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Measuring Musical Procrastination: Developing Validity and Reliability of Procrastination Scale Towards Instrumental Practice

Research Article

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ABSTRACT

In this study developing a valid and reliable procrastination scale toward instrumental practice aimed in music education. The study has been done two stages with two diffrent study groups. In first stage exploratory factor analysis has been performed with study group 1 (n=308) to reduce data to a smaller set of summary variables and to explore the underlying theoretical structure of the phenomena. As a result of the analysis, a 3 factor structure consisting of 15 items was obtained. The first factor is "Perception about instrument's utility in the future (,91)" the second factor is organizing practice process (,86). The third factor is "Self-efficacy for instrumental performance (,86)"The second stage of this study is performing confirmatory factor analysis. According to result of CFA, scale shows good fit indices (RMSEA= .060, CFI=.99, IFI=.99 GFI= .89, Chi-square (x^2) = 191.62, degree of freedom (df) = 87. x2 / df = 2,19). İt is thought that because of the scale is the first scale which measures procrastination in musical practice, in national and international music education field, will provide positive contributions for further to be undertaken regarding procrastination in music education for the future.

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Keywords:
Procrastination, İnstrumental practice, Music education

Introduction

The act of procrastination is a concept in which almost every person engages in everyday life. No matter whether there are simple or complex tasks, every person procrastinates at some point in life. Senecal, Koestner and Vallerand (1995), imply that the absence of procrastination in a person suggests that he/she does not procrastinate should be considered a social explanation rather than a true one. Solomon and Rothblum (1984) defined procrastination as a delaying of action without any necessity until experiencing discomfort. Steel (2007) stated that procrastination is a self – regulation failure that is harmful and common and has not been exactly understood.

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The phenomenon of procrastination is a subject that is frequently explored in both national and international fields of research. When the research is examined, it can be seen that the act procrastination is examined in general under five categories. These categories are general procrastination tendency, academic procrastination tendency, tendency to procrastinate decision-making, neurotic procrastination tendency, and compulsive, or non-functional procrastination tendency (Balkıs, 2006).

When the phenomenon of procrastination in the academic field is examined, often it is observed that the student has had to fulfil many academic tasks such as studying for exams, participating in projects, mastering the literature related to their fields, but these tasks have been postponed for some reasons (Özer, Demir and Ferrari, 2009). Ellis and Knaus (1977) reported that approximately 95% of university students had a tendency to postpone. Solomon and Rothblum (1984) reported this rate as 46%, Potts (1987) reported this rate as 75%, Balkıs and Duru (2009) stated that this rate is 25%, Özer, Demir and Ferrari (2009) 52%. In the light of this research, it can be said that academic procrastination is a common behaviour affecting academic achievement.

The relation of academic procrastination with many variables, which is seen as a widespread tendency in the academic field, has often been the subject of research. In national literature, academic procrastination has been examined with irrational beliefs, self-efficacy and the fear of negative evaluation (Çelik and Odacı, 2015), motivation, time management, negative attitude for studying and learning, concentrating, academic achievement and gender (Balkıs, Duru, Buluş and Duru, 2006), school success, hope, perfectionism, external control, responsibility, academic-self-efficacy and success orientation (Özer and Altun, 2011), test anxiety (Özer and Topkaya, 2011), irresponsibility, received qualification of task, negative perception about teachers, academic perfectionism (Bulut and Ocak, 2017) general competence belief and responsibility (Çelikkaleli and Akbay, 2013), self-esteem and performance (Balkıs and Duru, 2010), Time management (Aydın and Koçak, 2016; Demirtaş and Sözer; 2014) self-regulation and academic self-efficacy (Şeker, 2015).

In International literature procrastination has been examined with a negative evaluation of low personal standards for success (Saddler and Buley, 1999); perfectionism (Foster,2007); general and specific procrastination (Milgram, Tall and Levison, 1997); self-regulation (Secenal et al, 1995); self-efficacy and self-regulation (Strunk and Steele, 2011); self-regulation (Van Eerde, 2000); impulsivity and goal orientation ability (Gustavson, Miyake Hewitt and Friedman, 2014); impulsivity as a self-regulation failure and intrusive thoughts (Reberetz, Rochat and Barsics (2018); cognitive load, self-awareness and time limits on working under Pressure as Self-regulation failure of performance (Ferrari, 2001); role conflicts (Senecal Julien and Guay, 2003).

In the national literature, procrastination studies in the music education departments are few (Tufan and Gök., 2009; Şeker and Saygı, 2013; Şeker, 2015; Saracalıoğlu, Dinçer and Gerçeker, 2018). Of these studies, Şeker and Saygı (2013) compare music and art department's academic procrastination level in terms of their demographic variables. Şeker (2015) compared music, art and science departments' academic procrastination in terms of self-regulation and academic self-efficacy. He found negative correlation between academic procrastination and academic self-efficacy and self-regulation between academic procrastination. Tufan and Gök (2009), compared general and academic procrastination levels of the music education department of Gazi University in terms of demographic variables. Saracalıoğlu, Dinçer and Gerçeker (2018) discuss music teacher training department's academic and general procrastination levels with their test anxiety levels.

Music education departments affiliated to the faculties of education are the institutions which aim to train music teachers. Therefore, the education programs they have are given in three main sections as training courses, musical lessons and general culture courses. This situation increases the academic burden on students. The main reason for this is that the music department students have both theoretical (educational sciences and musical theory courses) and practical (musical, choral and chamber music) courses compared to

the students in other departments. Particularly, practical courses require different working conditions from theoretical courses in many respects.

In particular, instrument training is considered an essential one aspect of students' musical education processes. Although it is not considered as serious as a conservatory in music education departments, it can be said that it has a very important place in the process of training a qualified music teacher. A music teacher who is successful on their instrument can generally demonstrates better communication skills with students in their professional life and can increase motivation levels of the students in a positive way. Akbulut (2013), evaluated the instrumental education as an important dimension of general and professional music education and stated that instrument training is an effective process in acquiring musical behaviours, developing knowledge, skills and abilities and building a more effective and rewarding connection with music.

Instrument training can be defined as the acquisition of knowledge and skills necessary for an instrument to be played effectively. Schleuter (1997) stated that this knowledge and skill required in the instrument training process should be acquired in a sequential and systematic way. It is observed in instrument literature that the instrument is the most important activity for success (Wagner, 1975; Rosenthal, 1984; Wolfe, 1984; Barry, 1992; Özmenteş, 2008).

Instrumental practice is the process of bringing the work of studies and technical exercises to a profient level where the person is expected to play effectively. In this process, how the student will achieve success, what paths and methods to follow, or the level of motivation to achieve success is very decisive. Without a doubt, even though the instrument teacher is an effective factor in this process, the effort and patience that the student has to demonstrate are undoubtedly more important. Özmenteş, (2008) stated that the process of learning the instrument is not only to spend hours with but to gain the necessary skills, knowledge and strategies to play effectively. At this point, in the instrument performance literature, Ericsson, Krampe and Römer (1993) put forward the concept of deliberate practice. Ericsson and colleagues have defined this concept as the acquisition and proper use of skills, tactics and strategies to achieve a particular goal. McPherson (1999) stated that cognitive strategies such as controlling the learning and monitoring of students in other academic fields such as mathematics and science contributed positively to the academic success of the students and he implied that such strategies like comparative repetition, and improvisation should be used in effective instrumental practice.

One of the decisive concepts in instrument training or instrumental performance process is the process of self-regulation (self-assessment).. In instrumental education, the student can organize their own learning in instrumental practice, create new strategies to overcome the difficulties encountered, and monitor and control their performance. This can be explained as self-regulation in instrument education. Zimmerman (2002) stated that self-regulation is not a mental or academic performance skill but rather a self-directed process in which the learner converts his mental skills into academic skills. Zimmerman (2002) also stated that self-regulated students are proactive in their learning efforts. In other words, they are aware of their own strengths and limitations. That they are setting their own learning objectives and are able to determine strategies that meet these goals. Considering this situation in instrumental education, determining hard passages of newly encountered pieces or etudes; creating strategies for overcoming these passages; self-monitoring to understand whether strategies are working, determining how much time is needed for each problem and work within that time frame and using metronome are given as examples for high-level self-regulation in instrumental practice. Although self-regulation strategies are an important determiner for successful instrumental practice, Pintrich and De Groot (1990) stated that cognitive and meta-cognitive knowledge alone is not enough for effective practice. Students should be motivated to use these strategies effectively.

Self-efficacy is one of the important motivational aspects of instrumental practice. Pajares (1996) defined self-efficacy as the belief in one's capacity to organize and carry out the behaviours necessary to achieve a particular performance. Self-efficacy is a key determinant of whether learners employ self-regulatory strategies (Usher and Pajares, 2008). İf students' believe their abilities to play a musical piece successfully in the future, they will begin to create and use strategies for good performing. Pajares Hartley and Valiante (2001) state that if students have low self-efficacy about their skills, they give up the tasks that require those skills and, or show less perseverance. This situation may be one of the reasons for procrastination. In the literature, numerous studies show negative correlation between self-efficacy and procrastination (Ferrari, Parker, & Ware, 1992; Steel, 2007; Tuckman, 1991; Wolters, 2003; Şeker, 2015) Steel (2007) imply that self-efficacy is strong determiner of procrastination and in the process procrastination decreases an individual's self-efficacy level.

In the light of the knowledge mentioned above, it is seen that procrastination is highly common and has negative effects. İt can be said that the findings above may also apply to the field of music education. İn our country, the procrastination studies, aim for examining music students' general and academic procrastination levels. But in the literature, no scale has been developed for procrastination in instrumental performance. As known, instrumental practice differs from other courses in terms of working conditions. Hence instrumental practice requires cognitive, affective and physical aspects, and it should be measured proper on a scale that fully focuses on instrumental practice.

The aim of this research is to develop a valid and reliable procrastination scale for instrumental performance. It is hoped that, with this scale, positive contributions will be provided in instrumental education. This study will be the first in the field and may shed light on other procrastination studies in the instrument education field.

Method

This study consisted of content validity (review of experts), explanatory factor analyses, confirmatory factor analyses.

The first step of this study was developing an item pool. The items of this scale were created by interviews with students and a literature review. The interviews with students were unstructured. During the interviews, some questions were asked in order to know the thoughts about procrastination by the students, such, "Can you give me a simple definition of procrastination? What do you think about procrastination? "Under what conditions do you procrastinate your instrumental practice?". Then procrastination literature was reviewed and scales about procrastination were examined Aitken, 1982; Lay,1986; Balkıs, 2006), Tuckman (1991; Özer at all, 2013), Çakıcı (2003) At the end of reviews and interviews a 39 - item pre-trial form was created. This scale is designated in 0-10 response form according to Banduras' view. Bandura (1997) stated that the scales which have only a few steps to answer the items are less reliable and less sensitive. When a student responds to the scale, they are expected to give a number between 0 and 10 for every item of the scale. İtems in this form includes student's self-efficacy beliefs about instrumental performances, student's evaluations on the relation between their instrument and future career, and practice organization ability. For content validity, the items prepared were assessed by experts in order to select those items that identify procrastination on instrumental practice clearly. The group of experts consisted of one associate professor in the guidance and psychology counselling department of the faculty of education and two instrumental music associated professors in music education department. They were asked to review the form and to write down their recommendations, if any, to be corrected. The feedbacks from the panel was examined and no changes were required.

The pre-trial form was administered to the first study group (n=308). The study group consisted of freshmen, sophomore, junior and senior students who are the student of music education department of the

faculty of education of the Adnan Menderes, Pamukkale and Dokuz Eylül Universities. With study group 1, explanatory factor analysis was performed in order to assess the construct validity of the scale. The frequencies of study group 1 are indicated in Table 1.

Table 1. Distribution of Study Group 1 by Universities

University	Frequency	%
Adnan Menderes	97	31,5
Pamukkale	103	33,4
Dokuz Eylül	108	35,1
Total	308	100

Before the explanatory factor analysis, the item-total and inter-item correlations of items were examined and it was seen that the inter-item correlations of the items was bigger than .20. Because of this, in the EFA, it was decided that maximum likelihood instead of principal component analysis and direct oblimin rotation was used in order to warimax rotation. The warimax rotation method was not found to be appropriate here because the factors allowed less to be associated with each other. (Şimşek, 2007, 100) EFA is a multivariate statistic method of analysis. It is used independently to obtain fewer new conceptually meaningful dimensions from many related variables which are brought together (Büyüköztürk, 2002). İn EFA, factor loading value was determined at least .50. This is because powerful items were preferred for scale. According to Tabachnick and Fidell (2001) as a principal rule, every item's factor loading is expected, 32 or above. Comrey and Lee (1992) state that if an item's factor loading value is, .71 (explained 50% of total variance) classified as "perfect", it is ,63 (explained 40 % of total variance) it is considered very good, if the item is .55 (explained 30% of total variance) is ti considered good and if the item is .45 (explained 20% of total variance) it is considered mediocre. If the item's factor loading is .32 (explained % 10 of total variance) it is classified as weak.

After the EFA, Confirmatory factor analysis (CFA) was performed on new dataset (n=335). Before the perform, multi normality was examined. The new data set was collected from the CFA an analysis technique which measures the fitness between latent variables and actual data which cannot be measured directly. İn other words, CFA investigates to what extent the construct which is designated previously is confirmed by the data set that is created newly. İn his theoretical studies, Karl Jöreskog completely developed CFA based on whether data set consisting of the identified structure is measured or not (Çelik & Yılmaz, 2013).

Findings

For scales construct validity, EFA was performed. KMO and Bartlett test was performed in order to know how the data set at hand is enough for EFA. The result .919 shows that data efficiencies is enough for EFA. According to Bartlett's sphericity test, x^2 =2907,633 degree of freedom (df) is 105.

In this step EFA was performed. But in the item preparation process, the three factor-construct was designated (students' self-efficacy beliefs about instrumental performances, student's perception about instrument's utility in the future, and organizing practice process), and the inter-item correlation of every item is ,20 or above, analysis was performed on three factors with direct oblimin instead of varimax rotation. Şimşek (2007) state that principal component analysis and varimax rotation is used if items have low relation to each other. When the scree plot is examined three-factor construct is seen clearly in figure 1. At the end of the EFA Because of factor loading cut point is .50, the pre-trial form is reduced to 15 items. İn table 2 15-item form factor loadings are presented.

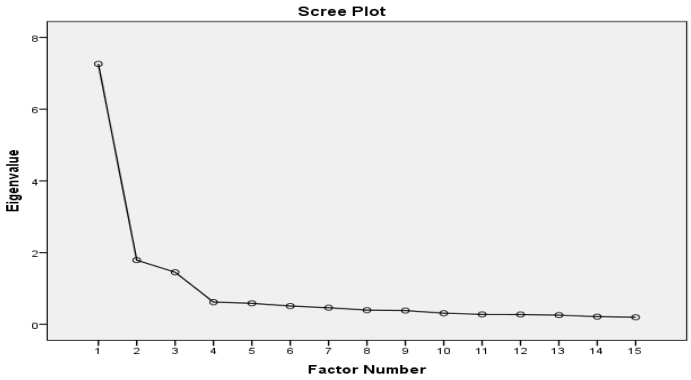

Figure 1. scree plot of the three-factor construct

Table 2. Factor loadings and variance explanation of 15-item construct

	Factors		
	1	**2**	**3**
m24	,954		
m22	,803		
m26	,799		
m30	,771		
m31	,743		
m17	,677		
m23	,653		
m37		,898	
m38		,857	
m34		,686	
m33		,510	
m2			,868
m1			,858
m5			,706
m6			,659
	Eigenvalue	Variance explained	Total
F1	7,263	45,98	45,98
F2	1,789	9,623	55,607
F3	1,454	7,48	63,086

As seen on table 2, first factor (student's perception about instrument's utility in the future) explained 45,98, second factor (student's self-efficacy beliefs about instrumental performances) explained 9,62 and third factor (organizing practice process) explained 7,48 of the total variance. Total variance explained by the whole scale is 63,08.

In the continuation of the study CFA was performed. New study group (n=335) used for CFA. The new study group is consist of freshmen, sophomore, junior and senior students of Çanakkale 18 Mart University, Burdur Mehmet Akif Ersoy University, Muğla Sıtkı Koçman University and Balıkesir Universty, Faculty Of Education Music Education Departments of Fine Arts. Because of the new data set used for only CFA, demographic information was not collected. Application time of the scale is 20 minutes. Distribution of new study group is presented in Table 3.

Table 3. Distribution of New Study Group for CFA

University	Frequency	Per cent	Valid Percent	C. Percent
18 Mart Ün.	78	23,3	23,3	23,3
Balıkesir Ün.	87	26,0	26,0	49,3
Mehmet Akif Ersoy Ün.	100	29,9	29,9	79,1
Muğla Sıtkı Koçman	70	20,9	20,9	100,0
Total	335	100,0	100,0	

Before CFA, the multivariate normality of the data was examined. İn order to test multivariate normality, mardia's multivariate skewness and kurtosis test was performed by LİSREL. According to the results, it is seen that there is not multivariate normality (Chi-square 2552.444; p< 0.005). The data suggested the use of the LISREL WLS (Weigthed Least Squares) estimation method for ordinal variables (Joreskog & Sörbom, 1993) polychoric correlations matrix and the asymptotic covariance matrix were used as input for data analysis. Therefore, appropriate estimation procedures were applied in both measurement and structural models. Three factor model is presented in figure 2.

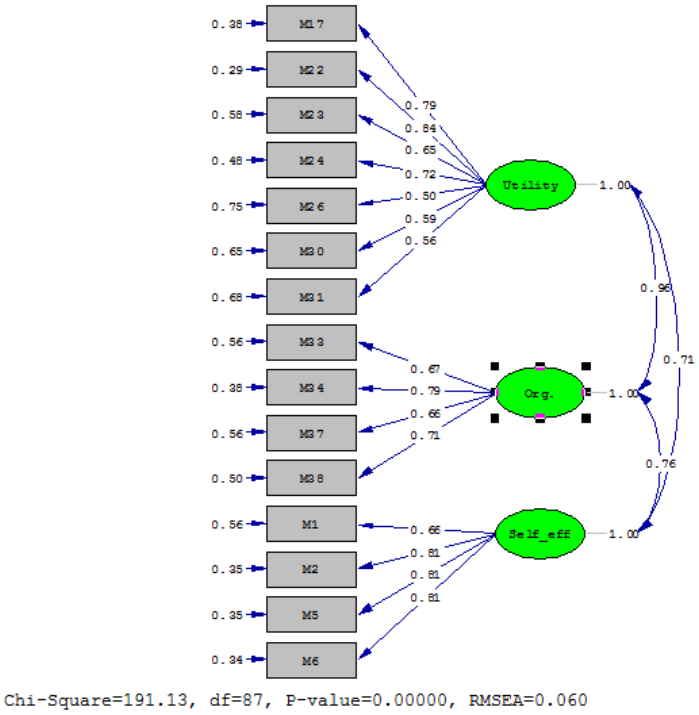

Figure 2. Three Factor Model

According to results, acceptable fit indices were obtained. The results were presented in table 4.

Table 4. Fit indices of Three Factor Model

	Acceptable	Perfect Fit	Results
Goodness of Fit Index (GFI)	<.90	<.95	.89
Incremental Fit Index (IFI)	<.90	<.95	.99
Comparative Fit Index (CFI)	<.90	<.95	.99
Root Mean Square of Error of Aproximation (RMSEA)	>.08	>.05	.060
Chi-Square			191.62
df			87
Chi-Square/dF			1,97

As it can be seen clearly in the table 4, the fit indices of the analysis were acceptable. Moreover,, because of the ratio of chi-square to df is lower than 2 shows us the model has good fit indices. (Mcdonald & Moon-Ho, 2002; Schermelleh-Engel ,Moosbrugger & Müller, 2003; Thompson, 2000; Şimşek, 2007). The correlations of these three factors are examined and İt was observed that all three factors have strong correlations at the 0,01 level. The correlation table is presented in table 5.

Table 5. Factoral Correlations

	F1	**F2**	**F3**
F1	1	,533**	,459**
F2	,533**	1	,533**
F3	,459**	,533**	1

** p< 0,01

Discussion and Conclusion

In the study, it is aimed that to develop valid and reliable procrastination scale about instrumental practice process. This scale is the first procrastination scale of national and international music education field about instrumental practice. In the research done so far about procrastination, the concept of procrastination has been examined in two main areas as general and academic. Klingsieck (2013), in her research, examined procrastination in 6 life-domains (academic and work, everyday routines and obligations, health, leisure, family and partnership, social contacts). At the end of her research she found that procrastination is domain-spesific but not extremely so. In the light of this study, it was thought that musical procrastination could be evaluated separately from academic procrastination and it was decided to develop a musical procrastination scale in order to investigate this evaluation. When the academic procrastination studies in the literature were examined, it was observed that the procrastination behaviours were about homework or project preparation or study. However, musical practice can be seen in many ways as different from other academic studies.

Procrastination in music instrument practice is generally considered a symptom of a larger problem and is usually connected to personal motivation issues. Especially in music teacher training departments, this issue has become more complex. The music teacher training program in our country includes musical lessons as well as academic courses unlike conservatories. These academic courses also called formation courses are courses which are from educational domain. A student, who wants to be a successful in this department, has to be successful in both musical and academic courses. İn addition to this, being appointed as a music teacher in public schools, students has to overcome an obligation called "KPSS" (Public Personnel Selection Examination). PPSE has been held since 2002 and teacher appointment has been done depending on this examination. This exam is carried out in three stages; general ability, general culture and educational sciences. İn educational sciences stage, students are responsible for the formation courses they have seen during their undergraduate education. But this exam does not measure students' musical abilities in any way. So, students In order to be assigned to public schools, prioritize gaining knowledge and skills related to the examination during their undergraduate education. In this situation, musical abilities like instrumental performance lose their value over time. It may be one of the reasons of procrastination. In literature, this aspect of procrastination has not been studied.

Another important point is that musical performances of music teachers in their vocational life are not controlled by any institution in our country. In other words, it is entirely up to the teacher to decide whether to use his instrument in his classes after he / she starts working as a music teacher. This means that having a good instrumental performance is only a preference rather than obligation. Students, who are aware of this situation, may think that good instrument performance is not necessary for being a music teacher, so this thought may be the one of the reason of procrastination. This situation can be explained with "expectancy-value theory" which is the most important views on the nature of achievement motivation.

All of the above-mentioned reasons can be seen as evidence that musical procrastination can be domain-specific and can be kept separate from academic procrastination. Therefore, developing a valid and reliable musical procrastination scale is a necessity in order to examine the reasons mentioned above

Since the procrastination is mostly a negative concept, the items that aim to measure the procrastination is prepared as negative. Therefore if the total score is low, this means, students' procrastination level low as well.

This scale is consisting of three factors; organizing practice process, perception about instrument's utility in the future and self-efficacy beliefs for instrumental performance. In each factor, the item that has the highest determination coefficient (R^2) isconsidered as the best descriptive item of the factor.

Among the items of factor 1, the item which has highest explained variance " ($r= 0.84$; $R^2 = 0.70$) , so the best representation of factor 1 is m22; "I thought that my instrument would not help me in the music teaching profession". At this point, Zarick and Stonebraker (2001) states that procrastination is not only irrational personal disposition, it is a logical, albeit potentially inefficient, behavior driven by a reasoned comparison of perceived costs and benefits. From this perspective, it can be said that If the effort to be spent on the task is not more valuable than the future benefits of the task, the individual may procrastinate the task. Although playing the instrument effectively is a crucial for being a qualified music teacher (Akbulut, 2013), There is no control mechanism that supervises teachers in their professional lives. This means, a music teacher can continue his professional life without ever using his instrument. This may mean that the instrument will not be of benefit to the person in the future, and the person may procrastinate the instrumental practice.

In the second factor, the item which has the highest explained variance ($R= 79$; $R^2 =0. 62$), so the best representation of the factor 2 is m34; "even if I wanted to study the instrument on that day, I would procrastinate it with an excuse. Steel (2007) stated that procrastination can be defined as low conscientiousness and self-regulatory failure. Conscientiousness is defined as the propensity to follow socially prescribed norms for impulse control, to be goal directed, to plan, and to be able to delay gratification (Roberts, et all, 2009). If a person scoring high in conscientiousness, usually has a higher self-discipline. Individuals who have scoring high conscientiousness prefer to follow a plan, rather than act spontaneously. Their methodic planning and perseverance usually makes them highly successful in their chosen occupation. İn factor 2, items represent this concept generally. When the items are examined, it can be seen that there is a problem of poor organization about instrumental practise. Organization refers to structuring, ordering and planning and it is an important self-regulation technique which can reduce procrastination. İn our research, if individual wants to be successful in instrumental performance, the practice sessions should be planned and well-organized. İnstrumental practise is consist of many sub-dimensions (etudes, exercises and pieces) and for being successful all this dimensions should be done as it's supposed to be. A practise session like this needs a lot of time, but many students can find enough time for this. So, a well-organized practise has become a necessity.

Steel (2007) stated that procrastination should be associated with distractibility, poor organization, low achievement motivation and intention-action gap. According to steel, each of this constructs represents low conscientiousness of self-regulatory failure. İntention-action gap refers to the degree to which people follow upon their original work plans (steel, 2007). In procrastination review, Gelderen and his colleagues (2015) identified the intention-action gap as action doubt, action fear and action aversion as avoidance-oriented emotions which lead procrastination. İn our scale, factor 2 represent this concepts indirectly. If we remember the item that best represents the factor 2, we can see procrastination but we can't see the reason of this. This is taken in to consider as a situation to need to be improve in the future research

In the third factor, the items 2,5 and 6 have same correlation value and determination coefficients ($R= ,81$ $R^2 = ,65$) so these three items are the best representation of the factor 3, m2, "no matter how hard I work, I

believe I will never succeed.", m 5 "I was not seen as a successful player in my environment" and m6 "I believe that I cannot overcome the technical and musical difficulties that I encountered while working on the instrument". Bandura (1986) defines two components of self-efficacy which are related but distinct. One of the components is efficacy expectations which are beliefs about one's capabilities to accomplish a specific task. The other component is outcome expectations refer to beliefs about the likelihood that certain behaviours will result in desired outcomes. İn our scale, the items of factor 1 is about one's beliefs about the capabilities of instrumental performance. Bandura (1986) stated that if one's has weak efficacy, it may adversely affect person's task initiation and persistence. This situation may cause procrastination in instrumental practise. In literature there are many studies that support this view (Tuckman, 1991; Ferrari, Parker and Ware; 1992; Seo, 2008; Akbay and Gizir, 2010; Waschle et all, 2014).

This scale examines the concept of procrastination in certain aspects. İt is no doubt that many other factors that determinate procrastination are existed. Therefore many studies should be done for examining procrastination in instrumental practice from a different perspective. This study is thought that will shed light any other future studies and provide positive contributions in the music education field

REFERENCES

Akbay,S., Gizir, C. (2010). Cinsiyete göre üniversite öğrencilerinde akademik erteleme davranışı: akademik güdülenme, akademik özyeterlik ve akademik yükleme stillerinin rolü. *Mersin Üniversitesi Eğitim Fakültesi Dergisi, 6(1), 60-78*

Akbulut, E. (2013). Eğitim fakültesi müzik eğitimi anabilim dalı "Bireysel Çalgı" dersi hedeflerinin gerçekleşme düzeylerine ilişkin 3. ve 4. sınıf öğrencilerinin görüşleri açısından bir değerlendirme. *Kastamonu Eğitim Dergisi, 21(1), 57-68.*

Aydın, K. S., Koçak, S. (2016). Üniversite öğrencilerinin zaman yönetimi becerileri ile akademik erteleme düzeylerinin incelenmesi. *Uşak üniversitesi eğitim araştırmaları dergisi, 2(3), 17-38.*

Aydoğan, D., Özbay,Y. (2012). Akademik erteleme davranışının benlik saygısı, durumluluk kaygı, öz-yeterlilik açısından açıklanabilirliğinin incelenmesi. *Pegem Eğitim ve Öğretim Dergisi, 2(3), 1-9.*

Balkıs, M. (2006) Öğretmen Adaylarının Davranışlarındaki Erteleme Eğiliminin, Düşünme ve Karar Verme Tarzları İle İlişkisi (Doctoral dissertation) Dokuz Eylül University, İzmir, Turkey

Balkıs, M., Duru, E. (2010). Akademik erteleme eğilimi, akademik başarı ilişkisinde genel ve performans benlik saygısının rolü. *Pamukkale Üniversitesi Eğitim Fakültesi Dergisi, 27(27), 159-170.*

Balkis, M., Duru, E. (2016). Procrastination, self-regulation failure, academic life satisfaction, and affective well-being: under regulation or misregulation form. *European Journal of Psychology of Education, 31(3), 439-459. doi.org/10.1007/s10212-015-0266-5*

Balkis, M., Duru, E. (2009). Prevalence Of Academıc Procrastınatıon Behavıor Among Pre-Servıce Teachers, And Its Relatıonshıp Wıth Demographıcs And Indıvıdual Preferences. *Journal Of Theory & Practice İn Education (Jtpe), 5(1), 18-32.*

Balkis, M. (2013). Academic procrastination, academic life satisfaction and academic achievement: the mediation role of rational beliefs about studying. *Journal of Cognitive & Behavioral Psychotherapies, 13(1), 57-74.*

Balkıs, M., Duru, E., Buluş, M., & Duru, S. (2006). Üniversite öğrencilerinde akademik erteleme eğiliminin çeşitli değişkenler açısından incelenmesi. *Ege Eğitim Dergisi, 7(2), 57-73.*

Bandura, A. (1986). The explanatory and predictive scope of self-efficacy theory. Journal of social and clinical psychology, 4(3), 359-373.

Bulut, R., Ocak, G. (2017) Öğretmen Adaylarının Akademik Erteleme Davranışlarını Etkileyen Etmenler. *E-Uluslararası Eğitim Araştırmaları Dergisi 8(2), 75-90*

Çakıcı, D.,D. (2003) Lise Ve Ünivrsite Öğrencilerinde Genel Erteleme Ve Akadmeik Erteleme Davranışının Incelenmesi (Master's thesis) Ankara Universty, Türkiye.

Çam, Z. (2013). Ergenlerde genel ve akademik erteleme davranışının yordayıcısı olarak beş büyük kişilik özelliği. *Eğitim ve Öğretim Araştırmaları Dergisi, 2(2), 89-96.*

Çelik, Ç. B., Odacı, H. (2015). Akademik erteleme davranışının bazı kişisel ve psikolojik değişkenlere göre açıklanması. *Hacettepe Üniversitesi Eğitim Fakültesi Dergisi, 30(3), 31-47*.

Çelikkaleli, Ö., Akbay, S. E. (2013). Üniversite öğrencilerinin akademik erteleme davranışı, genel yetkinlik inancı ve sorumluluklarının incelenmesi. *Ahi Evran Üniversitesi Kırşehir Eğitim Fakültesi Dergisi,* 14(2).

Demirtaş, H., Özer, N. (2007). Öğretmen adaylarının zaman yönetimi becerileri ile akademik başarısı arasındaki ilişkisi. *Eğitimde Politika Analizleri ve Stratejik Araştırmalar Dergisi,* 2(1), 34-47.

Duru, E., Balkis, M. (2014). The roles of academic procrastination tendency on the relationships among self-doubt, self-esteem and academic achievement. *Egitim ve Bilim*, 39(173).

Ericsson, K. A., Krampe, R. T., & Tesch-Römer, C. (1993). The role of deliberate practice in the acquisition of expert performance. *Psychological Review*, 100(3), 363.

Ferrari, J. R. (2001). Procrastination as self-regulation failure of performance: effects of cognitive load, self-awareness, and time limits on 'working best under pressure'. *European journal of Personality, 15(5), 391-406. https://doi.org/10.1002/per.413*

Ferrari, J. R., & Ware, C. B. (1992). Academic procrastination: personality. *Journal of social Behavior and personality, 7(3), 495-502.*

Foster, J. F. (2007). Procrastination and perfectionism: connections, understandings, and control. *Gifted Education International*, 23(3), 264-272. https://doi.org/10.1177/026142940702300307

Gustavson, D. E., Miyake, A., Hewitt, J. K., & Friedman, N. P. (2014). Genetic relations among procrastination, impulsivity, and goal-management ability: Implications for the evolutionary origin of procrastination. *Psychological Science, 25(6), 1178-1188. https://doi.org/10.1177/0956797614526260*

Jöreskog, K.G. & Sörbom, D. (1993). LISREL 8: *Structural equation modeling with the SIMPLIS command language.* Lincolnwood. IL: Scientific Software International, Inc.

Lay, C. H. (1986). At last, my research article on procrastination. *Journal of research in personality, 20(4), 474-495.*

Mcpherson, G. E., & McCormick, J. (1999). Motivational and self-regulated learning components of musical practice. *Bulletin of the Council for Research in Music Education, 98-102.*

Milgram, N. N., Mey-Tal, G., & Levison, Y. (1998). Procrastination, generalized or specific, in college students and their parents. *Personality and Individual Differences, 25(2), 297-316.*

Özer, B. U., Demir, A., & Ferrari, J. R. (2009). Exploring academic procrastination among Turkish students: Possible gender differences in prevalence and reasons. *The Journal of social psychology, 149(2), 241-257. https://doi.org/10.3200/SOCP.149.2.241-257*

Özer, B. U., & Topkaya, N. (2011). Akademik erteleme ve sınav kaygısı. *Adnan Menderes Üniversitesi Eğitim Bilimleri dergisi 2(2) 12-19*

Özer, A.,, & ALTUN, E. (2011). Üniversite öğrencilerinin akademik erteleme nedenleri. *Mehmet Akif Ersoy Üniversitesi Eğitim Fakültesi Dergisi, 1(21), 45-72.*

Özer, B. U., Saçkes, M., & Tuckman, B. W. (2013). Psychometric properties of the Tuckman Procrastination Scale in a Turkish sample. *Psychological Reports, 113(3), 874-884. https://doi.org/10.2466/03.20.PR0.113x28z7*

Özmenteş, S. (2008). Self-regulated learning strategies in instrument education. *İnönü Üniversitesi Eğitim Fakültesi Dergisi, (9), 157-175.*

Pajares, F., Hartley, J., & Valiante, G. (2001). Response format in writing self-efficacy assessment: Greater discrimination increases prediction. *Measurement and evaluation in counselling and development, 33(4), 214.*

Pajares, F. (1996). Self-efficacy beliefs in academic settings. *Review Of Educational Research, 66(4), 543-578.*

Potts, T, J.,(1987) Predicting Procrastination on academic Tasks with Self-report Personality Measures. (Doctoral dissertation) Hofstra Universty, New York, United States of America

Rebetez, M. M. L., Rochat, L., Barsics, C., & Van der Linden, M. (2018). Procrastination as a Self-Regulation Failure: The Role of Impulsivity and Intrusive Thoughts. *Psychological Reports, 121(1), 26-41. https://doi.org/10.1016/j.paid.2016.06.049*

Roberts, B. W., Jackson, J. J., Fayard, J. V., Edmonds, G., & Meints, J. (2009). Conscientiousness. In M. R. Leary & R. H. Hoyle (Eds.), *Handbook of individual differences in social behavior (pp. 369-381*). New York, NY, US: The Guilford Press.

Saddler, C. D., & Buley, J. (1999). Predictors of academic procrastination in college students. *Psychological Reports, 84(2), 686-688. https://doi.org/10.2466/pr0.1999.84.2.686*

Saracalıoğlu, S., Dinçer, B., Gerçeker, C.(2018) The relationship Between music teacher Candidates' academic and General Procrastination Tendencies and Test Anxiety. *Journal of Education and Training Studies 6(9), 174-183, https://doi.org/10.11114/jets.v6i9.3456*

Senécal, C., Julien, E., & Guay, F. (2003). Role conflict and academic procrastination: A self-determination perspective. *European journal of social psychology, 33(1), 135-145. https://doi.org/10.1002/ejsp.144*

Seo, E. H. (2008). Self-efficacy as a mediator in the relationship between self-oriented perfectionism and academic procrastination. *Social Behavior and Personality: an international journal, 36(6), 753-764. https://doi.org/10.2224/sbp.2008.36.6.753*

Solomon, L. J., & Rothblum, E. D. (1984). Academic procrastination: Frequency and cognitive-behavioural correlates. *Journal Of Counseling Psychology, 31(4), 503. http://dx.doi.org/10.1037/0022-0167.31.4.503*

Steel, P. (2007). The nature of procrastination: A meta-analytic and theoretical review of quintessential self-regulatory failure. *Psychological Bulletin, 133(1), 65. 10.1037/0033-2909.133.1.65*

Strunk, K. K., Steele, M. R. (2011). Relative contributions of self-efficacy, self-regulation, and self-handicapping in predicting student procrastination. *Psychological Reports, 109(3), 983-989. https://doi.org/10.2466/07.09.20.PR0.109.6.983-989*

Şeker, S. S. (2015). Review Of The Variables That Predict Academic Procrastination Of University Students. *European Scientific Journal, ESJ, 11(31).*

Şimşek, Ö.F.; (2007) *Yapısal Eşitlik Modellemesine Giriş: Temel İlkeler ve Uygulamaları.* Ankara, Ekinoks Yayınları

Tuckman, B. W. (1991). The development and concurrent validity of the procrastination scale. *Educational and psychological measurement, 51(2), 473-480. https://doi.org/10.1177/0013164491512022*

Tufan, E., & Gök, M. (2009). Müzik öğretmeni adaylarının genel ve akademik erteleme eğilimlerinin çeşitli değişkenler açısından incelenmesi, 8. Ulusal Müzik Eğitimi Sempozyumu, 23-25.

Usher, E. L., & Pajares, F. (2008). Self-efficacy for self-regulated learning: A validation study. *Educational and Psychological Measurement, 68(3), 443-463. https://doi.org/10.1177/0013164407308475*

Van Eerde, W. (2000). Procrastination: Self-Regulation İn İnitiating Aversive Goals. *Applied Psychology, 49(3), 372-389. https://doi.org/10.1111/1464-0597.00021*

Van Gelderen, M., Kautonen, T., & Fink, M. (2015). From entrepreneurial intentions to actions: Self-control and action-related doubt, fear, and aversion. *Journal of Business Venturing, 30(5), 655-673. https://doi.org/10.1016/j.jbusvent.2015.01.003*

Wäschle, K., Allgaier, A., Lachner, A., Fink, S., & Nückles, M. (2014). Procrastination and self-efficacy: Tracing vicious and virtuous circles in self-regulated learning. L*earning and instruction, 29, 103-114. https://doi.org/10.1016/j.learninstruc.2013.09.005*

Zimmerman, B. J. (2002). Becoming a self-regulated learner: An overview. *Theory İnto Practice, 41(2), 64-70. https://doi.org/10.1207/s15430421tip4102_2*