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Prospective Music Teachers' Attitudes, Self-Efficacy, and Study Habits Towards Piano Course in Terms of Different Variables

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Abstract

The main objective of this study is to investigate the attitudes, self-efficacy, and study habits of prospective music teachers in terms of various variables. The sample of this study, designed as a relational survey model, consists of a total 349 prospective music teachers studying at 5 state universities in the Aegean Region. Three measurement tools were used to collect data in the study. Participants' attitudes towards the piano course differed significantly by their gender, grade, perception of success, daily practice time, and piano ownership status. Prospective music teachers' self-efficacy towards piano courses differed significantly according to their gender, type of high school graduated, perception of success, daily practice time, and piano ownership status. Participants' self-efficacy also significantly differed by gender, type of high school graduated, perception of success, daily practice time, and piano ownership status. Participants' study habits significantly differed by type of high school graduated, perception of success, and daily practice time. Furthermore, there was a statistically significant relationship between students' attitude scores and their study habits scores, as well as a significant relationship between self-efficacy scores and study habits scores, and a moderately significant relationship between self-efficacy scores and attitude scores. Lastly, the correlation coefficient between the study's predictive variable (piano study habits) and the predicted variable (attitude) was found to be 0.574, indicating a moderate relationship. In a similar vein, the coefficient of correlation between the predictor variable (piano study habits) and the predicted variable (self-efficacy) was calculated as 0.773, implying a moderate relationship.

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INTRODUCTION

It is crucial to achieve affective as well as academic goals to reach the intended goals in education, to create qualified learning environments, and to raise well-equipped and self-realized individuals. As the speed of accessing information increases in the changing and evolving world, it also influences the goals, methods, and approaches in education. This is because the descriptions of the desired type of individuals to be cultivated have changed. While academic success criteria were previously sufficient, new criteria have now begun to be added. Examples of these criteria include a propensity for teamwork, strong communication and information technology skills, and advanced language proficiency, among others. Additionally, it is observed that certain affective characteristics positively impact academic achievement. One of these is attitude. Attitude is considered one of the most important affective characteristics in education. Therefore, it is worth providing the definition of attitude to clarify the situation. "Attitudes are positive or negative expressions of evaluation of objects, people, or events". An attitude involves a person's feelings towards something" (Robbins, 1994; as cited in Üstüner, 2006, p. 111). Another affective characteristic that influences success in education, as much as attitude, is self-efficacy. This is because self-efficacy is the belief system that determines students' confidence in successfully completing an academic task or assignment, or thinking in a way that would hinder their progress (Bandura & Locke, 2003; as cited in Spicer, 2012). With its nature, self-efficacy is closely related to beliefs about success, forming a significant connection between self-efficacy and achievement. Self-efficacy is an emotion that influences a student's learning behavior. Students who feel competent in their learning are more inclined to demonstrate self-regulation skills such as goal setting, effective learning strategies, and goal review. Further, students attempt to create effective learning environments for themselves (Bandura, 1986, 1997; as cited in Schunk and Pajares, 2009). Alongside attitude and self-efficacy, study habits constitute another influential variable for achieving educational goals. Well-established and high-quality study habits lead students to success and enable them to benefit from learning environments. To achieve effective learning, it is essential to have well-structured study habits in place (Gettinger & Seibert, 2002, cited in Çetin, 2009). Students' study habits and attitudes have an impact on their feelings and behaviors during school activities as well as their overall reactions to school life (Küçükahmet, 2005, as cited in Küçükosmanoğlu, et al., 2017).

The responsibility and emotional state of the learner in the triangle of education system, teacher, and student are of high importance to achieving the intended goals in every step of education. If the learner lacks interest in the subject, feels inadequate or unprepared, and demonstrates low academic effort, achieving a permanent and qualified learning outcome becomes challenging. It is critical, especially in the fields of art and sports, that the targeted efficiency is completed in a timely and complete manner that must be repeated daily. In Turkey, music education, which is relevant to the subject of the research, is provided in music teaching departments of fine arts education departments of universities. In the field of music, the development of various skills requires the simultaneous engagement of cognitive and psychomotor achievements. Proficiency in playing instruments, singing, and auditory skills necessitates the regular and accurate execution of prescribed exercises. For this to occur, individuals must have a deep passion for their craft, a sense of possessing the necessary skills, and a commitment to consistent practice. In light of the above mentioned, the present study attempts to examine the attitudes, self-efficacy, and study habits of prospective music teachers towards the piano course in terms of various variables. In this sense, the "Scale of Attitudes towards Piano Course" developed by Tufan and Güdek (2008), the "Scale of Self-Efficacy towards Piano Course" developed by Kurtuldu and Bulut (2017), and the "Scale of the Piano Study Habits" developed by Bağcı and Toy (2020), and the personal information form developed by the researcher were used to seek answers to the following questions.

1) Is there a significant difference between prospective music teachers' attitude scores, self-efficacy scores, and study habits scores regarding piano lessons according to gender?
2) Is there a significant difference between prospective music teachers' attitude scores, self-efficacy scores, and study habits scores regarding piano lessons according to their grades?
3) Is there a significant difference between prospective music teachers' attitude scores, self-efficacy scores, and study habits scores regarding piano lessons according to the high schools they graduated from?
4) Is there a significant difference between prospective music teachers' attitude scores, self-efficacy scores, and study habits scores regarding piano lessons according to their perception of success in piano?
5) Is there a significant difference between prospective music teachers' attitude scores, self-efficacy scores, and study habits scores regarding piano lessons according to their daily study hours?
6) Is there a significant difference between prospective music teachers' attitude scores, self-efficacy scores, and study habits scores regarding piano lessons based on their piano ownership status?
7) Do the scores of the Scale of Piano Study Habits and its sub-dimensions of prospective music teachers predict students' attitudes toward the piano?
8) Do the scores of the Scale of Piano Study Habits and its sub-dimensions of prospective music teachers predict students' self-efficacy toward the piano?

METHODOLOGY

RESEARCH MODEL

In this study, the relationship between prospective music teachers' attitudes toward piano lessons, their self-efficacy, and study habits was examined. The study employed the relational survey model, one of the quantitative research methods. “Relational survey models are research models that aim to determine the existence and/or degree of change between two or more variables” (Karasar, 2004, p. 81).

STUDY GROUP

The study group included 349 prospective music teachers studying at a state university in the Aegean Region in the spring semester of the 2021-2022 academic year. The research utilized a sample of 349 volunteers from all grades across five state universities, using an easily accessible sampling method. Demographic statistics for the individuals are presented in Table 1.

As shown in Table 1, 59.8% of participants were female and 40.2% were male. 18.7% attended her first grade, 18.7% sophomore, 32.7% third grade and 30.4% her senior year. 50.6% were graduated from fine arts, 32.4% were graduated from Anatolian high schools, and 17% were graduated from other high schools; 22.9% attended Adnan Menderes University, 22.6% attended Dokuz Eylül University, 18.4% attended Muğla Sıtkı Koçman University, 23.5% attended Pamukkale University, and 12.6% of the participants attended Balıkesir University; 22.6% found themselves successful at a low level, 57.5% found themselves successful at a moderate level, and 19.8% found themselves successful at a high level; 49.2% of the participants practiced for 30 minutes or less per day, 29.1% practiced for 30-60 minutes, and 21.8% practiced for 61 minutes or more. 56.1% of the participants owned a piano, while 43.9% did not.

Table 1. *Study Group*

		Study Group	
Variable	*Category*	*f*	*%*
Gender	Female	212	60.7
	Male	137	39.3
	Total	349	100.0
Grade	1st grade	65	18.6
	2nd grade	63	18.1
	3rd grade	114	32.7
	4th grade	107	30.6
	Total	349	100.0
Type of High School Graduated	Fine Arts High School	176	50.4
	Anatolian High School	112	32.1
	Other	61	17.5
	Total	349	100.0
The Sampled Universities	Adnan Menderes University	82	23.5
	Dokuz Eylül University	80	22.9
	Muğla Sıtkı Koçman University	64	18.4
	Pamukkale University	80	22.9
	Balıkesir University	43	12.2
	Total	349	100.0
Perception of Success	Low	79	22.6
	Moderate	202	58.0
	High	68	19.4
	Total	349	100.0
Daily Practice Time	30 minutes and less	172	49.2
	31-60 minutes	100	28.6
	61 minutes and more	77	22.2
	Total	349	100.0
Piano Ownership Status	Yes	196	56.1
	No	153	43.9
	Total	349	100.0

DATA COLLECTION TOOLS

The scores, which were previously found valid and reliable, as well as a *Personal Information Form*, were utilized in the study. 'Attitudes towards Piano Course Scale' (APCS) developed by Tufan and Güdek (2008), 'Self-Efficacy towards the Piano Course Scale' (SEPCS), developed by Kurtuldu and Bulut (2017), and the 'Piano Study Habits Scale' (PSHC) developed by Bağcı and Toy (2020) were employed as data collection tools. Permission was granted from the authors who developed the measurement tools.

ATTITUDES TOWARDS PIANO COURSE SCALE

APCS is a 30-item scale. The internal consistency reliability coefficient of the scale is .97 for the overall. The Cronbach's alpha coefficient of the first factor named *contentment*, consisting of eighteen items, is .97; the Cronbach's alpha coefficient of the second factor, called *value*, consisting of twelve items, is .91. The factor loading values of the items were in the range of 0.60 to 0.79. The KMO value of the scale was 0.97. The rating of the scale is between 1 and 5.

SELF-EFFICACY TOWARDS PIANO COURSE SCALE

SEPCS is a 32-item scale. The internal consistency reliability coefficient of the scale is .95 for the overall. The Cronbach's alpha coefficient of the first factor named *The self-efficacy towards the level of skill achieved in the piano course*, consisting of eighteen items, is .94; the Cronbach's alpha

coefficient of the second factor, called *The self-efficacy towards the level of knowledge and consciousness achieved in the piano course*, consisting of fourteen items, is .94. The factor loading values of the items ranged between 0.40 and 0.72. The KMO value was 0.95, and the rating of the scale is between 1 and 5.

PIANO STUDY HABITS SCALE

PSHC is a 32-item scale. The internal consistency reliability coefficient of the scale is .94 for the total scale. The Cronbach's alpha coefficient of the first factor named *instrument technique* consisting of seven items is .83; the second factor named *preparation and warm-up* consisting of seven items is .86; the third factor named *posture and technique* consisting of four items is .83; the fourth factor named *interpretation and expression* is .80; the fifth factor named *rhythmic practice and fingering* is .65; the sixth factor named *post-performance activity* is .66 and the seventh factor named *deciphering technique* is .68. Loadings of items ranged between 0.39 to 0.85. The KMO value of the scale was 0.89. A 5-point Likert-type, scoring from one to five, was utilized in the study.

EVIDENCE OF VALIDITY AND RELIABILTY FOR THE SCALES

EVIDENCE OF VALIDITY FOR THE SCALES

Confirmatory factor analysis was executed to measure the construct validity of the PSHS, SEPCS, and APCS employed in the work. As a result of the confirmatory factor analysis conducted, the fit indices of the scales are tabulated in Table 2.

Table 2. *Fit Indices of the Scale*

Fit Indices	*Accepted Values*	*PSHC*	*SEPCS*	*APCS*
χ2/sd	χ2/sd<5 (Sümer, 2000)	1488.79/442 3.368	1959.88/461 4.251	1558.26/403 3.867
RMSEA	RMSEA<0.10 (Kline, 2005)	0.082	0.092	0.091
SRMR	SRMR<0.08 (Brown, 2006)	0.070	0.074	0.069
NFI	NFI>0.90 (Brown, 2015)	0.96	0.94	0.95
IFI	IFI>0.90 (Brown, 2015)	0.97	0.95	0.96
CFI	CFI>0.90 (Brown, 2015)	0.97	0.95	0.96

Table 2, which shows the fit indices of PSHS, SEPCS and APCS scales, shows that the scales are valid and most of the fit indices are within the range of acceptance criteria.

EVIDENCE OF RELIABILITY FOR THE SCALES

The Cronbach's alpha internal consistency coefficients for the reliability of the PSHS, SEPCS, and APCS were calculated, and the results are detailed in Table 3.

Table 3. *Cronbach's Alpha Internal Consistency Coefficients for the Scales*

Scale		*Scale*	*F1*	*F2*	*F3*	*F4*	*F5*	*F6*	*F7*
PSHS	Cronbach's Alpha	0.963	0.905	0.912	0.911	0.908	0.766	0.764	0.7910.
	The Number of Items	32	7	7	5	4	3	3	3
SEPCS	Cronbach's Alpha	0.960	0.939	0.911					
	The Number of Items	32	18	14					
APCS	Cronbach's Alpha	0.805	0.955	0.827					
	The Number of Items	30	18	12					

Based on Table 3, it can be implied that the scores acquired from the scales and their sub-dimensions are highly reliable (Özdamar, 2004).

DATA COLLECTION PROCESS

Before conducting the study, the research content was throughly written and submitted in the format specified by the Adnan Menderes University Faculty of Education Ethics Committee. Following the close review and approval by the Ethics Committee, the research was launched simultaneously at the five public universities.

DATA ANALYSIS

The SPSS 24 and LISREL programs were used to analyze the data. Aforementioned scales were computerized through the SPSS 24 software program and the subject number was given to participants. Necessary changes were made to the data that was marked incorrectly and incompletely. An outlier analysis was conducted and 9 subjects were removed from the data set according to their standardized Z scores (+3, -3 range was taken). After removing the extreme values, the study was performed with 349 people.

Construct validity was examined to assess the validity of the scales. While examining the construct validity, confirmatory factor analysis was performed. The Cronbach's Alpha internal consistency coefficients were recorded and interpreted for the reliability of the scales. The skewness and kurtosis coefficients of the scores obtained in terms of both general and each demographic variable were analyzed to see if the data was normally distributed. The skewness and kurtosis between -2 and +2 are considered acceptable range for being normally distributed (Kim, 2013).

Following the normality tests of the scores obtained from the scales, the independent samples t-test was employed to evaluate differences by gender and piano ownership status; ANOVA was used to reveal differences according to grade, type of high school graduated, daily practice time, and perception of success; the Pearson correlation coefficient was employed to examine the relationships; and regression analysis was performed to investigate the effects. The results were presented in tables.

FINDINGS AND INTERPRETATION

In this section, the attitudes, self-efficacy, and study habits of the prospective music teachers participating in the research toward piano lessons were examined in accordance with the research's sub-problems and are presented in tables.

THE DIFFERENTATIATION ANALYSIS RESULTS BY DEMOGRAPHIC VARIABLES

THE DIFFERENTIATION ANALYSIS RESULTS BY GENDER VARIABLE

The outcomes of the Independent Samples t-test, which were performed to figure out if the scores acquired from the PSHS, SEPCS and APCS used in the study differed by gender, are reported in Table 4.

Based on Table 4, it can be concluded that gender is not a significant precursor of students' study habits ($t=1.091$, $p>0.05$), instrument technique ($t=1.937$, $p>0.05$), preliminary preparation and warm-up ($t=0.071$, $p>0.05$), posture and technique ($t=1.136$, $p>0.05$), interpretation and phrasing ($t=1.790$, $p>0.05$), rhythmic work and fingering ($t=0.713$, $p>0.05$), post-performance activity ($t=0.654$, $p>0.05$), deciphering technique ($t=0.406$, $p>0.05$) and attitude ($t=0.746$, $p>0.05$). The total self-efficacy scores ($t=2.321$, $p<0.05$), the sub-dimension scores, namely, self-efficacy towards the level of skill achieved in the piano course ($t=2.398$, $p<0.05$), Self-efficacy towards the level of knowledge and consciousness achieved in the piano course ($t=2.047$, $p<0.05$) 0.05), and contentment ($t=1.984$, $p<0.05$) and value ($t=2.756$, $p<0.05$) scores produced statistically significant differences based on gender variable. Besides that, females' total self-efficacy scores, the sub-dimension scores with respect to the self-efficacy towards the level of skill achieved in the piano course and the self-efficacy towards the level of knowledge and consciousness achieved in the piano course, and contentment mean scores are higher than males, whereas their value mean scores are lower than males.

Table 4. *The Differentiation Analysis Results by Gender*

	Gender	*n*	*X̄*	*Std. Deviation*	*t*	*sd*	*P*
Study Habits	Female	212	108.5943	23.46452	1.091	347	0.276
	Male	137	105.7007	25.30501			
	Total	349					
Instrument Technique	Female	212	23.4009	6.05227	1.937	347	0.054
	Male	137	22.0876	6.38297			
	Total	349					
Preliminary Preparation and Warm-up	Female	212	22.2406	6.17622	0.071	347	0.943
	Male	137	22.2920	7.12510			
	Total	349					
Posture and Technique	Female	212	18.4764	4.62984	1.136	347	0.257
	Male	137	17.9051	4.51938			
	Total	349					
Interpretation and Phrasing	Female	212	14.4481	3.69477	1.790	347	0.074
	Male	137	13.6934	4.07207			
	Total	349					
Rhythmic Work and Fingering	Female	212	11.1038	2.50092	0.713	347	476
	Male	137	10.8978	2.83176			
	Total	349					
Post-performance Activity	Female	212	9.1085	2.97741	0.654	347	0.514
	Male	137	8.8832	3.38480			
	Total	349					
Deciphering Technique	Female	212	9.8160	2.76730	0.406	347	0.685
	Male	137	9.9416	2.90478			
	Total	349					
Self-efficacy	Female	212	111.6462	21.84526	2.321	347	0.021
	Male	137	105.8248	24.39741			
	Total	349					
Self-efficacy towards the level of skill achieved in the piano course	Female	212	62.6981	12.60081	2.398	347	0.017
	Male	137	59.2190	14.16121			
	Total	349					
Self-efficacy towards the level of knowledge and consciousness achieved in the piano course	Female	212	48.9481	10.01668	2.047	347	0.041
	Male	137	46.6058	11.06289			
	Total	349					
Attitude	Female	212	85.2170	11.71300	0746	347	0.456
	Male	137	84.2263	12.72445			
	Total	349					
Contentment	Female	212	62.1321	14.86086	1.984	347	0.048
	Male	137	58.8248	15.72320			
	Total	349					
Value	Female	212	23.0849	7.72037	2.756	347	0.006
	Male	137	25.4015	7.58720			
	Total	349					

THE DIFFERENTIATION ANALYSIS RESULTS BY GRADE VARIABLE

The results of ANOVA performed to determine whether the scores obtained from the scales differed by the grade variable are demonstrated in Table 5.

Table 5. *The Differentiation Analysis Results by Grade*

		Sum of Squares	*sd*	*Mean Square*	*F*	*p*	*Differentiation*
Study Habits	Between Groups	746.276	3	248.759	.422	.737	-
	Within Groups	203210.372	345	589.016			
	Total	203956.648	348				
Instrument Technique	Between Groups	10.116	3	3.372	.087	.967	-
	Within Groups	13403.299	345	38.850			
	Total	13413.415	348				
Preliminary Preparation and Warm-up	Between Groups	90.556	3	30.185	.701	.552	-
	Within Groups	14862.716	345	43.080			
	Total	14953.272	348				
Posture and Technique	Between Groups	123.678	3	41.226	1.974	.118	-
	Within Groups	7204.133	345	20.882			
	Total	7327.811	348				
Interpretation and Phrasing	Between Groups	29.588	3	9.863	.660	.577	-
	Within Groups	5153.364	345	14.937			
	Total	5182.951	348				
Rhythmic Work and Fingering	Between Groups	3.291	3	1.097	.157	.925	-
	Within Groups	2410.526	345	6.987			
	Total	2413.817	348				
Post-performance Activity	Between Groups	8.179	3	2.726	.275	.844	-
	Within Groups	3424.680	345	9.927			
	Total	3432.860	348				
Deciphering Technique	Between Groups	9.892	3	3.297	.413	.744	-
	Within Groups	2754.779	345	7.985			
	Total	2764.670	348				
Self-efficacy	Between Groups	501.838	3	167.279	.314	.815	-
	Within Groups	183962.672	345	533.225			
	Total	184464.510	348				
Self-efficacy towards the level of skill achieved in the piano course	Between Groups	261.801	3	87.267	.489	.690	-
	Within Groups	61521.643	345	178.324			
	Total	61783.444	348				
Self-efficacy towards the level of knowledge and consciousness achieved in the piano course	Between Groups	60.730	3	20.243	.183	.908	-
	Within Groups	38210.983	345	110.756			
	Total	38271.713	348				
Attitude	Between Groups	470.223	3	156.741	1.069	.362	-
	Within Groups	50579.462	345	146.607			
	Total	51049.685	348				
Contentment	Between Groups	482.882	3	160.961	.689	.560	-
	Within Groups	80647.479	345	233.761			
	Total	81130.361	348				
Value	Between Groups	484.861	3	161.620	2.738	.043	1-2
	Within Groups	20367.128	345	59.035			
	Total	20851.989	348				

1st grade; 2nd grade
3rd grade; 4th grade

According to Table 5, students' study habits (F(3.345)= 0.422, p>0.05), instrument technique, (F(3.345)= 0.087, p>0.05), preliminary preparation and warm-up(F(3.345)= 0.701, p>0.05), posture and technique (F(3.345)= 1.974, p>0.05), interpretation and phrasing (F(3.345)= 0.660, p>0.05), rhythmic work and fingering (F(3.345)= 0.157, p>0.05), post-performance activity(F(3.345)= 0.275, p>0.05), deciphering technique and attitude (F(3.345)= 0.413, p>0.05), self-efficacy (F(3.345)= 0.314,

p>0.05),Self-efficacy towards the level of skill level achieved in the piano course, (F(3.345)= 0.489, p>0.05) and Self-efficacy towards the level of knowledge and consciousness achieved in the piano course (F(3.345)= 0.183, p>0.05), which are the sub-dimensions of self-efficacy, contentment (F(3.345)= 0.689, p>0.05) and value (F(3.345)= 2.738, p<0.05) scores produce statistically significant discrepancies in terms of grade variable. Also, the value scores of the participants indicated a statistically discernible difference contingent on the grade variable. The value mean scores of the students in the first grade were observed to be lower than those in the second grade.

THE DIFFERENTIATION ANALYSIS RESULTS BY TYPE OF HIGH SCHOOL GRADUATED

ANOVA was performed to determine whether the scores obtained from the scales differed by the type of high school graduated, and the outcomes are shown in Table 6.

Table 6. *The Differentiation Analysis Results by the Type of High School Graduated*

		Sum of Squares	*Sd*	*Mean Square*	*F*	*P*	*Differentiation*
Study Habits	Between Groups	2962.532	2	1481.266	2.550	.080	-
	Within Groups	200994.116	346	580.908			
	Total	203956.648	348				
Instrument Technique	Between Groups	389.228	2	194.614	5.170	.006	1-3
	Within Groups	13024.188	346	37.642			
	Total	13413.415	348				
Preliminary Preparation and Warm-up	Between Groups	104.974	2	52.487	1.223	.296	-
	Within Groups	14848.298	346	42.914			
	Total	14953.272	348				
Posture and Technique	Between Groups	48.401	2	24.200	1.150	.318	-
	Within Groups	7279.410	346	21.039			
	Total	7327.811	348				
Interpretation and Phrasing	Between Groups	67.979	2	33.990	2.299	.102	-
	Within Groups	5114.972	346	14.783			
	Total	5182.951	348				
Rhythmic Work and Fingering	Between Groups	20.253	2	10.126	1.464	.233	-
	Within Groups	2393.564	346	6.918			
	Total	2413.817	348				
Post-Performance Activity	Between Groups	26.253	2	13.126	1.333	.265	-
	Within Groups	3406.607	346	9.846			
	Total	3432.860	348				
Deciphering Technique	Between Groups	10.365	2	5.183	.651	.522	-
	Within Groups	2754.305	346	7.960			
	Total	2764.670	348				
Self-efficacy	Between Groups	8282.738	2	4141.369	8.133	.000	1-2 1-3
	Within Groups	176181.772	346	509.196			
	Total	184464.510	348				
Self-efficacy towards the level of skill achieved in the piano course	Between Groups	2854.589	2	1427.294	8.380	.000	1-2 1-3
	Within Groups	58928.855	346	170.315			
	Total	61783.444	348				
Self-efficacy towards the level of knowledge and consciousness achieved in the piano course	Between Groups	1415.313	2	707.657	6.643	.001	1-2
	Within Groups	36856.400	346	106.521			
	Total	38271.713	348				
Attitude	Between Groups	585.843	2	292.922	2.008	.136	-
	Within Groups	50463.841	346	145.849			
	Total	51049.685	348				

Table 6 *(continued)*

Contentment	Between Groups	523.691	2	261.846	1.124	.326	-
	Within Groups	80606.670	346	232.967			
	Total	81130.361	348				
Value	Between Groups	1.962	2	.981	.016	.984	-
	Within Groups	20850.027	346	60.260			
	Total	20851.989	348				

1. Fine Arts High School
2. Anatolian High School
3. Other

As detailed in Table 6, students' study habits (F(2.346)= 2.550, p>0.05), preliminary preparation and warm-up (F(2.346)= 1.223, p>0.05), posture and technique (F(2.346)= 1.150, p> 0.05), interpretation and phrasing (F(2.346)= 2.299, p>0.05), rhythmic work and fingering (F(2.346)= 1.464, p>0.05), post-performance activity (F(2.346)= 1.333, p>0.05), deciphering technique (F(2.346)= 0.651, p>0.05), attitude (F(2.346)= 2.008, p>0.05), contentment (F(2.346)= 1.124, p>0.05) and value (F(2.346))= 0.016, p>0.05) scores did not indicate a statistically discernible difference based on the type of high school graduated. The sampled students' instrument technique (F(2.346)= 5.170, p<0.05), total self-efficacy (F(2.346)= 8.133, p<0.05), the sub-dimension scores, namely, self-efficacy towards the level of skill achieved in the piano course (F(2.346)= 8.380, p<0.05) and Self-efficacy towards the level of knowledge and awareness achieved in the piano course (F(2.346)= 6.643, p<0.05) yielded a statistically discernible difference in terms of the type of high school graduated. The instrument technique mean scores of high school of the Arts graduates were found to be higher than the instrument technique mean scores of the students graduating from other high schools. It was also observed that the mean scores of high school of the Arts graduates in self-efficacy and its sub-dimensions, namely, the self-efficacy towards the level of skill achieved in the piano course and the self-efficacy towards the level of knowledge and consciousness achieved in the piano course, were higher than those of the students studying at Anatolian high schools and other high schools.

THE DIFFERENTIATION ANALYSIS FINDINGS BY PERCEPTION OF SUCCESS

The results of ANOVA performed to determine whether the scores obtained from the scales differed by perception of success are outlined in Table 7.

Table 7. *The Differentiation Analysis Results by Perception of Success*

		Sum of Squares	*sd*	*Mean Square*	*F*	*p*	*Differentiation*
Study Habits	Between Groups	34552.506	2	17276.253	35.286	.000	1-2 1-3 2-3
	Within Groups	169404.142	346	489.607			
	Total	203956.648	348				
Instrument Technique	Between Groups	2628.642	2	1314.321	42.166	.000	1-2 1-3 2-3
	Within Groups	10784.774	346	31.170			
	Total	13413.415	348				
Preliminary Preparation and Warm-up	Between Groups	1518.360	2	759.180	19.552	.000	1-2 1-3 2-3
	Within Groups	13434.912	346	38.829			
	Total	14953.272	348				
Posture and Technique	Between Groups	793.085	2	396.542	20.996	.000	1-2 1-3 2-3
	Within Groups	6534.726	346	18.886			
	Total	7327.811	348				

Table 7 *(continued)*

Interpretation and Phrasing	Between Groups	723.179	2	361.590	28.053	.000	1-2 1-3 2-3
	Within Groups	4459.772	346	12.890			
	Total	5182.951	348				
Rhythmic Work and Fingering	Between Groups	255.073	2	127.537	20.441	.000	1-2 1-3 2-3
	Within Groups	2158.743	346	6.239			
	Total	2413.817	348				
Post-performance Activity	Between Groups	143.861	2	71.931	7.567	.001	1-2 1-3
	Within Groups	3288.998	346	9.506			
	Total	3432.860	348				
Deciphering Technique	Between Groups	193.444	2	96.722	13.016	.000	1-2 1-3
	Within Groups	2571.226	346	7.431			
	Total	2764.670	348				
Self-efficacy	Between Groups	58482.631	2	29241.315	80.309	.000	1-2 1-3 2-3
	Within Groups	125981.879	346	364.109			
	Total	184464.510	348				
Self-efficacy towards the level of skill achieved in the piano course	Between Groups	18468.587	2	9234.294	73.764	.000	1-2 1-3 2-3
	Within Groups	43314.857	346	125.187			
	Total	61783.444	348				
Self-efficacy towards the level of knowledge and consciousness achieved in the piano course	Between Groups	11222.937	2	5611.468	71.780	.000	1-2 1-3 2-3
	Within Groups	27048.777	346	78.176			
	Total	38271.713	348				
Attitude	Between Groups	6791.046	2	3395.523	26.545	.000	1-2 1-3 2-3
	Within Groups	44258.639	346	127.915			
	Total	51049.685	348				
Contentment	Between Groups	15169.847	2	7584.924	39.787	.000	1-2 1-3 2-3
	Within Groups	65960.514	346	190.637			
	Total	81130.361	348				
Value	Between Groups	1782.268	2	891.134	16.169	.000	1-2 1-3 2-3
	Within Groups	19069.721	346	55.115			
	Total	20851.989	348				

1. Low; 2. Moderate; 3. High

From Table 7, study habits (F(2.346)= 35.286, p<0.05), instrument technique (F(2.346)= 42.166, p<0.05), preliminary preparation and warm-up (F(2.346)= 19.552, p<0.05) , posture and technique (F(2.346)= 20.996, p<0.05), interpretation and phrasing (F(2.346)= 28.053, p<0.05), rhythmic work and fingering (F(2.346)= 20.441, p<0.05), post-performance activity (F(2.346)= 7.567, p<0.05), deciphering Technique (F(2.346)= 13.016, p<0.05), total self-efficacy (F(2.346)= 80.309, p<0.05), the sub-dimension of self-efficacy towards the level of skill achieved in the piano course (F(2.346)= 73.764, p<0.05) and the sub-dimension of Self-efficacy towards the level of knowledge and consciousness achieved in the piano course (F(2.346)= 71.780, p<0.05), attitude (F(2.346)= 26.545, p<0.05), contentment (F(2.346)= 39.787, p<0.05) and value (F(2.346)= 16.169, p<0.05) scores

indicated statistically discernible discrepancies with regard to the variable of the perception of success.

The study habits, instrument technique, preliminary preparation and warm-up, posture and technique, interpretation and phrasing, and rhythmic work and fingering mean scores of the students who found themselves to be low-level successful were higher than the average scores of the students who perceived themselves as moderately and highly successful. Further, the study habits, instrument technique, preliminary preparation and warm-up, posture and technique, interpretation and phrasing, and rhythmic work and fingering average scores of the students who perceived themselves as moderately successful were higher than the average scores of the students who perceived themselves as highly successful. Further, the rhythmic work and fingering and post-performance activity average scores of the students who perceived themselves as low-level successful were reported to be higher than the average scores of the students who perceived themselves as moderately and highly successful.

The total self-efficacy, the sub-dimension of self-efficacy towards the level of skill achieved in the piano course, the sub-dimension of self-efficacy towards the level of knowledge and consciousness achieved in the piano course, and the attitude and contentment mean scores of the students who perceived themselves as successful at a low level were higher than the average scores of the students who perceived themselves as moderately or highly successful. The total self-efficacy, the sub-dimension of self-efficacy towards the level of skill achieved in the piano course, the sub-dimension of self-efficacy towards the level of knowledge and consciousness achieved in the piano course, attitude and contentment average scores of the students who perceived themselves as moderately successful were found to be higher than the average scores of the students who perceived themselves as highly successful.

The value mean scores of the students who perceived themselves as successful at a low level were lower than the mean scores of the students who perceived themselves as moderately and highly successful. In addition to that, the value mean scores of the students who perceived themselves as moderately successful were lower than the mean scores of the students who perceived themselves as highly successful.

THE DIFFERENTIATION ANALYSIS RESULTS BY DAILY PRACTICE TIME

The results of ANOVA performed to determine whether the scores derived from the scales differed by daily practice time are illustrated in Table 8.

Table 8. *The Differentiation Analysis Results by Daily Practice Time*

		Sum of Squares	*sd*	*Mean Square*	*F*	*p*	*Differentiation*
Study Habits	Between Groups	25604.485	2	12802.243	24.836	.000	1-2 1-3 2-3
	Within Groups	178352.162	346	515.469			
	Total	203956.648	348				
Instrument Technique	Between Groups	1376.661	2	688.330	19.786	.000	1-2 1-3
	Within Groups	12036.755	346	34.788			
	Total	13413.415	348				
Preliminary Preparation and Warm-up	Between Groups	1343.120	2	671.560	17.073	.000	1-2 1-3 2-3
	Within Groups	13610.152	346	39.336			
	Total	14953.272	348				
Posture and Technique	Between Groups	560.368	2	280.184	14.325	.000	1-2 1-3 2-3
	Within Groups	6767.443	346	19.559			
	Total	7327.811	348				

Table 8 *(continued)*

Interpretation and Phrasing	Between Groups	676.809	2	338.405	25.984	.000	1-2 1-3 2-3
	Within Groups	4506.142	346	13.024			
	Total	5182.951	348				
Rhythmic Work and Fingering	Between Groups	156.827	2	78.414	12.021	.000	1-2 1-3
	Within Groups	2256.990	346	6.523			
	Total	2413.817	348				
Post-performance Activity	Between Groups	142.071	2	71.036	7.469	.001	1-2 1-3
	Within Groups	3290.788	346	9.511			
	Total	3432.860	348				
Deciphering Technique	Between Groups	162.754	2	81.377	10.821	.000	1-2 1-3
	Within Groups	2601.917	346	7.520			
	Total	2764.670	348				
Self-efficacy	Between Groups	25844.232	2	12922.116	28.187	.000	1-2 1-3 2-3
	Within Groups	158620.278	346	458.440			
	Total	184464.510	348				
Self-efficacy towards the level of skill achieved in the piano course	Between Groups	7953.558	2	3976.779	25.561	.000	1-2 1-3 2-3
	Within Groups	53829.887	346	155.578			
	Total	61783.444	348				
Self-efficacy towards the level of knowledge and consciousness achieved in the piano course	Between Groups	5148.551	2	2574.275	26.891	.000	1-2 1-3 2-3
	Within Groups	33123.163	346	95.732			
	Total	38271.713	348				
Attitude	Between Groups	5348.943	2	2674.471	20.248	.000	1-2 1-3 2-3
	Within Groups	45700.742	346	132.083			
	Total	51049.685	348				
Contentment	Between Groups	10744.636	2	5372.318	26.409	.000	1-2 1-3 2-3
	Within Groups	70385.725	346	203.427			
	Total	81130.361	348				
Value	Between Groups	1015.014	2	507.507	8.852	.000	1-3 2-3
	Within Groups	19836.974	346	57.332			
	Total	20851.989	348				

1.30 minutes and less
2.31-60 minutes
3. 61minutes and more

As can be seen in Table 8, students' study habits ($F(2.346)= 24.836$, $p<0.05$), instrument technique, ($F(2.346)= 19.786$, $p<0.05$), preliminary preparation and warm-up ($F(2.346)= 17.073$, $p<0.05$), posture and technique ($F(2.346)= 14.325$, $p<0.05$), interpretation and phrasing ($F(2.346)= 25.984$, $p<0.05$), rhythmic work and fingering($F(2.346)= 12.021$, $p<0.05$), post-performance activity($F(2.346)= 7.469$, $p<0.05$), deciphering technique $F(2.346)= 10.821$, $p<0.05$) , total self-efficacy ($F(2.346)= 28.187$, $p<0.05$), the sub-dimension of Self-efficacy towards the level of skill level achieved in the piano course ($F(2.346)= 25.561$, $p<0.05$), the sub-dimension of Self-efficacy towards the level of knowledge and consciousness achieved in the piano course ($F(2.346)= 26.891$, $p<0.05$), attitude

(F(2.346)= 20.248, p<0.05), contentment (F(2.346)= 26.409, p<0.05) and value scores (F(2.346)= 8.852, p<0.05) produced statistically discernible discrepancies in terms of perception of success.

Additionally, study habits, instrument technique, preliminary preparation and warm-up, posture and technique, interpretation and phrasing, rhythmic work and fingering, performance and post-performance, deciphering technique, total self-efficacy, the sub-dimension of Self-efficacy towards the level of skill achieved in the piano course, attitude and contentment mean scores of students whose daily practice time was 30 minutes or less were lower than the mean scores of students whose daily practice time was 31-60 minutes and 61 minutes or more. The study habits, preliminary preparation and warm-up, posture and technique, interpretation and phrasing, total self-efficacy, and the sub-dimension of the self-efficacy towards the level of knowledge and consciousness achieved in the piano course, attitude and contentment average scores of the students whose daily practice time was 31-60 minutes were lower than the average scores of students who practice daily for 61 minutes or more.

Further, the mean value scores of the students whose daily practice time was 30 minutes or less were higher than those with a daily practice time of 31-60 minutes and 61 minutes or more.

THE DIFFERENTIATION ANALYSIS RESULTS BY HAVING A PIANO

The outcome of the Independent Samples t-test, which were performed to see if the scores obtained from the PSHS, SEPCS and APCS used in the study differed by having a piano, are provided in Table 9.

Table 9. *The Differentiation Analysis Results by Having a Piano*

	Having a Piano	*n*	$\bar{X}$	*Standard Deviation*	*t*	*Sd*	*p*
Study Habits	Yes	196	110.8010	23.46424	2.952	347	0.003
	No	153	103.1765	24.54859			
	Total	349					
Instrument Technique	Yes	196	23.8520	6.16138	3.340	347	0.001
	No	153	21.6471	6.06594			
	Total	349					
Preliminary Preparation and Warm-up	Yes	196	22.6786	6.48815	1.349	347	0.178
	No	153	21.7255	6.62256			
	Total	349					
Posture and Technique	Yes	196	18.9439	4.46662	3.230	347	0.001
	No	153	17.3660	4.60513			
	Total	349					
Interpretation and Phrasing	Yes	196	14.7755	3.85781	3.471	347	0.001
	No	153	13.3529	3.72310			
	Total	349					
Rhythmic Work and Fingering	Yes	196	11.3673	2.50901	2.792	347	0.006
	No	153	10.5817	2.73047			
	Total	349					
Post-performance activity	Yes	196	9.0918	3.09039	0.483	347	0.630
	No	153	8.9281	3.21203			
	Total	349					
Deciphering Technique	Yes	196	10.0918	2.87371	1.704	347	0.089
	No	153	9.5752	2.72825			
	Total	349					
Self-efficacy	Yes	196	114.0153	22.42583	4.385	347	0.000
	No	153	103.3987	22.46498			
	Total	349					

Table 9 *(continued)*

Self-efficacy towards the level of skill achieved in the piano course	Yes	196	64.0612	13.02488	4.446	347	0.000
	No	153	57.8366	12.92003			
	Total	349					
Self-efficacy towards the level of knowledge and consciousness achieved in the piano course	Yes	196	49.9541	10.19819	3.963	347	0.000
	No	153	45.5621	10.36621			
	Total	349					
Attitude	Yes	196	85.5816	11.75077	1.317	347	0.189
	No	153	83.8627	12.53157			
	Total	349					
Contentment	Yes	196	62.3724	15.19511	2.142	347	0.033
	No	153	58.8627	15.18485			
	Total	349					
Value	Yes	196	23.2092	7.94869	2.156	347	0.032
	No	153	25.0000	7.36992			
	Total	349					

As reported in Table 9, students' preliminary preparation and warm-up (t=1.349, p>0.05), post-performance activity (t=0.483, p>0.05), deciphering technique (t=1.704, p>0.05) and attitude (t=1.317, p>0.05) scores did not present a statistically significant discrepancy with respect to the variable of having a piano. Students' study habits (t=2.952, p<0.05), instrument technique (t=3.340, p<0.05), posture and technique (t=3.230, p<0.05), interpretation and phrasing (t=3.471, p<0.05) , rhythmic work and fingering (t=2.792, p<0.05), total self-efficacy (t=4.385, p<0.05), self-efficacy towards the level of skill achieved in the piano course (t=4.446, p<0.05), the sub-dimension of Self-efficacy towards the level of knowledge and consciousness achieved in the piano course (t=3.963, p<0.05), contentment (t=2.142, p<0.05) and value (t=2.156, p<0.05) scores yielded significant differences with respect to the variable of having a piano.

Study habits, instrument technique, posture and technique, interpretation and phrasing, rhythmic work and fingering, total self-efficacy, the sub-dimension of Self-efficacy towards the level of skill achieved in the piano course, the sub-dimension of Self-efficacy towards the level of knowledge and consciousness achieved in the piano course and contentment scores of students who have piano are higher than the average scores of students who do not have a piano. The average score of the students who have a piano is lower than the average score of the students who do not have a piano.

RESULTS OF RELATIONSHIP TEST

In this section, the relationship test results regarding the research sub-problems are presented. The associations between the scores are outlined in Table 10.

Table 10. *The Relationship between Study Habits and the Attitude towards Piano Course*

		Attitude	*Contentment*	*Value*
Study Habits	Pearson Correlation Coefficient	.550**	.634**	-.389**
	P	.000	.000	.000
	N	349	349	349
Instrument Technique	Pearson Correlation Coefficient	.524**	.548**	-.262**
	P	.000	.000	.000
	N	349	349	349
Preliminary Preparation and Warm-Up	Pearson Correlation Coefficient	.428**	.491**	-.298**
	P	.000	.000	.000
	N	349	349	349
Posture and Technique	Pearson Correlation Coefficient	.443**	.562**	-.417**
	P	.000	.000	.000
	N	349	349	349

Table 10 *(continued)*

Interpretation and Phrasing	Pearson Correlation Coefficient	.498**	.567**	-.338**
	P	.000	.000	.000
	N	349	349	349
Rhythmic Work and Fingering	Pearson Correlation Coefficient	.384**	.496**	-.378**
	P	.000	.000	.000
	N	349	349	349
Post-Performance Activity	Pearson Correlation Coefficient	.397**	.434**	-.235**
	P	.000	.000	.000
	N	349	349	349
Deciphering Technique	Pearson Correlation Coefficient	.374**	.459**	-.319**
	P	.000	.000	.000
	N	349	349	349

As detailed above, there is a statistically significant and positive relationship between students' attitude scores and study habits (r=0.550, p<0.05), instrument technique (r=0.524, p<0.05), preliminary preparation and warm-up (r=0.428, p<0.05), posture and technique (r=0.524, p<0.05) =0.443, p<0.05), interpretation and phrasing (r=0.498, p<0.05), rhythmic work and fingering (r=0.384, p<0.05), post-performance activity (r=0.397, p<0.05) and deciphering Technique (r=0.374, p<0.05) scores. In addition to that, a statistically significant and positive relationship was found between students' contentment scores and study habits (r=0.634, p<0.05), instrument technique (r=0.548, p<0.05), preliminary preparation and warm-up (r=0.491, p<0.05), posture and technique (r=0.562, p<0.05), interpretation and phrasing (r=0.567, p<0.05), rhythmic work and fingering (r=0.496, p<0.05), post-performance activity (r=0.434, p<0.05) and Deciphering Technique (r= 0.459, p<0.05) scores. Further, a statistically significant negative relationship was recorded between students' value scores and study habits (r=-0.389, p<0.05), instrument technique (r=-0.262, p<0.05), preliminary preparation and warm-up (r) =-0.298, p<0.05), posture and technique (r=-0.417, p<0.05), interpretation and phrasing (r=-0.338, p<0.05), rhythmic work and fingering (r=-0.378, p<0.05), post-performance activity (r=-0.235, p<0.05) and deciphering technique (r=-0.319, p<0.05) scores. The relationships between the scales are shown in Table 11.

Table 11. *The Relationship between Study Habits and Self-Efficacy towards the Piano Course*

		Self-Efficacy	*Self-efficacy towards the level of skill achieved in the piano course*	*Self-efficacy towards the level of knowledge and consciousness achieved in the piano course*
Study Habits	Pearson Correlation Coefficient	.753**	.725**	.732**
	P	.000	.000	.000
	N	349	349	349
Instrument Technique	Pearson Correlation Coefficient	.706**	.670**	.700**
	P	.000	.000	.000
	N	349	349	349
Preliminary Preparation and Warm-Up	Pearson Correlation Coefficient	.562**	.549**	.537**
	P	.000	.000	.000
	N	349	349	349
Posture and Technique	Pearson Correlation Coefficient	.620**	.592**	.608**
	P	.000	.000	.000
	N	349	349	349

Table 11 *(continued)*

Interpretation and Phrasing	Pearson Correlation Coefficient	.673**	.644**	.659**
	P	.000	.000	.000
	N	349	349	349
Rhythmic Work and Fingering	Pearson Correlation Coefficient	.620**	.602**	.596**
	P	.000	.000	.000
	N	349	349	349
Post-Performance Activity	Pearson Correlation Coefficient	.502**	.489**	.480**
	P	.000	.000	.000
	N	349	349	349
Deciphering Technique	Pearson Correlation Coefficient	.537**	.523**	.514**
	P	.000	.000	.000
	N	349	349	349

Referring to Table 11, there is a statistically significant and positive relation between students' self-efficacy scores and study habits (r=0.753, p<0.05), instrument technique (r=0.706, p<0.05), preliminary preparation and warm-up (r=0.562, p<0.05), posture and technique (r =0.620, p<0.05), interpretation and phrasing (r=0.673, p<0.05), rhythmic work and fingering (r=0.620, p<0.05), post-performance activity (r=0.502, p<0.05) and Deciphering Technique (r=0.537, p<0.05). Besides that, a statistically significant and positive relationship is found between students' self-efficacy scores for the level of skill achieved in the piano course, which is a sub-dimension of self-efficacy, and study habits (r=0.725, p<0.05), instrument technique (r=0.670, p<0.05), preliminary preparation and warm-up (r=0.549, p<0.05)), posture and technique (r=0.592, p<0.05), interpretation and phrasing (r=0.644, p<0.05), rhythmic work and fingering (r=0.602, p<0.05), post-performance activity (r=0.489, P<0.05) and Deciphering Technique (r=0.523, p<0.05) scores. Further, there is a statistically discernible positive relation between students' self-efficacy scores for the level of knowledge and consciousness achieved in the piano course, which is a sub-dimension of self-efficacy, and study habits (r=0.732, p<0.05)), instrument technique (r=0.700, p<0.05), preliminary preparation and warm-up (r=0.537, p<0.05), posture and technique (r=0.608, p<0.05), interpretation and phrasing (r=0.659, <0.05), rhythmic work and fingering (r=0.596, p<0.05), post-performance activity (r=0.480, p<0.05) and Deciphering Technique (r=0.514, p<0.05) scores. The relationships between the scales are provided in Table 12.

Table 12. *The Relationship between Attitude and Self-Efficacy towards the Piano Course*

		Attitude	*Contentment*	*Value*
Self-efficacy	Pearson Correlation Coefficient	.526**	.607**	-.375**
	P	.000	.000	.000
	N	349	349	349
Self-efficacy towards the level of skill achieved in the piano course	Pearson Correlation Coefficient	.505**	.588**	-.371**
	P	.000	.000	.000
	N	349	349	349
Self-efficacy towards the level of knowledge and consciousness achieved in the piano course	Pearson Correlation Coefficient	.514**	.586**	-.352**
	P	.000	.000	.000
	N	349	349	349

As can be seen from Table 12, is a moderate positive relationship between the students' self-efficacy scores and their attitude (r=0.526, p<0.05) and contentment (r=0.607, p<0.05) scores, and a moderate negative relation between the students' self-efficacy scores and value (r=-0.375, p<0.05) scores. Besides that, there is a moderate positive relation between the students' self-efficacy scores for the level of skill achieved in the piano course, which is a sub-dimension of self-efficacy, and the scores of attitude (r=0.505, p<0.05) and contentment (r=0.588, p<0.05), while there is a moderate negative relationship between the students' self-efficacy scores for the level of skill achieved in the piano course and value scores (r=-0.371, p<0.05). Likewise, a moderate positive relationship exists between the students' scores with respect to the sub-dimension of Self-efficacy towards the level of knowledge and consciousness achieved in the piano course, attitude (r=0.514, p<0.05) and contentment (r=0.586, p<0.05) while a moderate negative relationship exists between the students' sub-dimension score, namely, the self-efficacy towards the level of knowledge and consciousness achieved in the piano course, and value scores (r=-0.352, p<0.05)

REGRESSION ANALYSIS RESULTS

This section presents the regression results for the research sub-problems. The outcomes of the regression analysis are summarized in Tables 13 and 14.

Table 13. *Model Summary and ANOVA Results*

	Sum of Squares	*sd*	*R*	*R2*	*F*	*p*
Regression	16803.208	7	.574	.329	23.902	.000
Remainder	34246.477	341				
Total	51049.685	348				

As reported in Table 13, the relation between the precursor variables and the predicted variable was 0.574, indicating a moderate relationship. Students' instrument technique, preliminary preparation and warm-up, posture and technique, interpretation and phrasing, rhythmic work and fingering, post-performance activity, and deciphering technique scores explained 32.9% of the variance in the scores of the APCS. The analysis of the results indicates that the scores of students in the instrument technique, preliminary preparation and warm-up, posture and technique, interpretation and phrasing, rhythmic work and fingering, post-performance activity, and deciphering technique, and the model developed to predict their attitude scores towards the Piano Course are statistically significant (F (7.341) = 23.902, p<0.05).

Table 14. *Regression Model*

Variable	*Coefficient*	*Standard Deviation*	*β*	*t*	*p*	*rpairwise*	*rpartial*
Fixed	56.564	2.557		22.122	.000		
Instrument Technique	.583	.127	.299	4.591	.000	.524	.241
Preliminary Preparation and Warm-up	.137	.120	.074	1.137	.256	.428	.061
Posture and Technique	.285	.188	.108	1.521	.129	.443	.082
Interpretation and Phrasing	.530	.257	.169	2.060	.040	.498	.111
Rhythmic Work and Fingering	-.361	.323	-.078	-1.116	.265	.384	-.060
Post-performance Activity	.482	.236	.125	2.039	.042	.397	.110
Deciphering Technique	-.123	.280	-.029	-.439	.661	.374	-.024

Referring to the standardized regression coefficient (β) in Table 14, the comparative importance of the precursor variables on the Attitude towards the Piano Course is as follows: Instrument Technique, Interpretation and Phrasing, and Post-Performance Activity.

Given the regression analysis results, the regression equivalence for the prediction of Attitude towards the Piano Course is as follows:

Attitude towards the Piano Course = 56.564 + 0.583 Instrument Technique +0.530 Interpretation and Phrasing + 0.482 Post-Performance Activity.

The outcomes of the regression analysis are provided in Table 15 and Table 16.

Table 15. *Model Summary and ANOVA Results*

	Sum of Squares	*sd*	*R*	*R2*	*F*	*p*
Regression	110156.201	7	.773	.597	72.215	.000
Remainder	74308.309	341				
Total	184464.510	348				

As can be seen in Table 15, the relation between the predictor variables and the predicted variable was 0.773, indicating a moderate relationship. Students' instrument technique, preliminary preparation and warm-up, posture and technique, interpretation and phrasing, rhythmic work and fingering, post-performance activity, and deciphering technique scores explained 59.7% of the variance in the scores of Self-Efficacy towards Piano Course. The analysis results demonstrate that the scores of students in the sub-dimensions of the instrument technique, preliminary preparation and warm-up, posture and technique, interpretation and phrasing, rhythmic work and fingering, post-performance activity, and deciphering technique scores, and the model developed to predict their self-efficacy scores towards the Piano Course are statistically significant ($F(7.\ 341)=72.215$, $p<0.05$).

Table 16. *Regression Model*

Variable	*Coefficient*	*Standard Deviation*	*β*	*t*	*p*	*rpairwise*	*rpartial*
Fixed	30.760	3.766		8.167	.000		
Instrument Technique	1.409	.187	.380	7.529	.000	.706	.378
Preliminary Preparation and Warm-up	.178	.177	.051	1.000	.318	.562	.054
Posture and Technique	.584	.276	.116	2.112	.035	.620	.114
Interpretation and Phrasing	.815	.379	.137	2.150	.032	.673	.116
Rhythmic Work and Fingering	1.146	.476	.131	2.407	.017	.620	.129
Post-performance Activity	.534	.348	.073	1.533	.126	.502	.083
Deciphering Technique	.281	.412	.034	.683	.495	.537	.037

Given the standardized regression coefficient (β) in Table 16, the comparative eminence of the predictor variables on the Self-Efficacy towards the Piano Course is as follows: Instrument Technique, Rhythmic Work and Fingering, Interpretation and Phrasing, and Posture and Technique.

The regression equation for the prediction of Self-Efficacy towards the Piano Course is as follows:

Self-Efficacy towards the Piano Course = 30.760 + 1.409 Instrument Technique + 1.146 Rhythmic Work and Fingering + 0.815 Interpretation and Phrasing + 0.584 Posture and Technique

RESULTS, DISCUSSION AND SUGGESTIONS

RESULTS AND DISCUSSION

The results of the attitudes, self-efficacy, and study habits of the prospective music teachers towards the piano course according to the gender variable indicates that the total and sub-dimension scores for attitude and study habits did not vary discernibly. The total scores and sub-dimensions of self-efficacy, as well as the sub-dimensions of attitude, namely, contentment and value scores, on the other hand, differed significantly. The participants' total and sub-dimension scores of self-efficacy, namely, self-efficacy towards the level of skill achieved in the piano course and Self-efficacy towards the level of knowledge and consciousness achieved in the piano course, and contentment scores differed in favor of female students. Given the existing literature on self-efficacy towards

piano, it has been found that there are studies in which self-efficacy is significant according to the gender variable (Ünal & Bulut, 2019) and studies in which gender is not a significant predictor (Özer 2020; Kurtuldu, 2017; Babacan & Babacan, 2017; Jelen, 2017; Küçük, 2015; Otacıoğlu, 2008). Given the sub-dimension of the attitude, the value scores are in favor of female students. It is possible to come across such results in which the gender variable is significant (Çevik & Güven, 2011; Güçlü, 2022; Sağlam, 2008) and the results that gender is not significant (Gün & Köse, 2013; Sözgötürmez, 2019; Tunç & Baydağ, 2020; Ünal, 2017;) with respect to the studies on attitude.

Attitudes, self-efficacy, and study habits of prospective music teachers toward the piano course were examined based on the class variable. The results indicate that there were no significant variations in total attitude and contentment sub-dimension scores, total self-efficacy and sub-dimension scores, and total study habits and sub-dimension scores among the participants. However, there was a significant difference in value scores, favoring second graders. This disparity in high value scores for second graders may be attributed to the knowledge and experience acquired in courses emphasizing the importance of piano education during their academic year. It is plausible that second graders, having undergone individual courses such as instrument courses, technical courses covering the scientific aspect of music education like harmony and hearing education, as well as formation courses related to the dimension of learning and teaching music in music education departments, may have internalized the significance of piano education over the years. Examining the existing literature on attitudes, it is noteworthy that grade level has been identified as a significant variable in some studies (Güçlü, 2022; Sağlam, 2008), whereas other studies suggest that grade has no significant effect on attitude (Çevik & Güven, 2011; Sözgötürmez, 2019; Ünal, 2017).

Given the results of the attitudes, self-efficacy, and study habits of prospective music teachers towards the piano course according to the type of high school graduated, sampled students' total and sub-dimension scores of attitudes and total and sub-dimension scores of study habits, except for the sub-dimension of instrument technique, did not differ significantly. On the other hand, instrument technique, a sub-dimension of study habits, as well as total and sub-dimensions of self-efficacy, differed significantly. This differentiation is between students attending Anatolian Fine Arts High Schools (AFAHS) and other high schools, and it is in favor of students attending Anatolian Fine Arts High Schools (AFAHS). Participants who study at AFAHS might have scored higher on instrument technique and self-efficacy because they began piano courses at least four years earlier than students at other high schools. A critique of related literature shows that there are works in which type of high school is a significant predictor (Ünal & Bulut, 2019; Küçük, 2015) as well as studies revealing no significant results (Babacan & Babacan, 2017; Gün, 2014; Kurtuldu, 2017; Özer, 2020).

Given the findings based upon the perception of success, the future music teachers' total and sub-dimensions scores of attitudes, self-efficacy, and finally, study habits differed significantly according to their own perceptions of success. In this respect, students who found themselves successful at a low level have higher total and sub-dimension scores (instrument technique, preliminary preparation and warm-up, posture and technique, interpretation and phrasing, rhythmic work and fingering) than those who found themselves successful at a moderate level. Similarly, students who consider themselves moderately successful have higher total and sub-dimension scores (instrument technique, preliminary preparation and warm-up, posture and technique, interpretation and phrasing, rhythmic work and fingering) than students who consider themselves highly successful. Students who found themselves low-level successful have higher rhythmic work and fingering and post-performance activity scores than students who found themselves moderately and highly successful. Students who found themselves successful at a low level have higher self-efficacy total and sub-dimension scores, as well as higher total attitude and contentment scores, than students who consider themselves successful at a moderate or high level. The total and sub-dimensions of self-efficacy, as well as the total and sub-dimensions of contentment, are higher in students who find themselves successful at a moderate level than in students who find themselves successful at a high

level. Students who achieve success at a low level have lower value scores than those who achieve success at a moderate or high level. The value scores of students who found themselves moderately successful are lower than those of students who found themselves highly successful. Looking at the existing literature, no previous research that is consistent with the present research's findings can be found. As a result, it may be implied that the current study is unique and may contribute to the literature.

Given the results of the attitudes, self-efficacy, and study habits of the future music teachers towards the piano course according to daily practice time, it is seen that the participants' total and sub-dimensions of attitudes, self-efficacy, and study habits differ significantly. A significant difference was found in terms of both total scores and sub-dimensions. In this context, the total attitude scores and contentment scores, the total and sub-dimensions of self-efficacy, and study habits scores of the participants whose daily practice time is 30 minutes or less, are lower than the scores of the participants whose practice time is 31-60 minutes and 61 or more minutes. The study habits, preliminary preparation and warm-up, posture and technique, interpretation and phrasing, total self-efficacy and its sub-dimension, namely, self-efficacy towards the level of knowledge and consciousness achieved in the piano course, total attitude, and contentment scores of students with 31-60 minutes of daily practice time are lower than those whose daily practice time is 61 minutes or more. Participants with a daily practice time of 30 minutes or less have higher value scores than those with a daily practice time of 31-60 minutes and 61 or more. It is remarkable that the scores of the participants in almost all sub-dimensions of all the scales employed in the study decrease as the daily practice time decreases. Because the amount of time and effort devoted to the piano, the love felt, the determination shown, the sense of self-competence in the field, and creating a planned and systematic working routine may all be linked to qualified time spent with the instrument. The findings on the instrument and individual instrument daily practice time reported in the literature support the current study (Ak et al., 2022; Albayrak & Bulut, 2021; Güçlü, 2022; Gün, 2014; Kaya, 2018; Küçük & Engin, 2021; Özmenteş & Özmenteş, 2009; Pirlibeylioğlu & Bilgin, 2022).

Given the results of the attitudes, self-efficacy, and study habits of the future music teachers towards the piano course, depending on their daily practice time, the total attitude scores and the sub-dimensions of the study habits, namely, preliminary preparation and warm-up, post-performance activity, and deciphering technique, did not differ significantly. On the other hand, contentment and value scores, total self-efficacy and sub-dimension scores, and total and sub-dimension scores of study habits, including instrument technique, posture and technique, interpretation and phrasing, rhythmic work and fingering differed significantly. This differentiation is in favor of students who have a piano. Among the instruments learned during the music teaching process, the piano is the only one that cannot be moved. In this respect, students who own a piano can perform their planned studies more comfortably and freely than students who do not own a piano. The students who have a piano may achieve higher scores on the measuring instruments because they spend more time with the piano. Likewise, the existing literature reveals similar findings (Güçlü, 2022).

Referring to the relation between prospective music teachers' attitude scores towards the piano course, self-efficacy scores, and study habits scores, a positive and discernible relation was found between students' total scores of attitudes and their total and sub-dimension scores of study habits; a positive and significant relation was discovered between their contentment scores and total and sub-dimensions of study habits; and a negative and significant relation was found between the value scores and total and sub-dimensions of study habits. Regarding self-efficacy, a positive and significant relation was reported between the total and sub-dimensions of self-efficacy and the total and sub-dimensions of study habits. Additionally, a moderately positive and significant relation was reported between total self-efficacy and total attitude and contentment scores; and a moderately negative and significant relation was found between students' total self-efficacy scores and value

scores; a moderately positive and significant relation was reported between the self-efficacy towards the level of skill achieved in the piano course and total attitude and contentment scores ; and a moderately negative and significant relation was found between the self-efficacy towards the level of skill achieved in the piano course and value scores. Furthermore, a statistically positive moderately significant relation was reported between students' scores in the sub-dimension of self-efficacy, namely, the self-efficacy towards the level of knowledge and consciousness achieved in the piano course and attitude and contentment scores, and a statistically negative moderately significant relationship was found between the self-efficacy towards the level of knowledge and consciousness achieved in the piano course and value scores. The findings on the relationship can be linked to the fact that attitudes, self-efficacy, and study habits involve similar feelings, and this triggers the sense of collaborative working accompanied by love, interest, and diligence. In fact, if an individual intends to be successful not only in the field of music or any field related to instruments, but also in all other fields, more than one emotion and action must be present together. To take an action, individuals need to demonstrate their love and interest. In other words, they should have a high level of attitude, be disciplined and qualified, have regular study habits, and eventually develop a sense of self-efficacy.

Lastly, the outcome of the regression analysis was provided. In this frame, the relationship between predictive variables (the scores obtained from the PSHS) and predicted variables (the scores obtained from APCS) was calculated as 0.574, indicating a moderate relationship. Prospective music teachers' instrument technique, preliminary preparation and warm-up, posture and technique, interpretation and phrasing, rhythmic work and fingering, post-performance activity, and deciphering technique scores explain 32.9% of the variance with respect to the scores obtained from the APCS. The analysis of the results demonstrated that the scores of students in the instrument technique, preliminary preparation and warm-up, posture and technique, interpretation and phrasing, rhythmic work and fingering, post-performance activity, deciphering technique, and the model developed to predict their attitude scores towards the Piano Course were statistically significant. The relative eminence of the predictor variables on the SEPCS were instrument technique, rhythmic work and fingering, interpretation and phrasing, and posture and technique, respectively. Furthermore, the results of the regression analysis highlighted that the relationship between the predictor variables (the scores obtained from the PSHS) and the predicted variable (the scores obtained from the SEPCS) was 0.773, indicating a moderate relationship. Students' instrument technique, preliminary preparation and warm-up, posture and technique, interpretation and phrasing, rhythmic work and fingering, post-performance activity, and deciphering technique scores explained 59.7% of the variance in the SEPCS. According to the analysis results, it was seen that the scores of students in the sub-dimensions of the instrument technique, preliminary preparation and warm-up, posture and technique, interpretation and phrasing, rhythmic work and fingering, post-performance activity, and deciphering technique scores, as well as the model developed to predict their self-efficacy scores towards the piano course were statistically significant. The relative eminence of the predictor variables on the SEPCS were instrument technique, rhythmic work and fingering, interpretation and phrasing, and posture and technique, respectively. The regression results of the study might be explained by the fact that there are factors affecting academic success such as work, perseverance, and determination both in attitude and in self-efficacy. The term "attitude" is a state of emotion that involves interest, desire, and love. This is closely related to their desire to work. In other words, if the student has an interest in any field, not surprisingly, he/she will be willing to work, research, and learn. Developing a sense of self-efficacy in a field can only be achieved through systematic and qualified studies. In brief, since the predictor variable (study habits) was included in the predicted variables (attitude and self-efficacy), the study concluded such regression results.

SUGGESTIONS

1) To enhance the attitudes of prospective music teachers towards the piano, attention can be drawn to the importance and necessity of piano education.
2) Appropriate organizations can be arranged for prospective music teachers to attend symphonic concerts to keep their attitudes towards the piano alive.
3) Concerts where students can showcase their performances can be organized to enhance the self-efficacy feelings related to the piano.
4) Environments can be created where prospective music teachers can explain and play the pieces they are working on to another friend at their level, creating sample lessons. Sharing what they have learned about the piece they are working on and demonstrating it can increase their self-efficacy feelings.
5) To benefit the study habits of prospective music teachers, academics working as pedagogues in the field of piano education can be invited to meet with students in the department. This approach allows prospective music teachers to interact with diverse educators, offering alternative perspectives on study methodologies, durations, and the formulation of daily study schedules.
6) A weekly study program can be created in collaboration with teachers in one part of the piano lesson. The knowledge of effective study methods is instrumental in nurturing the attitudes, self-efficacy, and study habits of prospective music teachers in relation to the field.

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