music teacher candidates who graduated from fine arts high schools received higher scores than other graduates. This was followed by general High School, Anatolian High School and Vocational High School graduates.

Music teacher candidates' family support scale involvement in the process subscale scores show a significant difference based on the individual instrument variable. On the contrary, their total family support and family support sensitivity subscale scores differ significantly. Accordingly, the highest total family support score belongs to the music teacher candidates who play qanun. In the family support sensitivity subscale, the highest score was also received by music teacher candidates who play qanun. They were respectively followed by violoncello and viola players.

The participants' total training habits score and related subscale scores do not significantly differ based on their school grades and high school graduations. On the other hand, the scores they received from training habits scale and its subscales show a significant difference based on their gender, university and individual instrument variables. Female music teacher candidates' training habits scale – interest and willingness subscale are significantly higher than those of the male teacher candidates.

The sample group's attaching value on training, interest and willingness, and preparedness for training subscale scores, under the training habits scale, show significant difference on the basis of university variable. In this regard; the highest training habits score belongs to the students of MU. They were followed by ADU and BU students, respectively. In the "attaching value on training" subscale of the training habits scale, the highest score was received by the music teacher candidates who receive education in MU, who were followed by ADU and BU students.

The scores received by the participants from training habits scale significantly differ at the related subscales depending on their individual instruments. Accordingly,

the scores received by qanun player teacher candidates at “attaching value on training” and “preparedness for training” subscales significantly differ from the others. They were followed by baglama players and violoncello players in the “attaching value on training” subscale; and baglama players and violin players in the “preparedness for training” subscale.

Finally, a significant negative low level correlation was found between music teacher candidates’ burnout scores and family support scores. Also, there is a significant negative medium level correlation between music teacher candidates’ burnout scores and training habits scores, and a significant positive medium level correlation between their family support and training habits scores.

DISCUSSION

The participants’ burnout scores do not show a significant difference based on their genders, school grades and the high schools they graduated from. Modern era requires people to be equipped with a variety of skills and vast knowledge to achieve success in various fields of life. New requirements have been demanded for job selection, at job applications and examinations as a result of the increasing population. To achieve these, people engage in an intense endeavor at an early age.

In this regard, participating students may have received identical burnout scores regardless of their variables, since all people are required to make the same effort to catch up with the era. The findings of the present research are supported with the related literature. In their research on doctors and nurses at the Medical Faculty of Ankara University, Sayıl et al. (1997) did not find a significant difference at the gender variable. Additionally, Avşaroğlu et al. (2005) did not detect a significant difference in a gender-based evaluation of technical teachers’ burnout scores. On the other hand, it has been stated in several studies that, gender is not a significant variable in the case of teaching (Akın and Oğuz, 2010; Çelikkaleli, 2011; Ertürk and Keçecioğlu, 2012; Filiz, 2014). In contrary to this, it was reported in some of the studies (Budak and Sürgevil, 2005; Gündüz et al., 2012; Izgar and Yılmaz, 2000; Çapulcuoğlu and Gündüz, 2013; Ören and Türkoğlu, 2006; Balkıs et al., 2011; Otacıoğlu, 2008; Ay and Avşaroğlu, 2010; Karahan and Balat, 2011; Yeğin, 2014; Sencer and Gençdoğan, 2012; Çakmak and Şahin, 2017) that, gender is effective on burnout. In light of these, the present study is expected to contribute to the related literature as an original research.

In the research, music teacher candidates’ burnout levels did not significantly differ based on their school grade. In many aspects, the structure of music teaching department differs from the other departments of faculties of education. Most of the provided courses, particularly instrument training, require a daily and systematic preparation. Accordingly, burnout scores amond different school grades may not have differed. However, a significant difference between burnout scores was reported in many studies that evaluated burnout among different school grades (Gündüz et al., 2012; Çapulcuoğlu and Gündüz, 2013; Balkıs et al., 2011). This may be attributed to different sample groups and measurement tools of these studies.

The participants’ burout scores do not significantly differ based on their high school graduations as well. This can be ascribed to the majority of high school graduates’ opinion that they embark on a new life with university. Graduates of Fine Arts High Schools may regard four years of music teaching education as the next stage of their music education, and the graduates of other high schools may regard this period as the start of their music education. This finding is supported by Çavuşoğlu and Tümkaya (2010) research.

The participating music teacher candidates’ burnout scores significantly differ based on their university education and the type of individual instrument they use. The highest burnout score for individual instrument variable was received by piano players. This can be attributed to piano’s being an unportable musical instrument, thus preventing students from leaving their training environment. In addition, many of the music teacher candidates can not afford a piano thoroughout their education period due to its size and price. They are either obliged to stay at school for training or train at their piano-owner friends’ houses. For such reasons they may have received higher burnout scores.

The second variable of the research was family support. Music teacher candidates’ family support scores do not show a significant difference in a gender based evaluation. Their burnout scores significantly differ based on their school grades (at the famly support involvement in the process subscale), university education (total score), high school graduation (total score and all subscale scores), and individual musical instrument (total score and family support sensitivity subscale). Family support scores differed among many variables of the research. This is attributable to the fact that, many of the cognitive, affective and psycho-motor skills and knowledge acquired by individuals are initially developed in their family environment. Additionally, families differ from each other by the way they raise their children, also by their priorities and cultures. Such differences have a major effect on their children’s preferences, skills and children’s attitudes towards the professions they choose. For such reasons, family support scores may have differed for many variables.

Music teacher candidates’ training habits do not show a significant difference based on the high schools they graduated from. No study on students’ individual instrument training habits was encountered in the related literature. However, studies in which school grade variable was found to be effective on the training habits, are available (Aksu and Kurtuldu, 2015; Temelli and Kurt,

2010; Dural, 2008; Bay et al., 2005). This can be ascribed to different sample groups used in the research. Therefore, this research is expected to contribute to the literature. No significant difference was found between the participants training habit scores based on their high school graduation. Similar results are available in the literature (Aksu and Kurtuldu, 2015).

Research results also show that, music teacher candidates' training habit scores significantly differ based on their gender (at interest and willingness subscale), universities (at total scale, also attaching value on training, interest and willingness and preparedness for training subscales), and individual instruments (at attaching value on training and preparedness for training subscales). Among the participating music teacher candidates, the highest scores at the preparedness for training subscale of training habits scale was received by the students who play qanun. Qanun is a Turkish music instrument. Students may be motivated by its being an adopted, favored and preferred musical instrument by Turkish society, and accordingly they may have received higher training habit scores (at the preparedness for training scale) than other instrument players. Also, qanun players are not restricted with a fixed location for training, which in turn may result with higher preparedness for training scores.

Finally, there is a significant low level negative correlation between music teacher candidates' burnout and family support scores; a significant medium level negative correlation between their burnout and training habit scores; and a significant medium level positive correlation between their family support and training habit scores. This finding supports the general situation in daily lives of teacher candidates. Music teaching education involves heavy individual trainings and works. The moral and material support received from their families hold great importance for teacher candidates in achieving a successful and permanent musical performance. The positive significant correlation between the training habit and family support scores of students may have resulted from this situation.

RECOMMENDATIONS

The following recommendations are proposed in light of the obtained findings:

(1) New intra-class (methods, approaches and activities, etc.) or out-of-class (cultural and art activities, etc.) arrangements may be conducted with a view to minimize music teacher candidates' burnout feelings, and increase their motivations and attitudes.
(2) The efficiency of systematic training can be mentioned in courses, particularly instrument training courses.
(3) A new course with in-depth insight into training habits can be integrated in the curriculum for music teacher candidates.
(4) Musicians who achived professional success can be invited as lecturer to universities within the scope of cultural activities. This way, a role model can be established for music teacher candidates.

CONFLICT OF INTERESTS

The author has not declared any conflict of interests.

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