Çarkçi Opera Student's Self-Efficacy Scale: A Validity and Reliability Study

Assoc. Prof. Dr. Jaklin Çarkçı[1], Dr. Çare Sertelin Mercan[2]

[1]Üsküdar University, Institute of Social Science, Psychology, İstanbul-Turkey
[2]İstanbul University Cerrahpaşa Faculty Of Education

ABSTRACT: Purpose of the study is to develop a scale to determine vocational self-efficacy perceptions of the conservatory opera undergraduate students. Participants are 356 undergraduate opera students enrolled in conservatories at public and private universities across Turkey. In the first step of the study item generation was realised, subsequently field experts assessed content adequecy, afterwards items were administrated 100 participants for the pilot study, an exploratory factory analysis have been realised on this data and reduced the set of items. The new set of items were administrated to 256 participants for the main analyses. Explatory, confirmatory factor analyses, test re-test coefficients and construct validity have been tested. Results indicated that "Çarkçı Opera Students Self-Efficacy Scale" is a valid and reliable scale consisting of 24 items and 6 factors. It is a five-point Likert scale, Cronbach's is calculated 0.833for the total score, the result of test-retest analyses is .98.

KEYWORDS- Opera students, Scale development, Self-efficacy

1. INTRODUCTION

Music and dance have been used as a therapy tool since the early ages by the most primitive African tribes, Aboriginals, Pagans to Kams, Seljuks, Ottomans and medieval Islamic scholars in their treatment, along with water and music, and in Indian and Far Eastern philosophies, Old Testament inscriptions in the Torah. Today, the tradition of using music, painting, drama, briefly art therapy, has become quite common in treating psychological problems.

The fact that arts-based therapy systems gives satisfactory results, positive feedbacks of clients and therapists bring to the mind another question. The improper education of performance artists should cause psychological, physiological and cognitive disorders in individual. With this perspective, researchers started a series of studies on opera theatre and ballet artists and conservatoire students about their vocational self-efficacy and performance anxiety. In the literature, it has been observed that although there are some scales (McCormick & McPherson; 2003; 2006; Kenny, Davis & Oates, 2004; Ritchie & Williamaon, 2011; 2012; Tokinan, 2013; Çırakoğlu & Şentürk, 2013; Kabakçı, 2016) for music, piano and instrument performance artists, there is no scale to measure vocational self-efficacy of opera undergraduate students. And researchers couldn't reach any studies conducted on psychology of opera students and artists in Turkish sample. In this context, it is aimed to develop a self-efficacy and performance anxiety scales for the opera, ballet, theatre artists and students. The "Çarkçı Opera Students' Self-Efficacy Scale," which is presented in the current study, is a part of this research (Çarkçı, 2019).

It is assumed that Opera, as the cradle of the Renaissance, is of Florence origin, and has been formed by the composers, poets and sculptors who came together in Florence to form a more comprehensive art form in parallel with the ancient Greek tragedies (Altar 2000, Gürten 2009, Yener 1992). It is generally accepted that the first examples of the opera art are "Dafne" and "Euridice" operas which were staged for the first time by J.Peri in 1594. Opera art where music, theatre, decor and costume, architecture and sculpting, briefly all the arts in the scope of all fine arts come together, and where time and space elements are experienced in a multi-dimensional way with the timely creation of a crowded performer and technical group is the only branch of art in which human voice is used and performed without any technological assistance unlike other forms of art. Continuing its development in Northern Italy, opera art has changed in parallel with the classical, romantic, realistic, modern and post-modern art approaches reaching a wider audience in other European countries, and has inspired many composers to overcome the limits of their sound and body and realize themselves in this respect (Altar, 2000; Gürten 2009; Yener 1992).

The fact that opera artists using their voice and body as an instrument, enhances the importance of artist's psychology for the stage performance. Personality characteristics, ability, socio-cultural values and health-related issues are prominent in the personal

---

[1] This paper is a part of the masters's thesis prepared by the first author under supervision of the second author, submitted to Istanbul University Cerrahpaşa.

and professional development of opera artists as well as in many vocational performances. The voice of the artists also stands out as an instrument, therefore handling vocal functionality as an important sign of physical and psychological health in artistic expression (Sandgren, 2005) of opera artists is a requirement.

Self-efficacy perception is one of the most important elements of sustaining its existence and performance on the stage. No matter how accurate and elite is the education given, unless the individual's perception of self-efficacy is strong, they will not be able to succeed as they are not able to resist the environmental effects and succumb to their anxiety. This will lead the individual to end early their education or professional life. Self-efficacy beliefs regulate human functioning through cognitive, motivational, affective, and decisional processes (Bandura, 1997). Perceiving high-self efficacy activates individuals self-enhancing thoughts and contribute to motivating them-selves, on the other hand perceiving low self-efficacy may process in a self-debilitating way. Perceived self-efficacy affect individual's emotional well-being, depression level, responses against stress, and the way of decision making (Bandura & Locke, 2003). Self-efficacy is defined by Bandura (1986) as a judgment that the individual can find the power to realize their performance by regulating the environmental conditions so that they can perform a targeted performance. Self-efficacy is an individual's belief about him/her capability of how successfully perform a specific behaviour (Bandura, 1986). In other words, self-efficacy includes an individual's personal judgments that he/she can perform a certain performance under any situation. The self-efficacy expectancy of the individual is considered as an important factor that determines the motive to start a job, how much effort will be spent for that job and how long the individual will persevere to reach their goal when the obstacles are encountered (Bandura, 1989). The fact that the individual has a consistent and strong competence expectation regarding their own behaviour affects their behavioural determination in many areas of life. Considering the importance, the professional occupations in terms of the individual's emotional, psychological, economic and social wellbeing, it is very important to examine the effect of the concept of "self-efficacy expectation" presented by the social-cognitive theory in the career development process (Betz & Hackett, 1986; Lent & Hackett 1987). In the face of a problem, if the individual's belief in their skills and abilities is weak, their capacity to cope with the problem will also be low. In this case, the individual needs to have belief in their own strength and abilities in order to reach a solution in the problematic situation. According to another definition, self-efficacy is the power of the individual to fight the situation in line with their beliefs and abilities and skills about what they can do regarding any situation (Snyder & Lopez, 2002). It is the capacity of the individual to show what they can do regarding a targeted behaviour or a difficulty that has been faced with. In the light of all these definitions, self-efficacy is the capacity and ability to make all personal judgments of individuals that they can improve their behaviour and accordingly their performance. All the knowledge on self-efficacy literature lead the researchers to investigate the importance of self-efficacy of stage artists. In their research with 332 instrument artists and musicians, McCormick and McPherson (2003) found that self-efficacy is the factor that best explains real performance. A similar finding was obtained in the study of Ritchie and Williamon (2012) with 250 music undergraduate students. According to the results of the research, the self-efficacy perception of students regarding their music performance was determined to be the most important predictor of the quality of their performance. The same finding was found to be valid for the most successful conservatory students in the technical and recital exams. Since self-efficacy perception of the stage performers and students is an important building block in improving their motivation regarding their self-concept and performance, it is aimed to eliminate this shortcoming and develop the self-efficacy scale for the stage and school conservatory performances of opera students within this study. In line with the purpose in the process of building the scale items, the path that Betz and Hackett (2006) stated in their studies discussing the professional self-efficacy theory and the mistakes made in the handling of the concept has been followed and self-efficacy is not treated as a situational concept, but as a judgment or cognitive assessment of future performance skills. In a similar way, the beliefs of the individual on their skills to perform in front of others, which McCormick and McPherson (2003) especially emphasize in musical self-efficacy, were evaluated within the scope of the study.

2. METHODOLOGY

The item pool was framed by referring to self-efficacy literature, the theoretical framework, and via the interviews realised with 27 students, and 5 educators in conservatory opera branch. By the mentioned process writers set forth 47 items. In order to establish the content validity of the scale, the items were subjected to field experts. Three experts were drawn from the field of psychological counselling and guidance and three experts were drawn from the opera branch of state conservatory, all experts were faculty members. After expert reviews necessary modifications were made, 14 items are removed and 33 items are reorganised according to the experts' suggestions. The scale development is realised with two steps. Study was carried out with two parts. Study 1 was a pilot study, with participation of 100 opera undergraduate students, it has been realized an initial exploratory factor analysis with this group. In the second study exploratory and confirmatory factor analysis, convergent validity and reliability analysis were carried out with participation of 256 undergraduate opera students from 8 different cities in Turkey. For all the applications, the researchers obtained permission and clearance from Social Sciences and Human Ethical Committee of Istanbul University and Hacettepe University.

Çarkçi Opera Student's Self-Efficacy Scale: A Validity and Reliability Study

2.1. Study 1 (Pilot Study)
2.1.1. Data Collection
   Items were arranged and administered to a sample of 100 conservatory opera students (%39 men, %61 women) for the validation study. Data was collected in classroom settings and the subjects were asked to respond to all the statements, during the time of administration the investigator gave proper assistance and directions whenever and wherever necessary. It took approximately 15 minutes to collect the data.

2.1.2. Data Analysis & Results (Study 1)
2.1.2.1. Results of the exploratory factor analysis
Exploratory factor analysis of the pilot study started with 33 items, total correlations are examined for all items. Items with correlations less than .25; items showing high loading scores in more than one factor; and items that have loading scores with differences less than .10 are removed. With these criteria total 6 items are removed from the scale. Analyses are repeated with remaining 27 items. In order to test the structure validity of the instrument, a principal component analysis with varimax rotation has been applied for 27 items. Extracting factors with Eigen values over 1.00, was primary criterion to decide the number of factors retained for rotation (Tabachnik & Fidell, 2001). KMO (.701) and Barlett Sphericity (X2=940.46; p< .000) have found to be adequate for satisfactory factor analysis (Table 1). Results of the principal component analysis yielded six factors loading between .81 and .69 and explaining 61.2% of the total variance. The first factor (6 items) explains 14.3% of the total variance. The second factor (6 items) explains 11.5% of the total variance. The third factor (4 items) explains 11.2% of the total variance. The fourth factor (6 items) explains 11.24% of the total variance. The fifth factor (2 items) explains 7.2%, the sixth factor (3 items) explains 6.78% of the total variance. The factor loadings for each scale are presented in Table 1.

Table 1: Opera Students Self-Efficacy Scale Exploratory Factor Analysis (Study 1)

	1	2	3	4	5	6
Item 7	,811					
Item 2	,800					
Item 15	,778					
Item 1	,652					
Item 21	,650					
Item 14	,517					
Item 18		,725				
Item 19		-,700				
Item 16		-,688				
Item 20		,685				
Item 5		,630				
Item 4		,575				
Item 28			,768			
Item 29			,697			
Item 3			,633			
Item 12			,569			
Item 24				,690		
Item 9				,666		
Item 10				,641		
Item 23				,628		
Item 17				,516		
Item 33				,473		
Item 27					,836	
Item 30					,815	
Item 31						,687
Item 32						,613
Item 13						-,568

Kaiser – Meyer – Olkin (KMO) Test		,701	
Bartlett Sphericity Test	X²	940,469	
	Sd	351	
	P	,000	

Çarkçi Opera Student's Self-Efficacy Scale: A Validity and Reliability Study

2.2. Study 2
2.2.1. Procedure and Data Collection

The number of undergraduate students enrolled in opera branches of all conservatoires in Turkey is 581. First study was conducted on 100 of them, the second study was conducted with a group of 256 participants from 11 conservatoires in 8 different cities in Turkey with convenient sampling.

Data was collected in classroom settings, the subjects were asked to respond to all the statements, during the time of administration the researchers gave proper assistance and directions whenever and wherever necessary. It took approximately 25 minutes to collect the data.

2.2.2. Study Group

Out of 256 participants 38.7% (n = 99) were girls and 61.3% (n = 157) were boys. 44.9% (n = 115) of the participants were 1820 years old, 34% (n = 87) were of 21-24 years old, 20.3% (n = 52) were of 24 years old and over. The distribution of the participants according to the grades is determined as, 15.2% (n = 39) were in the preparatory class, 27.3% (n = 70) were in the first grade, 19.9% (n = 51) were in the second grade, 19.9% (n = 51) were in the third grade and 17.6% (n = 45) were in the fourth grade.

2.2.3. Measurement Tools

This study aims to develop and test the validity and reliability of a new scale to measure perceived vocational self-efficacy of undergraduate opera students. So, "Çarkçı Opera Students Self-Efficacy Scale is developed by this purpose. For the criterion validity "Self-love and Self-Efficacy" scale was used.

Self-love and Self-Efficacy Scale: The scale was developed by Tafarodi and Swan (1995) Turkish adaptation was realized by Doğan (2011). Scale consists of two subscales self-liking (8 items, Cronbach's alfa .83, test re test value is .72) and selfcompetence (8 items, Cronbach's alfa .74, test re test value is .72). In the present study self-competence sub-scale was used. The survey also included questions about students' individual characteristics; such as gender, age, and grade.

3. DATA ANALYSIS

The exploratory factor analysis is repeated with a new group of participants (n=256). The distribution of the factors was confirmed by confirmatory factor analysis. The reliability test for the scale is analysed by comparison of test-retest scores. The correlation analysis was realised "Self-Efficacy and Self-Love Scale" (Tafarodi & Swan, 1995) to investigate the external validity of Çarkçı Opera Students Self-Efficacy Scale. All statistics were compared at .05 significance level. All the data except confirmatory factor analysis were evaluated with SPSS 25.0 statistics package program, Confirmatory Factor Analysis was analyzed with AMOS 24.0 package program.

4. RESULTS
4.1. The Exploratory Factor Analysis

Exploratory factor analysis of the Study 2 started with 27 items to test the structure validity of the final form of the scale. A principal component analysis is realised, total correlations are examined for all items. Items with correlations less than .25; items showing high loading scores in more than one factor; and items that have loading scores with differences less than .10 are removed. With these criteria total 3 items are removed from the scale. Analyses are repeated with remaining 24 items.

In order to test the structure validity of the instrument, a principal component analysis with varimax rotation has been applied for 24 items. Extracting factors with Eigen values over 1.00, was initial criterion to decide the number of factors retained for rotation (Tabachnik and Fidell, 2001). KMO (.787) and Barlett Sphericity (X2=1465.57; p< .000) have found to be adequate for satisfactory factor analysis (Table 2). Results of the principal component analysis yielded six factors loading between .81 and .69 and explaining 56.43% of the total variance. The first factor (6 items) explains 13,19%, the second factor (6 items) explains 10,92%, the third factor (5 items) explains 10,17%, the fourth factor (2 items) explains 8,18%, the fifth factor (2 items) explains 7,14%, and the sixth factor (3 items) explains 8,18% of the total variance. The factor loadings for each scale are presented in Table 2.

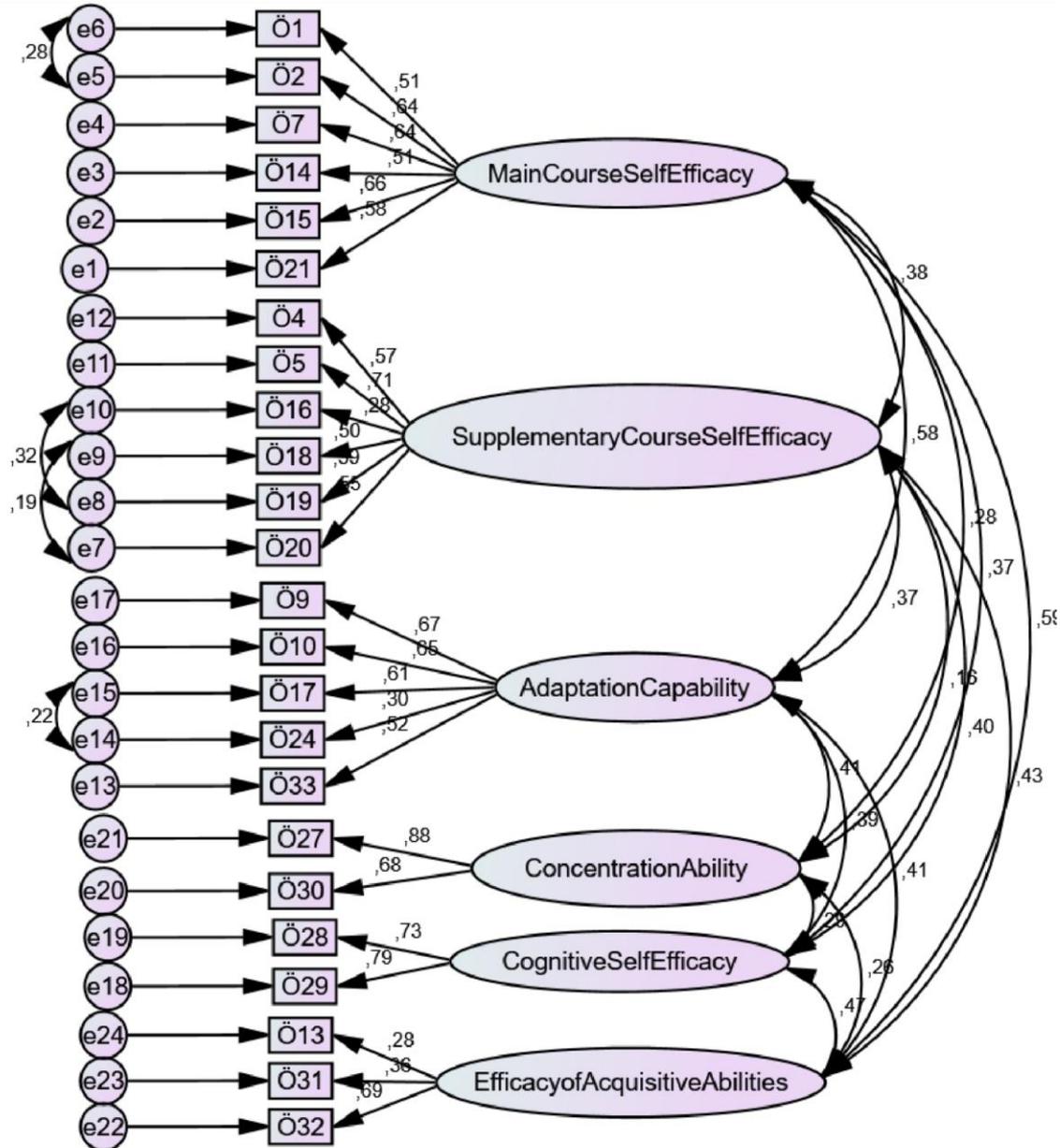**Table 2. Çarkçı Opera Students' Self-Efficacy Scale**

	1	2	3	4	5	6	Item Total Score Correlation
S2	,766						,381
S7	,724						,425
S15	,652						,552
S21	,618						,393

Item							
S1	,561			,392			
S14	,544			,388			
S5		,727		,431			
S20		,694		,365			
S18		,621		,381			
S19*		,615		,317			
S4		,574		,460			
S16*		,505		,250			
S17			,704	,463			
S24			,699	,252			
S10			,673	,438			
S9			,641	,500			
S33			,490	,404			
S30*				,808			,283
S27*				,795			,434
S28					,836		,396
S29					,782		,441
S31						,698	,311
S32						,649	,472
S13*						,382	,215
Factor Loads	13,198	10,928	10,175	8,189	7,140	6,806	
Total Variance Explained	56,436						
Kaiser-Meyer-Olkin (KMO)	,787						
Bartlett's Test	1465,571 (0,000)						
Degree of Freedom	276						

4.1.2. Opera Student Self-Efficacy Scale Confirmatory Factor Analysis

Confirmatory factor analysis was applied to test the accuracy of the predetermined factor structure. Confirmatory factor analysis helps to prove the accuracy of the dimensions obtained from the explanatory factor analysis and also shows the level of compatibility of the scale. Confirmatory Factor Analysis was realised using the structural equation modelling program AMOS 24.0. The analysis was performed on the 24 self-efficacy items and the maximum likelihood method of estimation was used. No cross-loadings and correlated measurement errors were allowed in the model. The ratio of the chi square statistic to the degrees of freedom ($x2/df$) should be less than 2 (Tabachnick & Fidell, 2001); the Goodness of Fit Index (GFI), the Comparative Fit Index (CFI), and Non Normed Fit Index (NNFI) should exceed .90 (Hu & Bentler, 1999; Tabachnick & Fidell, 2001); the Root mean square Error of Approximation (RMSEA) should be less than .05, with values less than .06 representing good fit (Hu & Bentler, 1999) and the Standardized Root Mean Squared Residual (SRMR) should not exceed .05 (Brown, 2006). Resulting fit indices revealed that all values except CFI and NFI values provided a perfect fit to the data, but CFI and NFI values are not among the acceptable fit threshold values x2=396.24, df=233, (x2/df= 1.70), RMSEA=0.52, GFI= 0.887, CFI=0.88, NFI= 0.86, NNFI=0,88, SRMR= 0.65).

Fit Indices	Perfect Fit	Acceptable Fit Range	Opera Students SelfEfficacy
X^2/df	$1 \leq X^2 / df \leq 3$	$2 \leq X^2 / df \leq 5$	**1,701**
CFI	≥0,97	$0,90 \leq$ CFI $\leq 0,97$	,878
SRMR	≤0,08	$0,08 \leq$ SRMR$\leq 0,10$	**,065**
NFI	≥0,95	$0,90 \leq$ NFI $\leq 0,95$	,855
RMSEA	≥0,05	$0,05 \leq$ RMSEA $\leq 0,10$	**,052**
X^2	396,240 (,000) (df = 233)		

5. RELIABILITY ANALYSIS

Cronbach Alpha Coefficients and test-retest coefficients were computed for reliability studies. Cronbach Alpha coefficients were calculated as .77 first factor, .71 for second factor, for .71 for third factor, .75 for forth factor, .73 for fifth factor, .38 for sixth factor. Cronbach Alpha Coefficient for the total scale is calculated as .83.

Test re-test study was conducted with a sample of 35 undergraduate students from Istanbul University state conservatory. The questionnaire has been administrated to the research group two times in two weeks period. Test re-test coefficients were found to be .982 for total score (all p's < .01).

Table 3. Opera Students' Self-Efficacy Scale Convergent Validity Study

	Main Course Self-Efficacy	Supplementary Course SelfEfficacy	Adaptation Capability	Concentration Ability	Cognitive SelfEfficacy	Efficacy of Acqusitive Abilities	Total SelfEfficacy	SelfEfficacy and Self-Love Scale
Main Course Self-Efficacy	1							
Supplementary Course SelfEfficacy	,217**	1						
Adaptation Capability	,383**	,175**	1					
Consentration Ability	,186**	,192**	,261**	1				
Cognitive Self-Efficacy	,280**	,241**	,272**	,244**	1			
Efficacy of Acqusative Abilities	,316**	,241**	,221**	,196**	,266**	1		
Total SelfEfficacy	,701**	,647**	,665**	,474**	,549**	,555**	1	
Self-Efficacy Self-Love Scale	0,120	0,086	0,067	-0,010	0,065	,125*	,132*	1

In order to test the convergent validity of the instrument "Self-Love and Self-Efficacy" (Demir, 2011) scale was administrated to 256 undergraduate students (99 women, 157 men). The correlation analysis was used to determine whether there is a relationship between "Çarkçı Self-Efficacy Scale for Opera Students" and "Self-Love and Self-Efficacy Scale". It was determined that there was a positive correlation between "Çarkçı Self-Efficacy Scale for Opera Students" total scores and Self-Love and Selfefficacy scale scores. Within the subscales efficacy of acquisitive abilities is correlated positively with "Self-Love and SelfEfficacy Scale".

6. DISCUSSION

In the present study, a self-efficacy scale was developed to measure vocational self-efficacy of opera conservatoire students, and validity and reliability tests were conducted. The scale has a 6 factor structure, the multi factor structure provides to determine the sources of self-efficacy as well as self-efficacy level. In this section, descriptions and rationale about subfactors, and scoring will be presented, right after limitations of the study and recommendations for future research and practitioners will take place. Çarkçı Opera Students Self Efficacy Scale consists of 24 items on a 5 point Likert's scale. 6 of them are reverse items. The higher points derived from the scale indicate high level of self-efficacy.

6.1. Factor1: Main Course Self-efficacy

The first factor consists of six items, high scores indicate high self-efficacy in voice capacity, enjoy singing and show good communication skills with instructors (ex/ I trust the capacity of my voice), on the other hand, low scores will indicate lack of self-efficacy in this area. Highest score that can be derived from this factor is 30, and the lowest is 6.

6.2. Factor 2: Supplementary Course Self Efficacy

The second factor consists of six items, two of them are reversely scored. High scores indicate high self-efficacy an opera student in the sub-courses (ex/ I can hear sensitively and accurately). It's assumed that sub-courses as solfeggio, harmony, dictation, correct feeling, deciphering rhythm feeling, auxiliary piano will improve the musical development of the student and accompany him throughout his/her professional stage performance life. Low scores derived from this sub scale is related with perception of low level, self-efficacy. 6 points indicates "very low" self-efficacy and 30 points indicates "high level" of selfefficacy.

6.3. Factor 3: Adaptation Capability

There are five items, to measure the responsiveness, flexibility and adaptability of an opera student to unexpected disruptions that may be encountered in stage and exams in conservatoire. Performing with the accompany of piano and orchestra, is a requirement for a student who is preparing for stage life, besides, confronting the responses of the audience or the colleagues is also crucial efficiency of a candidate performing artist, the high self-efficacy scores shall be considered as an indicator of adapting easily to unexpected situations and environmental conditions (ex./ I can do my best in stage courses). On the contrary, low scores shall be considered that the student needs support in this area. Low scores derived from this sub scale is related with perception of low level, self-efficacy. 5 points indicates "very low" self-efficacy and 25 points indicates "high level" of self-efficacy.

6.4. Factor 4: Concentration Ability

There are two reverse items in this subscale. This subscale determines how intensely the student concentrates on the music and/ or stage layouts of the work during the performance (ex./ I confuse the music when focused on the "mise en scene"; reverse item). In other words, it determines the self-efficacy perception of attention processes. In this subscale low score indicates high selfefficacy in attention processes, while high scores will suggest that perceived self-efficacy of the student on focusing is low. Lowest score can be derived from this sub scale is 2 and the highest is 10.

6.5. Factor 5: Cognitive Self-efficacy

This subscale consists of two items, measuring cognitive competence, based on memory processes of opera students (ex./ I can easily memorise the opus). Opera artists requires a high performance, in terms of cognitive processes. An opera artist on stage, requires attention and focusing simultaneously on orchestra music, singing in harmony with an orchestra, following the dialogues while focused on musical rhythm and body movements. Two points derived from this subscale defines low self-efficacy perception, 10 points will define perceived high self-efficacy about cognitive competence.

6.6. Factor 6: Efficacy of Acquisitive Abilities

This subscale, consists of 3 items, one of them is reversely scored. This subscale reflects the capability, all items are designed to interpret the self-efficacy of acquisitive abilities that will support the student's artistic performance (ex./ Previous achievements make me proud of myself). Mastery on a foreign language and the motivation sourced from previous achievements. Highest point that will derived from this subscale is 15 and the lowest point is 3.

Considering the total scores, derived from the opera students' self-efficacy scale, 24p will define "very low level" self-efficacy perception, 48p will define "low" level, self-efficacy, 72 p will define "medium level" self-efficacy perception at 96 p "high" level. self-efficacy perception, and finally 120 p will define a "very high level" self-efficacy perception.

As findings put out the "Çarkçi Opera Students' Self-Efficacy Scale", is a valid and reliable tool that enhance to measure vocational self-efficacy of opera students.

6.7. Recommendations for Future Research

Given that there is little research on the subject in the literature, it is recommended to the researchers who will lead new research, to realize the adaptability studies of the scale in different countries. It is recommended for the researchers to examine the relationship between perceived vocational self-efficacy of opera students and their personality traits, performance anxiety and other variables. Researchers shall examine the emotional development of individuals in transition from studentship to professional artists by longitudinal studies.

REFERENCES
1) Altar, C. M. (2000). Opera tarihi (Cilt 1). İstanbul: Pan Yayıncılık.
2) Bandura, A. (1997). Self-efficacy: The exercise of control. New York: Freeman
3) Bandura, A. (1986). Social Foundations of thought and action: A social Cognitive Theory. Englewood Cliffs, NJ: Prentice-Hall.
4) Bandura, A. (1989). `Self-regulation of motivation and action through internal standards and goal systems'. In: Pervin, L. A. (Ed.) Goal Concepts in Personality and Social Psychology, Erlbaum, Hillsdale, NJ, pp. 19-85.
5) Bandura, A. & Locke, E. A. (2003). Negative self-efficacy and goal effects revisited, Journal of Applied Psychology, 88, 1, 87–99 DOI: 10.1037/0021-9010.88.1.87
6) Betz, N. E. & Hackett, G (1986) Applications of self-efficacy theory to understanding career choice behaviour. Journal of Social and Clinical Psychology, 4, 279-289.
7) Betz, N. E. & Hackett, G (2006) Career self-efficacy theory: Back to Future. Journal of Career Assessment 14(1). https://doi.org/10.1177/1069072705281347
8) Brown, T.A. (2006). Confirmatory factor analysis for applied research. NY & London: The Guilford Press.

9) Çarkçı, J. (2019). Sahne sanatları opera bale tiyatro sanatçıları ve öğrencilerine yönelik performans kaygısı, özyeterlik ölçeği geliştirme çalışması.Yayımlanmamış Yüksek Lisans Tezi.İstanbul Üniversitesi Cerrahpaşa Eğitim Bilimleri Enstütüsü.İstanbul

10) Çırakoğlu, C. Ç., Şentürk, G. C. (2013). Development of a Performance Anxiety Scale for Music Students, Medical problems of performing artists 28(4), 199-206

11) DoğanT. (2011).İki Boyutlu Benlik Saygısı: Kendini Sevme/ÖzyeterlikÖlçeği'nin Türkçe Uyarlaması, Geçerlik ve Güvenirlik Çalışması. Sakarya Üniversitesi,Eğitim ve Bilim Dergisi-Cilt 36sayı 162,İSSN:1300-1227

12) Gürten, E. (2009). Sahne sanatlarında yönetim ve etkili iletişim. Yüksek Lisans Tezi. İstanbul Kültür Üniversitesi Sosyal Bilimler Enstitüsü, İstanbul.

13) Hu, L. T. & Bentler, P. M. (1999) Cutoff criteria for the fit indexes in covariance structure analysis: Conventional criteria versus new alternatives. Structural Equation Modelling, 6, 1-55.

14) Kabakçı, C. (2016). Sahne performansı kaygısında farkındalık ve mücadele. Sahne ve Müzik Araştırma Araştırma eDergisi, 3, 86-96.

15) Kenny, T. A., Davis, P. & Oates, J. (2004). Music performance anxiety and occupational stress among opera chorus artist anxiety and their relationship with state and trait anxiety and perfectionism. Journal of Anxiety Disorders, 18, 6, 757-777.

16) Lent, R.W. &Hackett, G. (1987) Career-Self-Efficacy: Empirical Status and Future Directions., Journal of Vocational Behavior 30, 347-382.

17) McCormick, J. & McPherson, G. (2003) The role of self-efficacy in a musical performance examination: an exploratory structural equation analysis. Psychology of Music, 31, (1), 37-51.

18) McCormick, J. & McPherson, G. (2006) Self Efficacy and Music Performance, Psychology of Music, 34, (3), 322-336.

19) Ritchie, L. & Williamon, A (2011). Measuring distinct types of musical self-efficacy. Psychology of Music, 39,3, 328344.

20) Ritchie, L. & Williamon, A. (2012) Self efficacy as a predictor of musical performance quality. Psychology of Aesthetics, Creativity and the Arts, 6, 4, 334-340.

21) Snyder, S. R. & Lopez, S. J. (2002). Handbook of positive psychology. New York: Oxford University Press.

22) Sandgren, M. (2005) Becoming and being an opera singer: Health, personality and skills, Doctoral Dissertation Stockholm University, Department of Psychology. F:/opera/becoming an opera singer.pdf retreived 10.02.2020.

23) Tabachnik, B. G. & Fidell, L. S. (2002). Using multivarate statistics (4th ed.) Boston: Allyn and Bacon.

24) Tafarodi, R. W., & Swann, W. B. Jr., (1995). Self-liking and self-competence as dimensions of global self-esteem: Initial validation of a measure. Journal of Personality Assessment, 65, 322–342.

25) Tokinan, Ö.B. (2013). Kenny müzik performans kaygısı envanterini Türkçe'ye uyarlama çalışması. Ahi Evran Üniversitesi Kırşehir Eğitim Fakültesi Dergisi (KAEFAD), Cilt 14, Sayı 1, s. 53-65.

26) Yener, F. (1992). 100 Opera. İstanbul: Bates Yayınları.