



Erden Topođlu, E. (2022). Academic motivations of preservice music teachers. *International Online Journal of Education and Teaching (IOJET)*, 9(2). 903-918.

Received : 12.01.2022  
Revised version received : 23.03.2022  
Accepted : 25.03.2022

## ACADEMIC MOTIVATIONS OF PRESERVICE MUSIC TEACHERS

*Research Article*

Evin Erden Topođlu  (<https://orcid.org/0000-0002-6731-5790>)

Aydın Adnan Menderes University, Turkey

[evinerden@hotmail.com](mailto:evinerden@hotmail.com)

Biodata: Evin Erden Topođlu is an assistant professor at Music Education Department in Adnan Menderes University, Turkey. Her research interests are on music education, music psychology and early child music education.

*Copyright © 2014 by International Online Journal of Education and Teaching (IOJET). ISSN: 2148-225X.*

*Material published and so copyrighted may not be published elsewhere without written permission of IOJET.*

## ACADEMIC MOTIVATIONS OF PRESERVICE MUSIC TEACHERS

Evin Erden Topođlu

[evinerden@hotmail.com](mailto:evinerden@hotmail.com)

### Abstract

The purpose of the present study is to determine the difference between preservice music teachers' levels of academic motivations and their genders, their high schools, lessons that they were failed, lessons that they were failed for the reason of absenteeism, and their career choice. Also, the relationship between the preservice music teachers' academic motivations and their instrument scores was investigated in the study. A total of 349 students who receive education from Faculty of Education Music Teaching Departments in Aydın, Denizli, İzmir, and Muđla attended the study. The data was gathered in the 2017-2018 academic year. The Academic Motivation Scale which was developed by Vallerand et al. (1992) and translated into Turkish by Karagüven (2012) was used in order to determine the levels of academic motivations of the participants. Six significant results were found in the study. There are significant differences between participants' academic motivations and their genders, their states of absenteeism, their high schools, the number of lessons they have failed, and their career choice. Also, positive significant but weak relationships were found between the participants' academic motivations and their instrument scores. The results were discussed in the light of the literature.

**Keywords:** Academic motivation, music education, preservice music teachers, motivation.

### 1. Introduction

One of the fundamental concerns of social science is how human behaviors are shaped, how individuals make decisions, and in which direction they take these decisions. Motivation is one of the key concepts that aims to determine what moves individuals in different circumstances and what are the underlying reasons for them to take action. Since motivation is a substantial notion for students as well as all individuals, it is one of the leading concepts that educational psychologists and researchers have been focusing on for a while. Although motivation and its interactions with miscellaneous variables were enquired and discussed in a vast number of studies, some educators and researchers accent and discussed the relationship between academic achievement and motivation concerning the assessment of learning processes. Significant relationships between academic achievement and motivation indicate that motivation is a crucial factor in terms of academic achievement. From a narrow point of view, the scores that are got from educational institutions or different educational achievement tests are interpreted as academic achievement, but academic achievement is a broader term that involves competencies such as linguistic, mathematical, social science, science, thinking skills of students so that these competencies enable them to succeed in school and society (Lindholm Leary & Borsato, 2006). In a similar vein, Deci & Ryan (2000) have suggested that students' other progress like psychological growth and wellness are way more important than academic achievement and its outcomes.

There is a wide range of motivation definitions from distinct standpoints in the literature. In a broader sense motivation can be described as to be moved to do something (Ryan & Deci, 2000). Pintrich & Schunk (2002) described motivation as a process of an individual which regulates his/her behaviors toward a specific goal. In this regard, academic motivation can be

characterized as the intrinsic processes which promote and orient the behaviors in order to reach specific academic goals (Pintrich & Zusho, 2002). The concept of motivation was discussed and tried to be defined by a number of theories and approaches that aims to identify human behavior (drive theory, conditioning theory, cognitive consistency theory, humanistic theory, attribution theory, expectancy-value theory, self-determination theory, self-efficacy theory, self-regulation theory, achievement goal theory, future time perspective, etc.). Therefore, there are scales that are developed in order to assess academic motivation, based on differing theoretical fundamentals (Amrai et al., 2011; Fortier, Vallerand, & Guay, 1995; Komarraju, Karau, & Schmeck, 2009; Turner, Chandler, & Heffer, 2009).

In this study, motivation was discussed in the light of self-determination theory (SDT) which was first exposed by Deci & Ryan with their book titled "Self-Determination and Intrinsic Motivation in Human Behavior" (1985). SDT differs from the other motivation theories by claiming that motivation is not single structured. In self-determination theory's taxonomy of motivation, motivation is grouped as intrinsic motivation, extrinsic motivation, and amotivation. In this taxonomy, there is a linear internalization from extrinsic motivation to intrinsic motivation (Ryan & Deci, 2020). The intrinsic motivation which can be described as taking action without any external demand is related to the behaviors of an individual for its own sake and the interest and satisfaction towards learning itself. Individuals are supposed to follow the rules due to their socialization from the beginning of the time they were born thus, they take action to the issues that they are not sincerely interested in. According to SDT, these controlled behaviors form the basis of extrinsic motivation and can be internalized in time (Deci et al. 1991, Deci & Ryan, 2000) Conversely, amotivation is the state of an individual's lack of motivation towards his/her behaviors.

Unlike in the drive theories, according to SDT, needs are not learned, they are innate. Also, SDT gives priority to psychological needs such as interpersonal relations and managing the physical and social environment. SDT asserts that individuals have three basic needs which are autonomy, competence, and relatedness. Preventing one of these basic needs of the individual damages his/her motivation and wellness. Autonomy is to prefer one's choices independently from external effects. If an individual has the initiative on his/her own behaviors, the individual takes the responsibility to reach goals and regulate his/her life. Competence relates to the use and enhancement of one's abilities whereas relatedness relates to one's need for close social relations (Deci & Ryan, 1985; Ryan & Deci, 2000). Intrinsic motivation is weakened or strengthened depending on these needs are met (Deci & Ryan, 2000). According to Ryan & Deci (2020) autonomy is supported by value and interest experiences, competence is supported by structured environments which provide optimal difficulties, positive feedback, and development opportunities whereas, relatedness is supported by transferring respect and care.

According to SDT, motivation is regulated by a number of factors. External regulation is the state of extrinsic motivation in which the behavior of individuals is externally controlled. Individuals undertake tasks in anticipation of reward or avoidance of punishment. In the introjection dimension, individuals focus on approval from the outside or by themselves. Identification is the individual's state of recognizing and accepting the underlying value of behavior however, the behavior is still extrinsic because it is not originated from the individuals' own desire and satisfaction. Integration is the complete form of internalization.

The motivational perspective of SDT has led to a wide range of studies in social sciences not only in the psychology field but also in educational sciences. Many studies have discussed the relationship and the difference between motivation and various variables to determine the interaction of these variables with motivation. In several studies, it is determined that there is a significant difference between variables such as gender, grade, major, university, and

academic motivation, which is one of the substantial predictors of academic achievement (Atay, 2018; Erdem, 2019; G6mleksiz & Serhatlıođlu, 2013; Yılmaz, Tařkesen & Tařkesen, 2016). On the contrary, some studies indicate no significance between academic motivation and gender, grade, level of income, and homeland variables (řeker, 2016; Deniz, 2020). In this regard, it is important to make new studies via different scales with different samples and to discuss the findings in the literature. Also, it is essential to assess preservice music teachers' academic motivations and to reveal which sub-dimensions and variables it differs, in order to enhance the quality of the learning processes in the schools.

The purpose of the present study is to determine the difference between preservice music teachers' levels of academic motivations and their genders, their high schools, lessons that they were failed, lessons that they were failed for the reason of absenteeism, and their career choice. Also, the relationship between the preservice music teachers' academic motivations and their instrument scores was investigated in the study.

## 2. Methods

This is a descriptive study that aims to investigate the preservice music teachers' academic motivations towards several variables. The study group, data collecting tools, and data analysis techniques of the research were explained below.

### 2.1. Study Group

The study group consists of preservice music teachers who gather education from the universities in the Aegean Region of Turkey. These universities are Adnan Menderes University (26.3%), Dokuz Eyl6l University (20.3%), Pamukkale University (34.6%), and Muđla Sıtkı Koçman University (18.9%). A total of 349 students who receive education from Faculty of Education Music Teaching Departments attended the study. 200 of these students were female (57.3%) and 149 of them were male (42.7%). Participants' ages range from 17 to 29 ( $M=20.8$ ,  $SD=1.65$ ). The data was gathered in the 2017-2018 academic year.

### 2.2. Data Collecting Tools

#### 2.2.1. Personal Information Form

The Personal Information Form which was developed by the researcher was used in order to reveal the participants' genders, high schools they were graduated from, lessons that they were failed, lessons that they were failed for the reason of absenteeism, and their career choice.

#### 2.2.1. Academic Motivation Scale

The scale was developed by Vallerand et al. (1992) and translated into Turkish by Karag6ven (2012). The Cronbach alpha coefficients for sub-scales range between .67 and .87. Cronbach alpha coefficient for the whole scale is .87. The scale which has seven subscales consists of 28 items. Three of these seven subscales are aimed to assess three types of intrinsic motivation, the other three are aimed to assess three types of extrinsic motivation, and the last subscale is aimed to assess motivation. The seven subdimensions are Intrinsic Motivation to Know (IMTK), Intrinsic Motivation to Accomplish (IMTA), Intrinsic Motivation to Experience Stimulation (IMES); Extrinsic Motivation External Regulation (EMER), Extrinsic Motivation Introjected Regulation (EMIN), Extrinsic Motivation Identified Regulation (EMID) and Amotivation (AMOT). The scores of the subscales range from 4 and 28. The subscales are evaluated separately and higher scores indicate high levels of motivation concerning the related subscale.

## 2.2. Data Analysis

For the purposes of the study, several tests were applied in order to decide whether parametric or non-parametric tests will be used. Since the gender, absenteeism, and high school variables have two groups, skewness and kurtosis values were investigated to specify if the groups were distributed normally. For the gender variable, the skewness and kurtosis values were between +1.226 and -.990, the skewness and kurtosis values were between +1.127 and -1.055 for the absenteeism variable, and values for the high school variable were between +1.146 and -1.145. According to Tabachnick & Fidell (2007), if the values are between +3 and -3 for the skewness and kurtosis variables, the groups are normally distributed. In this regard, t-test for independent samples were applied since the groups were normally distributed for the gender, absenteeism, and high school variables. Homogeneity of variances tests were applied in order to determine whether parametric or non-parametric tests to apply for the failed lessons and career choice variables. For the failed lessons variable, it was clarified all the subscales were homogeneous except AMOT subscale ( $p < .05$ ), and for the career choice variable, IMTA, IMES, EMIN, and EMID subscales were homogeneous contrary to this, IMTK, EMER, and AMOT subscales were not homogeneous ( $p < .05$ ). In this sense, for the subscales that were homogeneous one-way analysis of variance tests (ANOVA) were applied while for the subscales that were not homogeneous Kruskal-Wallis tests were applied. Since the number of failed lessons variable has three groups and the career choice variable has four groups, Bonferonni correction was performed by using the significance/number of groups formula (Miller, 1981). In this sense, a significance level of .0166 was accepted for the number of failed lessons variable and .0125 was accepted for the career choice variable. Also, the relationship between the preservice music teachers' academic motivations and their instrument scores was investigated by Pearson Moments Correlation.

## 3. Results

In order to determine the difference between participants' academic motivations and their genders, a t-test for independent samples was performed. The results are presented in Table 1.

Table 1. *t-test results on participants' academic motivations and their genders*

Academic Motivation	Gender	N	$\bar{x}$	Sd	t	df	p
IMTK	Female	200	21.93	5.10	2.05	290.99	.041
	Male	149	20.69	5.91			
IMTA	Female	200	17.16	5.72	-.00	347	.999
	Male	149	17.16	6.42			
IMES	Female	200	17.94	5.55	1.923	294.03	.056
	Male	149	16.69	6.34			
EMER	Female	200	23.24	4.49	3.53	347	.000
	Male	149	21.30	5.23			
EMIN	Female	200	16.90	5.33	1.27	347	.204
	Male	149	16.12	6.00			
EMID	Female	200	22.15	4.56	2.87	347	.004
	Male	149	20.65	5.12			
AMOT	Female	200	9.31	5.94	-3.35	290.87	.001
	Male	149	11.67	6.90			

As seen in Table 1, female participants ( $\bar{x}=21.93$ ,  $sd=5.10$ ) have significantly higher scores than male participants ( $\bar{x}=20.69$ ,  $sd=5.91$ ) on IMTK subscale ( $t_{290.99}=2.05$ ,  $p=.041$ ). Female participants ( $\bar{x}=23.24$ ,  $sd=4.49$ ) have significantly higher scores than male participants ( $\bar{x}$

=21.30, sd=5.23) on EMER subscale ( $t_{347}= 3.53, p=.000$ ). Also, female participants ( $\bar{x}=22.15, sd=4.56$ ) have significantly higher scores than male participants ( $\bar{x}=20.65, sd=5.12$ ) on EMID subscale ( $t_{347}= 2.87, p=.004$ ). On the other hand, male participants ( $\bar{x}=11.67, sd=6.90$ ) have significantly higher scores than female participants ( $\bar{x}=9.31, sd=5.94$ ) on AMOT subscale ( $t_{290.87}= -3.35, p=.001$ ). The difference between male ( $\bar{x}=17.16, sd=6.42$ ) and female participants' ( $\bar{x}=17.16, sd=5.72$ ) IMTA subscale scores are not significant ( $t_{347}= -.00, p=.999$ ). There is no significant difference between male participants' ( $\bar{x}=16.69, sd=6.34$ ) and female participants' ( $\bar{x}=17.94, sd=5.55$ ) IMES subscale scores ( $t_{294.03}= 1.923, p=.056$ ). Also, no difference was found between the male ( $\bar{x}=16.12, sd=6.00$ ) and the female participants' ( $\bar{x}=16.90, sd=5.33$ ) EMIN subscale scores ( $t_{347}= 1.27, p=.204$ ). In order to determine the difference between the participants' academic motivations and whether they were failed a lesson for the reason of absenteeism, a t-test for independent samples test was performed and the result are presented in Table 2.

Table 2. *t*-test results on participants' academic motivations and whether they were failed a lesson for the reason of absenteeism

Academic Motivation	absenteeism	N	$\bar{x}$	Sd	t	df	p
IMTK	No*	242	22.07	5.10	4.23	319	.000
	Yes**	79	19.20	5.48			
IMTA	No	242	17.62	5.88	3.24	319	.001
	Yes	79	15.17	5.74			
IMES	No	242	18.13	5.71	3.93	319	.000
	Yes	79	15.19	5.92			
EMER	No	242	23.08	4.58	4.59	319	.000
	Yes	79	20.30	4.93			
EMIN	No	242	16.71	5.54	1.68	319	.094
	Yes	79	15.50	5.45			
EMID	No	242	21.82	5.01	2.16	319	.032
	Yes	79	20.47	4.28			
AMOT	No	242	9.35	5.95	-3.91	115.12	.000
	Yes	79	12.84	7.18			

$p < .05$

\*No= Participants who have no lessons that they were failed for the reason of absenteeism.

\*\*Yes= Participants who have one or more lessons that they were failed for the reason of absenteeism.

According to the results in Table 2, there are significant differences between the participants' states of absences and their IMTK subscale scores (no  $\bar{x}=22.07, sd=5.10, yes \bar{x}=19.20, sd=5.48, t_{319}= 4.23, p=.000$ ), IMTA subscale scores (no  $\bar{x}=17.62, sd=5.88, yes \bar{x}=15.17, sd=5.74, t_{319}= 3.24, p=.001$ ), IMES subscale scores (no  $\bar{x}=18.13, sd=5.71, yes \bar{x}=15.19, sd=5.92, t_{319}= 3.93, p=.000$ ), EMER subscale scores (no  $\bar{x}=23.08, sd=4.58, yes \bar{x}=20.30, sd=4.93, t_{319}= 4.59, p=.000$ ), EMID subscale scores (no  $\bar{x}=21.82, sd=5.01, yes \bar{x}=20.47, sd=4.28, t_{319}= 2.16, p=.032$ ), and AMOT subscale scores (no  $\bar{x}=9.35, sd=5.95, yes \bar{x}=12.84, sd=7.18, t_{115.12}= -3.91, p=.000$ ). No significant difference was found between the participants states of absences and their EMIN subscale scores (no  $\bar{x}=16.71, sd=5.54, yes \bar{x}=15.50, sd=5.45, t_{319}= 1.68, p=.094$ ). To determine the difference between the participants' academic motivations and the high schools they were graduated from, a t-test for independent samples was applied and the results are presented in Table 3.

Table 3. *t*-test results on participants' academic motivations and the high schools they were graduated from

Academic Motivation	High school	N	$\bar{x}$	Sd	t	df	p
IMTK	FAHS*	288	21.23	5.54	-1.32	343	.189
	Others	57	22.28	5.30			
IMTA	FAHS	288	17.01	6.05	-.84	343	.403
	Others	57	17.74	5.94			
IMES	FAHS	288	17.31	5.93	-.44	343	.658
	Others	57	17.69	5.99			
EMER	FAHS	288	22.47	4.98	.80	343	.423
	Others	57	21.89	4.59			
EMIN	FAHS	288	16.86	5.58	2.09	343	.037
	Others	57	15.16	5.88			
EMID	FAHS	288	21.93	4.65	3.13	343	.002
	Others	57	19.75	5.31			
AMOT	FAHS	288	10.49	6.53	1.45	88.10	.150
	Others	57	9.26	5.67			

p&lt;.05

\*Fine Arts High School

According to the results shown in Table 3, participants who were graduated from fine arts high schools ( $\bar{x}=16.86$ ,  $sd=5.58$ ) have significantly higher scores than the participants who are graduated from other high schools rather than fine arts high schools ( $\bar{x}=15.16$ ,  $sd=5.88$ ) on EMIN subscale scores ( $t_{343}=2.09$ ,  $p=.037$ ). Also, there is a significant difference between the participants' high schools and their EMID subscale scores (FAHS  $\bar{x}=21.93$ ,  $sd=4.65$ , others  $\bar{x}=19.75$ ,  $sd=5.31$ ,  $t_{343}=3.13$ ,  $p=.002$ ). According to the results there is no difference between the participants' high schools and their IMTK subscale scores (FAHS  $\bar{x}=21.23$ ,  $sd=5.54$ , others  $\bar{x}=22.28$ ,  $sd=5.30$ ,  $t_{343}=-1.32$ ,  $p=.189$ ), IMTA subscale scores (FAHS  $\bar{x}=17.01$ ,  $sd=6.05$ , others  $\bar{x}=17.74$ ,  $sd=5.94$ ,  $t_{343}=-.84$ ,  $p=.403$ ), IMES subscale scores (FAHS  $\bar{x}=17.31$ ,  $sd=5.93$ , others  $\bar{x}=17.69$ ,  $sd=5.99$ ,  $t_{343}=-.44$ ,  $p=.658$ ), EMER subscale scores (FAHS  $\bar{x}=22.47$ ,  $sd=4.98$ , others  $\bar{x}=21.89$ ,  $sd=4.59$ ,  $t_{343}=.80$ ,  $p=.423$ ), AMOT subscale scores (FAHS  $\bar{x}=10.49$ ,  $sd=6.53$ , others  $\bar{x}=9.26$ ,  $sd=5.67$ ,  $t_{88.10}=1.45$ ,  $p=.150$ ). To reveal the difference between the participants' academic motivations and the lessons they have failed a one-way analysis of variance test (ANOVA) was applied. The results are presented in Table 4.

Table 4. ANOVA results on participants' academic motivations and the number of lessons they have failed

Subscales	Source of variance	Sum of Squares	df	Mean Square	F	p	Cause of significance
IMTK	Between groups	405.28	2	202.64	7.397	.001	0>3and+
	Within Groups	8739.02	319	27.40			
	Total	9144.30	321				
IMTA	Between groups	288.72	2	144.36	4.164	.016	0>3and+
	Within Groups	11058.06	319	34.67			
	Total	11346.78	321				
IMES	Between groups	278.89	2	139.45	4.071	.018	
	Within Groups	10927.66	319	34.26			
	Total	11206.55	321				
EMER	Between groups	417.26	2	208.63	9.529	.000	0>3and+
	Within Groups	6984.11	319	21.89			
	Total	7401.37	321				
EMIN	Between groups	58.08	2	29.04	.931	.395	
	Within Groups	9952.25	319	31.20			
	Source of variance	10010.33	321				
EMID	Between groups	74.57	2	37.28	1.576	.208	
	Within Groups	7544.35	319	23.65			
	Source of variance	7618.92	321				

p<.016

According to Table 4 there are significant differences between the participants' IMTK subscale scores ( $F(2-319) = 7.397$ ,  $p = .001$ ), IMTA subscale scores ( $F(2-319) = 4.164$ ,  $p = .016$ ), EMER subscale scores ( $F(2-319) = 9.529$ ,  $p = .000$ ), and the number of lessons they have failed. According to the Tukey test that was performed in order to reveal the cause of difference, the participants who are successful on all the lessons they get, have significantly higher IMTK subscale scores, IMTA subscale scores, and EMER subscale scores than participants who have failed on three or more of their classes. However, there is no significant difference between the participants' academic motivations and their IMES subscale scores ( $F(2-319) = 4.071$ ,  $p = .018$ ), EMIN subscale scores ( $F(2-319) = .931$ ,  $p = .395$ ), and EMID subscale scores ( $F(2-319) = 1.576$ ,  $p = .208$ ). Since the variances were not homogeneous, a Kruskal-Wallis test was performed in order to investigate the difference between the participants' AMOT subscale scores and the number of lessons they have failed. The results are presented in Table 5.

Table 5. *Kruskal-Wallis test results on participants' amot subscale scores and the number of lessons they have failed*

Lessons failed	N	Mean Rank	X <sup>2</sup>	df	p	Cause of Significance
0	132	136.42	21.861	2	.000	0<1-2
1-2	95	163.56				0<3 and +
3 and +	95	194.29				1-2<3 and +

p<.016

According to Table 5, there is a significant difference between participants' AMOT subscale scores and the number of lessons they have failed ( $x^2$  (df=2, n=322) = 21.861; p= .000). A number of Mann-Whitney U tests were applied in order to determine the cause of the difference. According to the Mann-Whitney U tests, the difference between AMOT subscale scores and the number of lessons participants have failed, was derived from the participants who were successful on all their lessons and participants who were failed on 1 or 2 lessons and 3 and more lessons. In addition, there is a significant difference between participants who were failed on 1 or 2 lessons and 3 and more lessons, regarding AMOT subscale scores. In order to determine whether there is a difference between the participants' academic motivations and their career choice, a one-way analysis of variance test (ANOVA) was applied. The results are presented in Table 6.

Table 6. *ANOVA results on participants' academic motivations and their career choice*

Subscales	Source of variance	Sum of Squares	df	Mean Square	F	p	Cause of significance
IMTA	Between groups	1429.30	3	476.43	14.662	.000	acad.>FAHT, acad.>music t., acad.>others, music t.>others
	Within Groups	9573.89	344	32.50			
	Total	10485.50	347				
IMES	Between groups	755.83	3	251.94	7.572	.000	acad.>FAHT, acad.>music t., acad.>others,
	Within Groups	11446.15	344	33.27			
	Total	12201.98	347				
EMIN	Between groups	407.49	3	135.83	4.403	.005	acad.>music t., acad.>others,
	Within Groups	10612.15	344	30.85			
	Total	11019.64	347				
EMID	Between groups	39.77	3	13.26	.558	.643	
	Within Groups	8167.72	344	23.74			
	Total	8207.49	347				

p<.012

According to Table 6, there is a significant difference between the participants IMTA subscale scores (F (3-344) = 14.662, p = .000), IMES subscale scores (F (3-344) = 7.572, p = .000), and EMIN subscale scores (F (3-344) = 4.403, p = .005). In order to determine the cause of the difference, a Tukey test was applied. According to the Tukey test, IMTA subscale scores of participants who want to be academicians are significantly higher than those who want to be a fine arts high school teacher, a music teacher in the Ministry of National Education, and those who plan to do another job than being a music teacher. Also, the participants who want to be a music teacher have higher IMTA subscale scores than those who plan to do another job than being a music teacher. IMES subscale scores of participants who want to be academicians are significantly higher than those who want to be a fine arts high school teacher, a music teacher in the Ministry of National Education, and those who plan to do another job than being a music teacher. Also, EMIN subscale scores of participants who want to be academicians are

significantly higher than those who want to be a music teacher in the Ministry of National Education, and those who plan to do another job than being a music teacher. There was no significant difference found between participants' EMID subscale scores and their career choices ( $F(3-344) = .558, p = .643$ ). Due to the variances were not homogeneous for IMTK, EMER, and AMOT subscales, a Kruskal-Wallis test was performed in order to reveal the difference between participants' IMTK subscale scores, EMER subscale scores, and AMOT subscale scores and their career choices. The results are presented in Table 7.

Table 7. *Kruskal-Wallis test results on participants' academic motivations and their career choice*

	Career choice	N	Mean Rank	X <sup>2</sup>	df	p	Cause of Significance
IMTK	Academician	121	210.68	29.136	3	.000	acad.>FAHT, acad.>music t., acad.>others, FAHT>others music t.>others
	Fine arts Teacher	63	169.32				
	Music Teacher	105	160.41				
	Others	59	130.92				
EMER	Academician	121	201.65	21.995	3	.000	acad.>music t., acad.>others, FAHT>others, music t.>others
	Fine arts Teacher	63	181.90				
	Music Teacher	105	163.64				
	Others	59	130.25				
AMOT	Academician	121	148.94	35.477	3	.000	acad.<music t., acad.<others, FAHT<others, music t.<others
	Fine arts Teacher	63	156.35				
	Music Teacher	105	178.21				
	Others	59	239.70				

$p < .012$

According to the results presented in Table 7, there is a significant difference between the participants' IMTK subscale scores ( $\chi^2(df=3, n=348) = 29.136; p=.000$ ), EMER subscale scores ( $\chi^2(df=3, n=348) = 21.995; p=.000$ ), AMOT subscale scores ( $\chi^2(df=3, n=348) = 35.477; p=.000$ ) and their career choices. Multiple Mann-Whitney U tests were performed to reveal the cause of the difference. The results of the Mann-Whitney U tests have shown that IMTK subscale scores of participants who want to be an academician are significantly higher than those who want to be a fine arts high school teacher and those who want to be a music teacher in the Ministry of National Education, and those who plan to do another job than being a music teacher. Also, the participants who plan to do another job than being a music teacher have significantly lower IMTK subscale scores than those who want to be a fine arts high school teacher and those who want to be a music teacher in the Ministry of National Education. The participants who want to be an academician in the future have significantly higher EMER subscale scores than those who want to be music teachers in the Ministry of National Education and participants who plan to do another job than being a music teacher have significantly lower EMER subscale scores than those who want to be an academician, those who want to be a fine arts high school teacher and those who want to be a music teacher in the Ministry of National Education. In addition, the participants who plan to do another job than being a music teacher have significantly higher AMOT subscale scores than those who want to be academicians, a fine arts high school teacher, a music teacher in the Ministry of National Education. Also, the participants who want to be music teachers in the Ministry of National Education have higher

AMOT subscale scores than those who want to be academicians in the future. In order to investigate the relationship between the participants' academic motivations and their instruments scores, Pearson Moments Correlation was applied. The results are presented in Table 8.

Table 8. *Pearson moments correlation results between participants' academic motivations and their instrument scores.*

	IM TK	IMTA	IMES	EMER	EMIN	EMID	AMOT	Instrument score
IMTK	1	.718**	.690**	.734**	.465**	.380**	-.421**	.113*
IMTA		1	.688**	.568**	.622**	.262**	-.205**	.201**
IMES			1	.508**	.520**	.250**	-.167**	.183**
EMER				1	.394**	.547**	-.486**	.060
EMIN					1	.359	.022	.090
EMID						1	-.111	.049
AMOT							1	-.085
Instrument score								1

According to Table 8, there are significant positive but weak correlations between participants' IMTK subscale scores ( $r = -.11$ ,  $p < .05$ ), IMTA subscale scores ( $r = -.20$ ,  $p < .01$ ), IMES subscale scores ( $r = -.18$ ,  $p < .01$ ) and their instrument scores. On the contrary, there were no correlations found between the participants' EMER, EMIN, EMID, AMOT subscale scores, and their instrument scores.

### 3. Discussion

The present study was aimed to investigate the academic motivations of music students who receive education from the universities that are established in the Aegean Region of Turkey. Six significant results were found in the study. There are significant differences between participants' academic motivations and their genders, their states of absenteeism, their high schools, the number of lessons they have failed, and their career choice. Also, positive significant but weak relationships were found between the participants' academic motivations and their instrument scores.

The results have shown that female participants have significantly higher scores than male participants in regards to intrinsic motivation to know, extrinsic motivation external regulation, and external motivation identified regulation. Hence, female participants have higher scores of both intrinsic and extrinsic motivations than males. According to Vallerand et al. (1992) intrinsic motivation to know is related to curiosity, exploration, and motivation to learn while extrinsic motivation external regulation is related to rewards and constraints and identified regulation is related to the individual's internalizing the reasons for studying. Therefore, it can be said that female participants are both more likely to study for their own sakes and also motivated by the rewards of being successful so that they want to study sincerely. Accordingly, the male participants have higher scores on amotivation than female participants which means, males are neither intrinsically nor extrinsically motivated. This result is consistent with the literature. Yılmaz, Taşkesen & Taşkesen (2016) have found in their study which was carried out with 219 preservice music and preservice art teachers that females have higher academic motivation scores than males. Similar results were found in the studies which were carried out with different study groups in different cultures (Alemdağ, Öncü & Yılmaz, 2014; Brouse, Basch, LeBlanc, McKnight & Lei, 2010; Eymur & Geban, 2011; Gömleksiz & Serhatoğlu, 2013; Vallerand et al. 1992). Although there are similar results with the present study, in the literature there are also studies that assert the difference between academic motivation and

gender is not significant (Korkmazer, 2020; Zembat, Akşin, Tunçeli & Yılmaz, 2018). The difference between the participants' academic motivations and their genders can arise from a great variety of reasons. Although this is a subject for further studies, higher intrinsic and extrinsic motivation of females and amotivation of males may be due to the dominance of male participants' musician identities. According to a study carried out by Özmenteş (2014) male music students have significantly higher scores on self-efficacy towards music ability than female music students. In other words, male music students see themselves as more talented than females. Since male music students think that they are more talented in music, they may not cherish being a music teacher, and the reason for male students' higher amotivation scores can be explained by this reason. According to the results, there are significant differences between the participants' states of failing a course due to absenteeism and all the subscales except extrinsic motivation introjected regulation. Therefore, the participants who did not have any failed courses for the reason of absenteeism are statistically high motivated than the ones that have one or more failed courses for the reason of absenteeism. Those who were failed due to absenteeism have significantly higher amotivation scores than the successful ones. It is not surprising that the students who attend the courses regularly are motivated both intrinsically and extrinsically. However, these results do not clearly show the underlying reasons for the cause of the difference. Are participants less motivated due to absenteeism or do they attend courses sporadically because they are not sufficiently motivated? The reasons for this result can be a subject for further studies. There are significant differences between the participants' extrinsic motivations (introjected-identified regulations) and their high schools on behalf of fine arts high school graduates. Dađlıođlu, Genç & Yüksek Usta (2017) have found a significant difference between preschool teacher candidates' intrinsic motivations and their high schools. On the contrary, Zembat et al. (2018) have found no difference between academic motivation and high school variables of preservice preschool teachers. A similar result was found by Örucü (2019) that there was no significant difference between preservice science teachers' academic motivations and the high schools they were graduated from. This result shows that fine arts high school graduates are more motivated extrinsically than the participants who were graduated from other kinds of high schools. Fine arts high schools are four-year high school programs that have very similar curriculums compared with faculty of education music departments with regards to music lessons. Therefore, it was expected that the fine arts high school graduates had higher academic motivations. It is remarkable that although the difference is not significant, the participants who were graduated from other high schools have higher intrinsic motivation scores than fine arts high school graduates. Also, fine arts high school graduates have higher amotivation scores than the other participants. This result can arise from the expectations of fine arts high school graduates and this can be another studies subject. But it is thought that fine arts high school graduates might have different expectations than being a music teacher. Due to fine arts high school graduates have higher expectations and most of the lessons in music teacher training programs aim to teach music rather than to perform music, these students might have lower intrinsic motivations. But since fine arts high school graduates have more music education experience, they might tend to receive approval for being better in music lessons than other high school graduates. The higher extrinsic motivations of fine arts high school graduates may be explained in this vein. According to the results, the preservice music teachers who succeed in all the courses have higher scores on intrinsic motivation to know, intrinsic motivation to accomplish, and extrinsic motivation external regulation subscales than the preservice music teachers who failed three or more courses. Also, participants who were failed three or more courses have statistically higher amotivation scores than those who succeed in all the courses. This result is related to the academic achievements of the participants. As expected, this means that the participants who succeed in all the courses are intrinsically enthusiastic about learning, they are satisfied with

the goals they succeed and they also think that it is what they have to do as a teacher candidate. These results which were similar to the literature are related to the academic achievements of participants. Zembat et al. (2018) have found in their study that as the academic motivations of preservice teachers increase, their academic achievements also increase in the same vein. Aydın (2010) has found in her study that academic motivation predicts academic achievement. A similar result was found by Taylor et al. (2014) on academic achievement and academic motivation. On the contrary, Yılmaz et al. (2016) found no difference between academic achievement and academic motivations of preservice art and music teachers. The results have shown significant differences between participants' career choices and their academic motivations. The intrinsic and extrinsic motivation scores of the participants who want to become academicians in the future are significantly higher than all the other participants who want to be a fine arts music teacher, those who want to be a music teacher in a secondary or in a high school, and those who want to do other professions. But the difference between the participants' external motivation identified regulation scores are not significant. Although the reason for these results might originate from a range of factors, being an academician might have been seen as a superior profession when compared with other categories. The higher motivations of participants who want to be academicians can be arisen by these reasons. These results are similar to the results of the study which determined the relationship between the academic motivations of the university students and their career decidedness (Koyuncuoğlu, 2021). According to the results of the present study, there are significant positive but weak correlations between the participants' intrinsic motivations and their instrument scores. Although this result shows that the participants practice their instruments for their own sake, higher correlations were expected between these variables. This result might arise from the perceptions of individual instruments of the participants that do not lead their motivations as predicted. Further studies must be made for exposing the reasons for these results.

There are a set of limitations in the present study. The participants are being educated in a specific region of Turkey therefore, this makes the results difficult to generalize. The number of participants according to the universities are not similar as a result of some preservice music teachers preferred not to participate in the study.

## References

- Alemdađ, C., Öncü, E., & Yılmaz, A. K. (2014). Beden eğitimi öğretmeni adaylarının akademik motivasyon ve akademik öz-yeterlikleri. *Spor Bilimleri Dergisi*, 25(1), 23-35
- Amrai, K., Motlagh, S. E., Zalani, H. A., & Parhon, H. (2011). The relationship between academic motivation and academic achievement students. *Procedia-Social and Behavioral Sciences*, 15, 399-402.
- Atay, B. (2018). *Müzik öğretmeni adaylarının müzik performansı kaygı düzeyleri ve akademik motivasyon düzeylerinin incelenmesi*. [Unpublished master thesis]. Marmara University Eğitim Bilimleri Enstitüsü
- Aydın, F. (2010). *Akademik başarının yordayıcısı olarak akademik güdülenme, öz yeterlilik ve sınav kaygısı*. [Unpublished master thesis]. Hacettepe Üniversitesi Sosyal Bilimler Enstitüsü.
- Brouse, C. H., Basch, C. E., LeBlanc, M., McKnight, K. R. & Lei, T. (2010). College students' academic motivation: Differences by gender, class, and source of payment. *College Quarterly*, 13, 1-10.
- Dađlıođlu, H., Genç, H., & Yüksek Usta, S. (2017). Okul öncesi öğretmen adaylarının akademik motivasyonları ile matematik öğretime ilişkin özyeterlik inançları arasındaki ilişkinin incelenmesi. *Turkish Studies*, 12(6), 235 - 260.
- Deci, E. L., & Ryan, R. M. (1985). *Intrinsic motivation and self-determination in human behavior*. New York, NY: Plenum Publishing Co.
- Deci, E. L., & Ryan, R. M. (2000). The " what " and " why " of goal pursuits: Human needs and the self-determination of behavior. *Psychological inquiry*, 11(4), 227-268. [https://doi.org/10.1207/S15327965PLI1104\\_01](https://doi.org/10.1207/S15327965PLI1104_01)
- Deci, E. L., Vallerand, R. J., Pelletier, L. G., & Ryan, R. M. (1991). Motivation and education: The self-determination perspective. *Educational psychologist*, 26(3-4), 325-346. <http://dx.doi.org/10.1080/00461520.1991.9653137>
- Deniz, A. (2020). *Eđitim Fakültesi öğrencilerinin öğretmenlik mesleğine ilişkin tutum, akademik öz-yeterlik ve akademik güdülenme düzeylerinin incelenmesi: Bir vakıf University örneđi*. [Unpublished master thesis]. İstanbul Sabahattin Zaim University Sosyal Bilimler Enstitüsü.
- Erdem, D. (2019). *Spor Bilimleri ve Beden Eğitimi ve Spor Yüksekokulu Öğrencilerinin Akademik Motivasyon Düzeylerinin İncelenmesi*. [Unpublished master thesis]. Fırat University Sağlık Bilimleri Enstitüsü.
- Eymur, G. & Geban, Ö. (2011). An investigation of relationship between motivation and academic achievement of pre-service chemistry teachers. *Eđitim ve Bilim*, 36, 246-255.
- Fortier, M. S., Vallerand, R. J., & Guay, F. (1995). Academic motivation and school performance: Toward a structural model. *Contemporary Educational Psychology*, 20(3), 257-274. <https://doi.org/10.1006/ceps.1995.1017>
- Gömlüksiz, M. N., & Serhatlıođlu, B. (2013). Öğretmen adaylarının akademik motivasyon düzeylerine ilişkin görüşleri. *Türkiye Sosyal Araştırmalar Dergisi*, 173(173), 99-128.
- Karagüven Ünal, M. H. (2012). Akademik motivasyon ölçeğinin Türkçeye adaptasyonu. *Kuram ve Uygulamada Eğitim Bilimleri*, 12(4), 2599-2620.

- Komaraju, M., Karau, S. J., & Schmeck, R. R. (2009). Role of the big five personality traits in predicting college students' academic motivation and achievement. *Learning and Individual Differences, 19*(1), 47-52. <https://doi.org/10.1016/j.lindif.2008.07.001>
- Korkmazer, F. (2020). Üniversite öğrencilerinin akademik motivasyon algılarının incelenmesi üzerine bir alan çalışması. *Dicle University İktisadi ve İdari Bilimler Fakültesi Dergisi, 10* (20), 502-515.
- Koyuncuoğlu, Ö. (2021). An investigation of academic motivation and career decidedness among university students. *International Journal of Research in Education and Science (IJRES), 7*(1), 125-143. <https://doi.org/10.46328/ijres.1694>
- Lindholm Leary, K., & Borsato, G. (2006). Academic Achievement. In F. Genesee, K. Lindholm Leary, W. M. Saunders, & D. Christian (Eds.), *Educating English language learners: A synthesis of research evidence* (pp. 176–222). Cambridge University Press. <https://doi.org/10.1017/CBO9780511499913.006>
- Miller, R. (1981). *Simultaneous Statistical Inference*. New York: Springer Verlag.
- Örücü, F. N. (2019). *Fen bilgisi eğitimi öğretmen adaylarının fen bilgisine yönelik motivasyonlarının, özdüzenlemelerinin, tutumlarının ve teknolojiye yönelik tutumlarının bazı demografik değişkenler açısından incelenmesi*. [Unpublished master thesis]. Necmettin Erbakan University Eğitim Bilimleri Enstitüsü.
- Özmenteş, G. (2014). Mesleki müzik eğitimi alan öğrencilerin müzik özyeterlikleri, benlik saygıları ve bireysel özellikleri arasındaki ilişkiler. *Eğitim ve Bilim, 39*(171), 138-152.
- Pintrich, P. R., & Schunk, D. H. (2002). *Motivation in education: Theory, research, and applications (2nd Ed.)*. Upper Saddle River, New Jersey: Merrill Prentice Hall.
- Pintrich, P. R., & Zusho, A. (2002). The development of academic self-regulation: the role of cognitive and motivational factors. In A. Wigfield & J. S. Eccles (Eds.), *Development of achievement motivation* (pp. 249–284). San Diego, CA: Academic Press.
- Ryan, R. M., & Deci, E. L. (2000). Intrinsic and extrinsic motivations: Classic definitions and new directions. *Contemporary educational psychology, 25*(1), 54-67. <https://doi.org/10.1006/ceps.1999.1020>
- Ryan, R. M., & Deci, E. L. (2020). Intrinsic and extrinsic motivation from a self-determination theory perspective: Definitions, theory, practices, and future directions. *Contemporary educational psychology, 61*, 101860. <https://doi.org/10.1016/j.cedpsych.2020.101860>
- Şeker, S. S. (2016). Müzik eğitimi bölümü öğretmen adaylarının akademik güdülenme ve akademik öz-yeterlik düzeylerinin incelenmesi. *Abant İzzet Baysal University Faculty of Education Dergisi, 17*(3), 1465-1484. <https://doi.org/10.17240/aibuefd.2017.17.31178-338840>
- Tabachnick, B. G., & Fidell, L. S., (2007). *Using Multivariate Statistics (5th ed.)*. Pearson Education Company.
- Taylor, G., Jungert, T., Mageau, G. A., Schattke, K., Dedic, H., Rosenfield, S., & Koestner, R. (2014). A self-determination theory approach to predicting school achievement over time: The unique role of intrinsic motivation. *Contemporary Educational Psychology, 39*(4), 342–358. <https://doi.org/10.1016/j.cedpsych.2014.08.002>
- Turner, E. A., Chandler, M., & Heffer, R. W. (2009). The influence of parenting styles, achievement motivation, and self-efficacy on academic performance in college students.

*Journal of College Student Development*, 50(3), 337-346.  
<http://doi.org/10.1353/csd.0.0073>

Vallerand, R. J., Pelletier, L., Blais, M. R., Briere, N. M., Senecal, C. & Vallieres, E. F. (1992). The academic motivation scale: A measure of intrinsic, extrinsic, and amotivation in education. *Educational and Psychological Measurement*, 52, 1003-1017.  
<https://doi.org/10.1177%2F0013164492052004025>

Yılmaz, M., Taşkesen, O., & Taşkesen, S. (2016). Güzel sanatlar eğitimi bölümü öğrencilerinin bazı değişkenlere göre akademik motivasyonları ile akademik başarıları arasındaki ilişkinin incelenmesi. *Erzincan University Faculty of Education Dergisi*, 18(2), 1056-1072. <https://doi.org/10.17556/jef.62310>

Zembat, R., Aşkın Yavuz, E., Tunçeli, H. İ., & Yılmaz, H. (2018). Öğretmenlik mesleğine yönelik tutum ile akademik motivasyon ve başarı arasındaki ilişkinin incelenmesi. *Kuramsal Eğitimbilim Dergisi*, 11(4), 789-808. <https://doi.org/10.30831/akukeg.351404>