Psychometric Properties of Music Performance Anxiety Inventory

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Abstract

Music performance anxiety (MPA) has been defined as the experience of marked and persistent anxious apprehension related to musical performance, which is manifested through combinations of affective, cognitive, somatic and behavioral symptoms. This study aimed to examine the validity and reliability of the Diana Kenny's Music Performance Anxiety Inventory (2006) in an Iranian sample for the second time. The first time, the inventory was conducted in Shiraz and Mashhad. The relevant factor analysis indicated that the inventory had two items which could explain 35.14% of the variance. Although the research findings support the reliability of the said inventory on the Iranian sample, the variance explained was far from the intended rate. On the other hand, the inventory had generally investigated evocations of anxious propositions (e.g., uncontrollability, unpredictability, negative affect and musical symptoms) and attentional shift (task or self-evaluative focus and fear of negative evaluation). This study, however, did not fully examine the dimensions. Thus, the present study, which is a pilot one, examines the psychometric properties and uses the obtained dimensions from the exploratory analysis in the measurement model and main research context.

Keywords: Music Performance Anxiety, Anxiety, Factor Analysis musician

INTRODUCTION

Anxiety is a feeling of fear, dread, and uneasiness. Anxiety or apprehension is a continuous, unpleasant and vague feeling or dread with an unknown origin, which causes a person to suffer from uncertainty, despair and physiological arousal (Sligman & Rezeuhn, 2006). Performance anxiety includes a host of disorders which affect people in a wide range of issues such as tests, math performance, public speech, sports, and dance rehearsals, arts, acting, and music (Halls, 2015). Music performance anxiety is a complex phenomenon that arises from the interaction of a number of

factors, including genetic factors, environmental stimuli and experience, feelings, cognition and individual behaviors. Music performance anxiety is manifested through three independent cognition, arousal, and components of independent behaviors. While a certain level of functional anxiety is deemed to be normal, it can also be debilitating factor and regarded a mental disorder (Matei & Ginsberg, 2017). In recent years, music performance anxiety has drawn the attention of researchers, especially psychologists, including Urruzola & Bernaras, 2020; Kalmska and Rudzi, 2020; Sinico et al., 2019; Dubos et al., 2019; Asavidson, Vogol & Ross, 2019; Gonzaleza

et al., 2018; Kenny & Halls, 2018; Eri Jathoud et al., 2017; Matei & Ginsberg, 2017; Osório et al., 2017 and Spehn & Walther, 2016). Kenny (2011) defined music performance anxiety to be the experience of marked and persistent anxious apprehension related to musical performance. which is manifested through combinations of affective, cognitive, somatic and behavioral symptoms. Music performance anxiety is also known as stage fright, musician stress syndrome, and music syndrome. This type of anxiety becomes a problem when its physiological manifestations leave a negative effect on the individual's performance (Dauncer, Hildbrandt, Ariyal & Gomez, 2011). As a specific psychological phenomenon, music performance anxiety has a myriad of symptoms. Osório et al. (2017) argue that strategies such as frequent visiting of a psychologist/psychiatrist and psychologist and taking antidepressants are among the known symptoms. Eighteen percent of musicians were found to take beta-blockers while 6% took prescribed drugs. Medeiros Barbar and Alexander Dei (2013) demonstrated that 24% of musicians suffered from music performance anxiety, 19% from social anxiety and 20% from depression indicators. These figures were even higher for the amateur musicians, who saw the said rates double compared to the professionals. Urruzola & Bernaras (2020) maintained that anxiety can affect the performance quality negatively and increase the likelihood of failure and dysfunction. Kalenska and Rudzaj (2020) concluded that the apprehension and multiplicity of emotional states reported by young musicians included five emotional profiles which varied from negative emotions of fear and uneasiness (higher level of music performance anxiety) through a combination of negative affect (moderate positive and performance anxiety, desire, capacity) to positive affect, such as trust, courage and happiness (self-confidence- trust). Sinico et al. (2019) pointed out that male pipers showed a higher level of music performance anxiety, while professional pipers could better cope with musical performance anxiety. Dubos et al. (2019) demonstrated that women reported higher levels of music performance anxiety and social anxiety without significant perfectionism

differences. Social fear and perfectionism were found to be significantly correlated with music performance anxiety. Asavidson, Vogul, and Ross (2019) concluded that adults' parenting style and attachment behavior were associated with music performance anxiety, measured by the Kenny's subscale of Music Performance Anxiety. Gonzaleza et al. (2018) demonstrated that because of the similarities, music performance anxiety could be negatively predicted by self-efficacy which was a negative predictor. The overall effect of music performance anxiety on the performance was found to be negatively significant. Selfefficacy was a positive predictor for the increased performance. In this connection, Kenny (2011) showed that trait anxiety, neuroticism, negative emotionality, introversion, self-concept, selfesteem, self-efficacy, source of control, coping style, behavioral inhibition and perfectionism were considered be music performance anxietyrelated contexts. Other researchers also concluded that negative emotionality (Kaspersen & Gotestam, 2002), trait anxiety (Kokotsaki & Davidson, 2003), core self-evaluation (Kenny, 2011), and perfectionism (Flett & Hewitt, 2005) were symptoms of music performance anxiety. Experience gained in making music can be undermined by concerns about a performer's evaluation of his or her performance or that of others, thus resulting in a debilitating anxiety in a host of physiological, cognitive, emotional and behavioral areas. Physiological symptoms can be similar to those of fear experience, which include high heart rate, muscle spasm, tremors, shortness of breath, sweating, impaired vision, dizziness, and gastrointestinal dysfunction. Concerns about evident manifestations of anxiety can also leave negative effects on the performer and cause apprehension about how the audience perceive the symptoms. Cognitive symptoms can cause catastrophic thoughts before the performance such as the possibility of symbolic error, memory loss, loss of body control, negative reaction by the audience, and dread of negative evaluation. Speaking of emotions, the musician may feel disappointed this way and loses control (Kenny & Halls, 2018). Those who enter the highly competitive realm of music must not only enjoy personal characteristics such as determination and resilience, but also acquire cognitive and social skills, instrument-specific motor skills, coping

skills commensurate with the psychological demands, general performance, etc. They must also have the capability of handling their time and assume responsibility for their physical and mental well-being. Although musicians are said to have the highest levels of career satisfaction, they also suffer from mental illness, too. Performance anxiety has been examined in a host of contexts such taking tests, public lecture, writing, sexual functioning, sports, and the performing arts (dancing, music, and acting) (Matei & Ginsborg, 2017).

However, it seems to be necessary to investigate the subject of anxiety among musicians as well. Because stage anxiety can affect the individual's performance considerably negatively, this study mainly aimed to validate the psychometric properties as well as the reliability of music performance anxiety context among musicians in Iran.

Methodology

This study used a descriptive-correlational method, and employed an online sampling method through Porsline site. The statistical population consisted of the singers and musicians residing in the province of Kermanshah and other cities as well as those who had the experience of performance in front of a crowd, and a group of art students who were members to a concert group who also had the experience of performance. In general, as many as 310 people took part in the research. The sample size included 217 males and 93 females. Of the total sample size, 3 people had a doctorate degree, 17 ones had a master's degree, 74 ones had a bachelor's degree, 154 ones had a diploma and associate's degrees, and 62 ones were student. The following tools were used to collect the data.

Kenny's Music Performance Anxiety Inventory

This inventory was developed by Kenny et al. (2004) to examine the relationship between musical performance anxiety and Barlow's Theory of Emotion (2000). This scale includes 26 items on evocations of anxious propositions (e.g., uncontrollability, unpredictability, negative affect and musical symptoms) and attentional shift (task or self-evaluative focus and fear of negative evaluation), physiological arousal, and memory bias. The items are

answered on a 7-point Likert scale ranging from -3 (strongly disagree) to +3 (strongly agree). The maximum score is 156. Higher scores indicate more anxiety and more psychological distress. This inventory enjoys a higher internal consistency (Cronbach's alpha: 0.94) (Kenny et al., 2004). A regression analysis by Mounesi-Tousi et al. (2016) demonstrated that the Spielberger State-Trait Anxiety Inventory (STAI) (Spielberger, 1983) and the individual scale of Kass and Kennedy Music Performance Anxiety Inventory have the ability to independently predict the Kenny's Music Performance Anxiety Inventory based on the State-Trait Anxiety Inventory (STAI) and the Kenny's inventory scoring method (with score over 40 regarded to be positive). These two variables explain 85.3% of the score variance.

Validity of the inventory

The internal consistency index, i.e., the Cronbach's alpha coefficient of this inventory was 0.78. However, after eliminating the items with low factor load, the Cronbach's alpha coefficient was calculated to be 0.82, indicating that only 18% of the total inventory scores variance had been explained as a result of measurement error. This also suggested the desirable reliability of this inventory. The Guttman method was also used to measure the reliability of the inventory. The alpha coefficient ranged from 0.78 to 0.85, which may indicate good reliability of the inventory. The reliability was also calculated to be 0.79 by splithalf test. Intra-factor consistency was calculated to be 0.80 from Cronbach's alpha method while the second factor yielded 0.68. The correlation between these two factors was 0.64. The correlation between performance anxiety and anxiety evocations with total score was 0.89 and 0.85, respectively (Mounesi et al., 2016).

Inventory scoring

The scores were measured on a Likert scale as follows:

"Strongly disagree (0), disagree (1), somewhat disagree (2), no idea (3), somewhat agree (4), agree (5), strongly agree" (6). Of course, items 2, 9, 14, 20, 24 and 26 are reversely scored.

Spielberger State-Trait Anxiety Inventory

The first form of the State-Trait Anxiety Inventory (STAI-X) was constructed by Spielberger et al. in

1970. The revised STAI-Y form changed 12 of the 40 items, i.e., 30% of the X form content, thus improving the psychometric properties of both the State-and-Trait Anxiety Scales (Spielberger, 1983). Over the past 20 years, the State-Trait Anxiety Inventory has been extensively used in various studies as the most common test to measure anxiety. This inventory contains 40 items which measure both state anxiety and trait anxiety scales. The trait part has 20 items scored on 4-point Likert scale ranging from 1 (almost never) to 4 (almost always). In total, a score of 40 to 160 is recorded for each person. The Cronbach's alpha coefficient of State and Trait Anxiety Scales were reported to be 0.92 and 0.90, respectively. Also, the retest coefficients of State and Trait Anxiety Scales were calculated 0.62 and 0.68, respectively (Spielberger et al., 1970). This instrument was standardized by Panahi Shahri

in Iran, yielding a reliability of 0.90 for female students. Mehram (1993) calculated the reliability coefficient of state anxiety, trait anxiety scales and a total rate of 0.91, 0.90 and 0.94, respectively. For validity, concurrent criterion validity method was used. Using this method, a significant difference was noted between the subjects of the normal and the criterion groups on both the state and trait anxiety scales. In a study on 300 students, Mehrabizadeh-Honarmand Shirzadi, and Haghighi (2002) used the internal consistency method to calculate the reliability coefficients of the state and trait anxiety scales at 0.91, 0.89 and 0.94, respectively.

Findings

First, the distribution of variables normality is examined using Kolmogorov-Smirnov test and the confirmatory factor analysis results are then provided.

Variables	Normality distribution test						
	Kolmogorov-Smirnov	Sig.					
Music performance anxiety	0.03	0.200					
State anxiety	0.04	0.200					
Trait anxiety	0.05	0.059					
Total state and trait anxiety test	0.03	0.200					

Table 1: Research variable distribution

Table 1 gives Kolmogorov-Smirnov values which are not significant, confirming the normality of variables distribution. Before the confirmatory factor analysis is performed, it is required to examine the adequacy of the sample using the Kaiser-Meyer-Olkin (KMO) index, which was 0.898 (p=0.0001) for the Kenny Music Performance Anxiety Inventory as given by Table 2. This also helped analyze this scale items. In this pilot study, principal components analysis and varimax rotation (Mounesi et al., 2016) were used to analyze the inventory items. Preliminary results are also given in Table 3.

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Measuring sample adequacy using the Kaiser-Meyer-Olkin (KMO) index	0.898
Bartlett's Test of Sphericity	2938.492
Freedom degree	325
Sig.	0.0001

		Tabl	e 3: Factor a	analysis of n	nusic perfor	mance anxie	ty inventory			
Со	Initial eigenvalues			sum o	sum of squares of the			sum of squares of the		
mp				extracte	ed loads	before	extracte	ed loads	after	
on				rotation	rotation			rotation		
ent										
	eig	Va	Cu	eig	Va	Cu	eig	Va	Cu	
	en	ria	mu	en	ria	mu	en	ria	mu	
		nc	lati		nc	lati		nc	lati	

	val	е	ve	val	е	ve	val	е	ve
	ues	ре	var	ues	ре	var	ues	ре	var
		rce	ian		rce	ian		rce	ian
		nt	ce		nt	се		nt	се
		ag	ре		ag	ре		ag	ре
		е	rce		е	rce		е	rce
			nta			nta			nta
			ge			ge			ge
1	7.7	29.	29.	7.7	29.	29.	4.5	17.	17.
	84	93	93	84	93	93	42	47	47
		8	8		8	8		0	0
2	2.4	9.5	39.	2.4	9.5	39.	3.7	14.	32.
	73	11	44	73	11	44	79	53	00
			9			9		6	6
3	1.5	6.0	45.	1.5	6.0	45.	2.5	9.7	41.
	79	71	52	79	71	52	47	97	80
			0			0			2
4	1.2	4.8	50.	1.2	4.8	50.	2.0	7.8	49.
	60	48	36	60	48	36	35	25	62
			8			8			8
5	1.0	4.1	54.	1.0	4.1	54.	1.2	4.9	54.
	91	96	56	91	96	56	84	37	56
			4			4			4

Table 3 gives Scree test results as illustrated in Figure 1 as well as the eigenvalues, which yielded 5 factors, with the number of items of

each factor taken from Table 3, which shows the post-rotation matrix of components.





Later, the post-rotation matrix of components was provided in Table 3 with the number of items of each factor specified. This indicates five factors extracted whose factor loads are given in Table 3. The researcher lists the factors based on common and general concept of the items pertaining to each factor, as given in Table 3. These 5 factors can explain 54.56% of the total variance. Following this, confirmatory factor analysis was used to investigate and confirm these extracted factors, which are as follows:

Factor	Item statement	Factorial	Proposed factor
No.		load	title
	10. I never know before a concert whether I will	0.745	
	perform well		
	17. From early in my music studies, I remember	0.685	
	being anxious about performing	0.684	
	12. During a performance I find myself thinking	0.634	Self-
First	about whether I'll even get through it	-0.596	
factor	13. My worry and nervousness about my	0.591	
	performance interferes with my focus and	0.567	
	concentration	0.559	
	14. Even in the most stressful performance	0.545	
	situations, I am confident that I will perform well	0.542	
	22. I often prepare for a concert with a sense of		
	dread and impending disaster		
	25. I worry so much before a performance, I cannot		
	sleep		
	18. I worry that one bad performance may ruin my		
	career		
	15. I am concerned about being scrutinized by others		
	7. Even if I work hard in preparation for a		
	performance, I am likely to make mistakes		
Second	23. I often feel that I have nothing to look forward to	0.739	
factor	6. I often feel that life has not much to offer me	0.709	Negative affect
	11. I often feel that I am not worth much as a person	0.676	and situational
	3. I seldom feel in control of my life	0.661	symptoms
	4. I often find it difficult to work up the energy to do	0.588	
	tnings	0.588	
	20. My parents always listened to me	-0.511	
Thind	21. As a clilla, i often felt sau	0.900	Foor of pogative
factor	due to appriety	-0.809	rear of negative
Tactor	0. My parents were mostly responsive to my people	0.794	evaluation
	24. My parents encouraged me to the new things	0.731	
	26. When performing without music, my memory is	0.518	
	reliable		
Fourth	1 Sometimes Lifeel anxious for no particular reason	0.680	Uncontrollability
factor	16. Sometimes I feel worried for no particular reason	0.639	Sheontionability
	5. Excessive worrying is a characteristic of my family	0.572	
Fifth	8. I find it difficult to depend on others	0.748	Unpredictability
factor	2. I find it easy to trust others	0.728	5
	·····	'	

Table 4: Matrix of components after rotation

item. Consistent with Table 5, the normality is met

The precondition to use this analysis is multivariate normality. However, the normal distribution of scales is also mentioned, but it investigates the normality in each and every because the kurtosis column values are outside the +10 and -10. Also, the skewness column is not out of 3+ and 3, so the data distribution is normal and the assumption of distribution normality is met.

Variables	Kurtosis	Critical ratio	Skewness	Critical ratio
Item 7	0.264	1.900	-1.148	-4.126
Item 2	-0.130	-0.932	-1.445	-5.192
Item 8	-0.153	-1.098	-1.195	-4.296
Item 5	-0.112	-0.812	-1.441	-5.180
Item 16	-0.492	-2.887	-1.198	-4.307
Item 1	-0.637	-4.582	-1.001	-3.597
Item 19	-0.579	-4.160	-0.831	-2.985
Item 9	1.085	7.800	0.313	1.125
Item 24	0.474	3.406	-0.996	-3.581
Item 26	1.032	7.419	0.095	0.341
Item 23	0.881	6.334	-0.612	-0.200
Item 6	0.691	4.965	-0.881	-3.166
Item 11	1.724	12.390	1.844	6.627
Item 3	0.589	4.235	-0.917	-3.297
Item 4	0.315	2.267	-1.292	-4.643
Item 20	-0.505	-3.628	-0.919	-3.304
Item 21	0.690	4.961	-0.975	-3.504
Item 10	-0.198	-1.424	-1.134	-4.074
Item 17	0.018	0.126	-1.281	-4.604
Item 12	-0.431	-3.096	-0.890	-3.197
Item 13	-0.039	-0.282	-1.049	-3.770
Item 14	0.548	3.937	-0.781	-2.806
Item 22	0.366	2.633	-1.125	-4.044
Item 25	-0.033	-0.238	-1.354	-4.865
Item 18	0.332	2.387	-1.111	-3.991
Item 15	0.019	0.135	-1.310	-4.709

Table 5:	Measurement	of data	a distribution	normality
				-1

In the next step, the measurement model is plotted consistent with the exploratory factor analysis and the confirmatory factor analysis is performed. The following figure illustrates the measurement model, with the model fit results given in Table 6.





Figure 2: Measurement model of music performance anxiety

Table 6 shows that the fit indices of the measurement model after modifying the model indicate the optimal fit of the model.

Table 6: Fit indicators of music performance anxiety measurement model

Indic	X	D	X ² /	G	AG	RMS	C	PG
ator		f	df/	FI	FI	EA	FI	FI
	438. 011	2 8 6	1.6 89	0.8 80	0.8 52	0.04 7	0.9 42	0.7 17

Upon ensuring that the measurement model had good fit and the exploratory factors were confirmed, the internal consistency of the inventory items was examined. The internal consistency index, i.e., Cronbach's alpha coefficient was calculated to be 0.83. Also, the Cronbach's alpha of the first, second, fourth and fifth factors were 0.87, 0.61, 0.62 and 0.32, respectively. However, concerning the third factor, items 9, 19, 24 and 26 yielded an undesirable Cronbach's alpha of 0.40, which could have been an acceptable value of 0.61, if item 19,

having intense internal consistency with other items, was removed as recommended by the software, Thus, one would conclude that it was better to remove item 19 from the third factor as well as the fifth factor to provide good consistency in general.

Table 7 gives the correlation of the factors with each other and with the total score which indicates a good correlation.

Table 7: Correlation of factors with each other and with the total score

	1	2	3	4	5
1. Music	1				
performance					
anxiety					
2. self-evaluation	**0.894	1			
3. negative affect and	**0.778	**0.533	1		
situational symptoms					
4. fear of negative	**0.368	**0.169	**0.255	1	
evaluation					
5. uncontrollability	**0.674	**0.450	**0.508	**0.272	1

**= significance level (0.001).

I the end, in the first part of the analysis, to calculate the convergent validity, the correlation coefficient of each individual's scores on the Musical Performance Anxiety inventory with the Spielberger State-Trait Anxiety Inventory (STAI) was used.

 Table 8: Correlation coefficient of individual's scores on the Music Performance Anxiety inventory and the Spielberger he State-Trait Anxiety Inventory (STAI)

	1	2	3	4	5	6
1. Stat trait	١					
anxiety						
2. Music	**0.7	1				
performa	45					
nce						
anxiety						
3. self-evaluation	**0.5	**0.8	1			
	85	94				
4. negative affect	**0.7	**0.7	**0.5	1		
and situational	07	78	33			
symptoms						
5. fear of negative	**0.3	**0.3	**0.1	**0.2	1	
evaluation	33	68	69	69		
6.	**0.5	**0.6	**0.4	**0.5	**0.2	1
uncontrollability	98	74	50	08	72	

**= significance level (0.001).

Also, stepwise multiple regression analysis was used to examine the convergent validity of the Music Performance Anxiety Inventory, multiple regression test is based on some assumptions which consist of: 1- The assumptions that the errors are independent of each other; to test this assumption, the Watson-Durbin test was used. One would say that if this test has a value

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ranging from 1.5 to 2, the independence of the observations can be confirmed and the analysis can be performed. The value in the present study was 1.387, indicating the observations was confirmed to be independent; 2- The assumption that errors are normally distributed and have a mean of zero, which is also met in the present study; on the other hand, the errors have a

relatively normal distribution, with the mean error value being very insignificant (close to zero) and the standard deviation close to one (0.975) and 3- The assumption that the independent variables are non- collinear; to examine this, two tolerance and variance inflation factor statistics were used. As given in Table 9, collinearity is noted between the independent variables in the second step; thus, step one of this analysis can be invoked. As a result, with regression analysis tests assumptions being met, this test can be used to predict the music performance anxiety in order to examine the convergent validity.

	a	c	•		1 .
Table 9.	Summary	ot	stepwise	regression	analysis
	Sammary	01	step mise	regression	anaryono

Step	Variable	t	F	R2	R	β	B	.Sig	Collinearity Assumption		Durbin- Watson
١			372.79	0.54	0.740			0.001	variance inflation	Tolerance	vv utsom
	Trait anxiety	19.30				0.74	1.36	0.001	1	1	
			192.61	0.55	0.746			0.001			1.855
٢	Trait anxiety State- anxiety	4.78 2.48				0.49 0.25	0.92 0.46	0.013	0.133 0.133	7.518 7.518	

Table 9 shows that consistent with the regression analysis the Spielberger State-Trait Anxiety Inventory (STAI) can significantly predict music performance anxiety (beta of 0.74). Generally speaking, the music performance anxiety inventory held a higher validity.

Discussion and conclusion

Pambeori et al. (2011) suggested that music performance anxiety is a cause of concern for a majority of musicians, even professional ones. Musicians were found to have similar perceptions and concerns. Anxiety, though reported to be a useful state, involved negative consequences. The prevalence of anxiety in individual performance was greater than that of the group performance. Generally speaking, the impacts of anxiety with performance was found to be associated with its perceived intensity during the performance, as this perceived intensity was modified by the musicians' performance experience and their general sensitivity to anxiety. In sum, this study suggested that the Music Performance Anxiety inventory held a high construct validity. A review of the Kenny Music Performance Anxiety Inventory (2011) and the State-Trait Anxiety Inventory (STAI) yielded 5 factors

consisting in: self-evaluation, negative affect and situational symptoms, fear of negative evaluation, uncontrollability and unpredictability. The findings concluded that the inventory held a high concurrent validity as data analysis revealed a significantly positive correlation between State-Trait Anxiety Inventory (STAI) and Kenny's Music Performance Anxiety inventory. Kenny et al. (2004) concluded that people with high trait anxiety will also experience greater musical performance anxiety. In the meantime, the total score of this inventory, the observed factors of performance anxiety and anxiety evocations saw a higher total score correlation, suggesting a higher construct validity of this inventory. Another finding of the study revealed that the Music Performance Anxiety inventory had a good validity. The internal consistency coefficient of this scale was 0.74. The findings were consistent with those of the Kenny et al. (2004), as the Persian version had been well adapted with the Iranian culture. It should be pointed out that items 2, 9, 14, 20, 24 and 26 should be reversely scored. The findings generally revealed that using music performance anxiety inventory can help screen music performance anxiety among musicians as it can help usher in a new realm for the future studies on music performance anxiety. Kenny and

Osborne (2006) argue that music performance anxiety is a relatively neglected psychological phenomenon that is rarely studied in major psychological journals or textbooks. This subject has, so far, been taken up for adult and amateurs and professional musicians. Thus, there are compelling reasons to deal with music performance anxiety as preventive attention is more focused on conditions that show stability over time and moderate response to existing treatments. Eri Jaycard et al. (2017) concluded that the variables explained 45.6% of the variance of musical performance anxiety in males and 52.1% of the variance in females. Consistent with the findings, it is recommended to standardize a 40-item scale already developed by Kenny (K-MPAI) in the Iranian society to address music performance anxiety problems. To measure more accurate reliability and validity, this scale can be applied to a majority of Iranian musicians.

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	Diana Kenny's Music Fertormance Anxiety invent	ory	
Row	Statement	Never	always
1	I never know before a concert whether I will perform well		
2	From early in my music studies, I remember being anxious about performing		
3	During a performance I find myself thinking about		
5	whether I'll even get through it		
4	My worry and nervousness about my performance		
-	interferes with my focus and concentration		
5	Even in the most stressful performance situations, I am confident that I will perform well		
6	I often prepare for a concert with a sense of dread and		
	impending disaster		
7	I worry so much before a performance, I cannot sleep		
8	I worry that one bad performance may ruin my career		
9	I am concerned about being scrutinized by others		
10	Even if I work hard in preparation for a performance, I am		
	likely to make mistakes		
11	I often feel that I have nothing to look forward to		
12	I often feel that life has not much to offer me		
13	I give up worthwhile performance opportunities due to		
	anxiety		
14	I seldom feel in control of my life		
15	I often find it difficult to work up the energy to do things		
16	My parents always listened to me		
17	As a child, I often felt sad		
18	I give up worthwhile performance opportunities due to		
	anxiety		
19	My parents were mostly responsive to my needs		
20	My parents encouraged me to try new things		
21	When performing without music, my memory is reliable		
22	Sometimes I feel anxious for no particular reason		
23	Sometimes I feel worried for no particular reason		
24	Excessive worrying is a characteristic of my family		
25	I find it difficult to depend on others		
26	I find it easy to trust others		

Diana Kenny's Music Performance Anxiety Inventory