

Investigation of music performance anxiety level in individuals singing in choir

Koroda şarkı söyleyen bireylerde müzik performans kaygı düzeyinin incelenmesi

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ABSTRACT

Fear of appearing before an audience, being evaluated by teachers in examinations, personal characteristics, certain physical conditions of the performance environment, and technical details involving the preparation process for the performance are among the factors associated with music performance anxiety. The aim of this study is to examine the level of music performance anxiety among individuals who sing in choirs. The study group consists of 178 choristers, either amateur or professional, who were accessible to the researcher in 2025 and volunteered to participate in the study. Data were collected using the Kenny Music Performance Anxiety Inventory. The findings of the study revealed that the level of music performance anxiety among individuals singing in choirs was moderate. In terms of the gender variable, it was found that women had higher levels of music performance anxiety than men. Regarding the age variable, it was observed that there was a statistically significant difference at least at one level. Similarly, in terms of the professional experience variable, a statistically significant difference was identified at least at one level. It was determined that the music performance anxiety levels of groups with 1–5 years and 5–10 years of experience were higher than those of individuals with 10 years or more of experience. No significant difference was found in music performance anxiety levels based on the variable of being an amateur or professional choir member. Likewise, with regard to the type of music performed, being a member of a Western music choir or a Turkish music choir did not result in a significant difference in music performance anxiety levels.

Keywords: choir, chorist, performance, anxiety, song

ÖZ

Topluluk karşısına çıkma korkusu, sınavlarda öğretmenler tarafından değerlendirilme, kişisel özellikler, performans sergilenen ortama ait bazı fiziksel koşullar ve performansa hazırlanma sürecini içeren teknik detaylar, müzikte performans kaygısı ile ilişkili olan öğelerden bazılarıdır. Bu araştırmanın amacı: Koroda şarkı söyleyen bireylerde müzik performans kaygısı düzeyinin incelenmesidir. Çalışma grubunu 2025 yılında amatör veya profesyonel korolarda şarkı söyleyen ve araştırmacı tarafından ulaşılabilen, araştırmaya katılmaya gönüllü 178 korist oluşturmaktadır. Araştırmada Kenny Müzik Performans Kaygısı Envanteri ile veri toplanmıştır. Araştırmada koroda şarkı söyleyen bireylerde müzik performans kaygı düzeyinin orta düzeyde olduğu bulgusuna ulaşılmıştır. Cinsiyet değişkeni açısından bakıldığında kadınların müzik performans kaygısı düzeylerinin erkeklerden daha yüksek olduğu bulgusuna ulaşılmıştır. Yaş değişkeni açısından bakıldığında en az bir düzeyde anlamlı farklılık olduğu bulgusuna ulaşılmıştır. Mesleki deneyim değişkeni açısından bakıldığında en az bir düzeyde anlamlı farklılık olduğu görülmektedir. 1-5 yıl ve 5-10 yıl deneyime sahip grupların müzik performans kaygısı düzeylerinin 10 yıl ve üzeri bireylerin kaygı düzeyinden yüksek olduğu tespit edilmiştir. Amatör/profesyonel koro üyesi olma değişkenine göre müzik performans kaygısı düzeyleri arasında anlamlı bir farklılık olmadığı

görülmektedir. Katılımcıların içinde bulunduğu müzik türü değişkeni açısından, batı müziği korosu veya Türk müziği korosu üyesi olmasının ise müzik performans kaygısı düzeyleri arasında anlamlı bir farklılık yaratmadığı sonucuna ulaşılmıştır.

Anahtar kelimeler: koro, korist, performans, kaygı, şarkı

1. INTRODUCTION

Music is a powerful art form that allows people to express their emotions and connect with others. However, going on stage or performing can cause anxiety for some musicians. Music performance anxiety is a state of tension and worry that occurs during or before a musical performance, often triggered by thoughts of making mistakes, being judged negatively, or failing to meet expectations. This anxiety can lead to physical symptoms such as rapid heartbeat, muscle tension, and difficulty controlling breathing, as well as effects like trouble focusing and loss of self-confidence. Performance anxiety can negatively affect both technical skills and the artistic quality of the performance. Therefore, learning ways to cope with anxiety is important for musicians, both for delivering a good performance and for maintaining psychological comfort.

Anxiety

According to Harriman (1970), anxiety is a repetitive, untargeted, pathological fear reaction. Wilde (1995), on the other hand, defines anxiety as the state of feeling threatened and inadequate in a challenging environment.

Anxiety can occur in different places and times. Performance anxiety, which often occurs when an individual performs in front of others, can be seen in many different areas.

Performance anxiety is a condition that occurs with intense cognitive and physical symptoms in individuals from various branches such as theater, music, dance and sports who perform in front of a community or audience (Barbar et al., 2014).

Music Performance Anxiety

Musicians are among the professional groups that experience performance anxiety (Gorges et al., 2007). Music is a performance art. A musician lives a life in which he/she will be on stage and perform at regular intervals throughout his/her life. In other words, performance is a part of a musician's career.

It can be thought that musicians who have to perform continuously as an important part of their career may encounter performance anxiety in this situation. Salmon (1999) explains music performance anxiety as the individual's feeling of anxiety with the thought that his/her performance will be bad in front of the audience (as cited in Fehm & Schmidt, 2006).

"This anxiety that musicians experience during solo, orchestral, soloist or instrumental performances is defined as music performance anxiety" (Ryan & Andrews, 2009).

Nagel explains music performance anxiety as "musicians' fear of possible or actual mishaps that may occur during the performance and the feelings of embarrassment and humiliation they may cause" (Nagel, 1990).

This anxiety is defined as "a combination of three factors: physical arousal (increased pulse rate, dry mouth, sweating, etc.), behavioral reactions (trembling, feeling of weakness, voice trembling, etc.) and fearful cognitive behaviors (loss of concentration, fear of making mistakes, feeling of inadequacy, loss of consciousness, distraction, anticipation of loss of status, etc.)" (Kenny & Osborne, 2006). In the context of music, such symptoms can significantly hinder a performer's ability to deliver a confident and expressive performance, ultimately affecting both technical accuracy and artistic expression.

According to Kenny et al. (2004), "since music performance is a complex process involving well-trained skills such as fine motor skills, coordination, memory, aesthetics, and interpretation, high levels of music performance anxiety can be detrimental to the performer's success". Williamon (2004) states that "in order for a musician to perform to the best of his/her ability, in addition to his/her physical qualifications, he/she should also have good mental health, and that feeling mentally well affects his/her psychomotor skills positively". In this case, it can be said that it is important for a musician to know how to prevent, reduce the impact of, and cope with emotions that hinder performance such as anxiety, stress, and fear in order to perform at the highest level during his/her education and professional life (as cited in Aydın & İşgörür, 2018).

1.1. Purpose of the Study

The aim of this study is to examine the level of music performance anxiety in individuals singing in a choir.

In line with this purpose, the following questions were sought to be answered:

1. What is the level of music performance anxiety in individuals singing in choir?
2. Does the level of music performance anxiety in individuals singing in choir differ in terms of demographic variables (gender, age, professional experience)?
3. Does the level of music performance anxiety in individuals singing in choir differ in terms of being an amateur/professional choir member?
4. Does the level of music performance anxiety in individuals singing in choir differ in terms of music genre?

1.2. Importance of the Study

Since choristers spend a significant portion of their professional lives on stage or in rehearsal, they are highly likely to be exposed to anxiety. This study is important for musicians in terms of determining the anxiety levels of choir singers and making suggestions about anxiety.

2. METHODOLOGY

The model of this research, which was conducted to examine the level of music performance anxiety in individuals singing in choir, is a survey model. "General screening models are screening arrangements made on the whole universe or a group, sample or sample to be taken from it in order to make a general judgment about the universe in a universe consisting of a large number of elements. With general survey models, single or relational surveys can be conducted" (Karasar, 2005). With single survey models, temporal developments and changes can be determined as well as instant situation determinations.

The study group consisted of 178 choristers who sang in amateur or professional choirs in 2025 and could be reached by the researcher and volunteered to participate in the study.

In the study, data were collected with the Kenny Music Performance Anxiety Inventory. The adaptation of the inventory into Turkish was conducted by Banu Özevin Tokinan in 2013. In the adaptation, "It was aimed to share the adaptation of the inventory to Turkish culture by conducting linguistic equivalence, validity and reliability studies. The adaptation study was conducted with 696 students who continue their undergraduate education in the Departments of Music Education of various universities. In the study, as a result of the validity and reliability studies of the 6-point Likert-type inventory, it was determined that the adapted form of the inventory to Turkish consisted of 25 items distributed in five factors. The Cronbach Alpha reliability coefficient of the scale was found to be .895. The item-total correlations of the items ranged from .336 to .651" (Özevin Tokinan, 2013).

Within the scope of the research, the "Personal Information Form" was developed by the researcher to determine the demographic characteristics of the choristers and applied to the choristers; those deemed necessary for the research were selected and used.

Cronbach's Alpha reliability coefficient was used for the reliability of the scale. Cronbach's Alpha coefficient was 0.96 and it was concluded that the reliability of the scale was high.

Table 1

Reliability Analysis

Reliability Statistics	
Cronbach's Alpha	Number of items
0,96	25

As shown in Table 1, the reliability analysis revealed a Cronbach's alpha coefficient of 0.96 for the 25 items included in the scale. According to the commonly accepted thresholds in psychometric research, a Cronbach's alpha value above 0.70 indicates acceptable internal consistency, while values above 0.90 demonstrate excellent reliability (George & Mallery, 2019). Thus, the obtained coefficient suggests that the instrument demonstrates a very high level of internal consistency, meaning that the items are measuring the same underlying construct in a coherent and stable manner. Consequently, the scale can be considered highly reliable for use in further analyses.

2.1. Ethical Approval of the Study

In this study, all the rules specified within the scope of the "Higher Education Institutions Scientific Research and Publication Ethics Directive" have been followed. None of the actions listed under the second section of the directive, titled "Violations of Scientific Research and Publication Ethics," have been committed.

Ethics committee permission information:

The name of the committee that conducted the ethical assessment: XXXX University Ethics Committee

Date of the ethical assessment decision: 16.01.2025

Ethics assessment document number: 2025/01

3. FINDINGS

3.1. Findings related to music performance anxiety level in individuals singing in choir

Table 2

Descriptive Statistics

	N	Lowest	Highest	Mean	Std. Dev.
Anxiety Total Point	178	,00	144,00	59,8876	31,85381
Valid N (listwise)	178				

As indicated in Table 2, the descriptive statistics for the Anxiety Total Score indicate that the data were obtained from a sample of 178 participants. The scores ranged from a minimum of 0.00 to a maximum of 144.00, suggesting a broad distribution of anxiety levels within the sample. The mean score was calculated as 59.89, pointing to a moderate average level of anxiety among the participants. However, the relatively high standard deviation of 31.85 reveals substantial variability in anxiety scores, indicating that individual differences in experienced anxiety were considerable. This wide range and dispersion of scores may reflect diverse psychological profiles within the sample or varying external factors influencing anxiety levels.

Table 3

Classification of Music Performance Anxiety

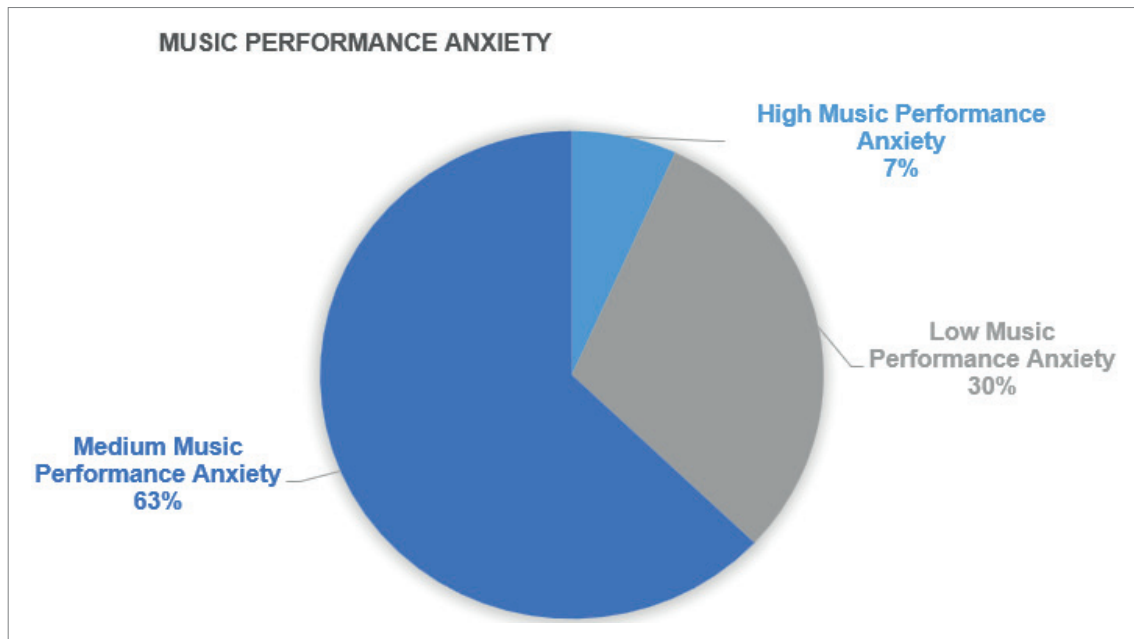
	Frequency	Percent	Valid Percent	Total Percent
High Music Performance Anxiety (105p and above)	12	6,7	6,7	6,7
Medium Music Performance Anxiety (104p -46p)	112	62,9	62,9	69,7
Low Music Performance Anxiety (45p and below)	54	30,3	30,3	100,0
Total	178	100,0	100,0	

Table 3 shows that, the frequency distribution of Music Performance Anxiety (MPA) levels among the 178 participants reveals that a majority of individuals fall within the medium anxiety range. Specifically, 112 participants (62.9%) reported medium levels of MPA, corresponding to scores between 46 and 104. A smaller portion of the sample, 54 individuals (30.3%), exhibited low levels of performance anxiety with scores of 45 or below, while only 12 participants (6.7%) demonstrated high levels of MPA, with scores of 105 and above. These findings suggest that while a significant portion of the sample experiences moderate anxiety in performance contexts, high levels of MPA are relatively uncommon. The distribution also highlights

that nearly one-third of the participants report low anxiety, indicating a varied emotional response to music performance within the group.

Graph 1

Music Performance Anxiety



When Graph 1 is examined, it is seen that 62.92% of the individuals singing in the choir have moderate music performance anxiety as the highest rate related to music performance anxiety levels. Secondly, it is seen that 30,34% have low level music performance anxiety. The most thought rate was determined as 6.74%, indicating high music performance anxiety.

3.2. Findings related to the examination of music performance anxiety level of individuals singing in choir in terms of demographic variables (gender, age, professional experience)

Anxiety Level by Gender

Table 4

Level of Anxiety by Gender

	Gender	N	Mean	ss	t	df	p	Direction
Anxiety Total Scores	Male	82	52,1220	29,41377	3,24821	176	0.002	Female> Male
	Female	96	66,5208	32,50068	3,31709			

Table 4 shows that, while the average music anxiety score of women is 66.52, the average anxiety score of men is 52.12. There is a significant difference between music anxiety scores according to gender. According to this result, women have higher music anxiety than men.

Anxiety Level by Age

Table 5

Level of Anxiety by Age

Anxiety Total Scores						
	Sum of Squares	sd	Mean Squares	F	Sig.	Direction
Between Groups	17128,254	2	8564,127	9,225	,000	18-24 > 25-34 = 35 and above
In Group	162467,498	175	928,386			
Total	179595,753	177				

As demonstrated in Table 5, there is at least one significant difference in terms of age variable ($p=0.000$). Post Hoc (tukey) test was used to determine which group was in favor of the difference. According to the test results, the group with the highest anxiety level is the 18-24 age group (72.61 p). The anxiety level of the 18-24 age group is higher and statistically significant than both the 25-34 and 35 and over age groups. On the other hand, there was no significant difference between the anxiety averages of the 25-34 age group (66.44 p) and the 35 years and over age group (51.29 p).

Anxiety Level According to Professional Experience

Table 6

Anxiety Level According to Professional Experience

Anxiety Total Scores						
	Sum of Squares	sd	Mean Squares	F	Sig.	Direction
Between Groups	11851,219	2	5925,609	6,182	,003	Year = 5-10 Year > 10 Year and above
In Group	167744,534	175	958,540			
Total	179595,753	177				

According to the Table 6, there is at least one significant difference in terms of professional experience ($p=0.003$). Post Hoc (tukey) test was used to determine which group was in favor of the difference. According to the test results, the group with the highest anxiety level is the 5-10 years group (72.37 p). There is no significant difference between the groups with 1-5 years and 5-10 years of professional experience. On the other hand, the anxiety scores of the group with both 1-5 years and 5-10 years of experience are higher and statistically significant than the anxiety level of individuals with 10 years and above.

3.3. Findings related to the examination of music performance anxiety level in individuals singing in choir in terms of being an amateur/professional choir member

Table 7

Anxiety Level According to the Variable of Being an Amateur/Professional Choir Member

	Type	N	Mean	ss	t	df	p	Direction
Anxiety Total Scores	Professional	68	59,16	29,86	-0,238	176	0.812	Professional=Amateur
	Amateur	110	60,33	33,14				

As indicated in Table 7, while the average music anxiety score of professionals is 59.16, the average anxiety score of amateurs is 60.33. There is no significant difference between music anxiety scores according to the variable of being an amateur/professional choir member.

3.4. Findings related to the examination of music performance anxiety level of individuals singing in choir in terms of music genre variable

Table 8

Anxiety Level According to Music Genre Variable

	Type	N	Mean	ss	t	df	p	Direction
Anxiety Total Scores	Western Music Choir	66	65,07	31,66	1,677	176	0,095	Western Music Choir = Turkish Music Choir
	Turkish Music Choir	112	56,83	31,71				

According to the findings presented in Table 8, while the average music anxiety score of the Western Music Choir was 65.07, the average anxiety score of the Turkish Music Choir was 56.83. There is no significant difference between music anxiety scores according to the music genre variable.

4. CONCLUSION, DISCUSSION AND RECOMMENDATIONS

In the study, it was concluded that the level of music performance anxiety in individuals singing in the choir was at a moderate level. Of the study group, 62.92% had moderate music performance anxiety and 30.34% had low music performance anxiety. In this case, it is seen that 93.26% of the individuals do not have high anxiety. Only 6.74% of the individuals had high anxiety, which corresponds to only 12 individuals out of the study group of 178 people.

As a result of examining the level of music performance anxiety in individuals singing in the choir in terms of demographic variables (gender, age, professional experience);

In terms of the gender variable, it was concluded that women had higher levels of music performance anxiety than men. In line with the findings, there is a significant difference between music anxiety scores according to gender. While the average music performance anxiety score of women is 66.52, the average music performance anxiety score of men is 52.12.

In terms of age variable, it was concluded that there was a significant difference at at least one level. The group with the highest level of music performance anxiety is the 18-24 age group. It was concluded that the music performance anxiety level of the 18-24 age group was higher than both the 25-34 age group and the 35 and over age group.

In terms of the professional experience variable, it is seen that there is a significant difference at at least one level. The group with the highest level of music performance anxiety was the 5-10 years group.

As a result of examining the level of music performance anxiety in individuals singing in choir in terms of the variable of being an amateur/professional choir member, it was concluded that there was no significant difference between the levels of music performance anxiety according to the variable of being an amateur/professional choir member.

As a result of examining the level of music performance anxiety in terms of music type variable, it was concluded that being a member of Western music choir or Turkish music choir did not create a significant difference between the levels of music performance anxiety.

5. DISCUSSION

The results of the study reveal that the majority of choir singers experience moderate levels of music performance anxiety, with only a small proportion (6.74%) demonstrating high levels of anxiety. This finding suggests that, although performance anxiety is present, it does not typically reach levels that might severely hinder performance for most choristers. This aligns with previous research indicating that moderate anxiety can sometimes serve as a motivational factor, enhancing focus and preparation (Kenny & Osborne, 2006).

When demographic factors are examined, gender emerges as a significant variable, with women reporting higher levels of music performance anxiety than men. The average scores—66.52 for women and 52.12 for men—suggest that gender-related differences may stem from variations in self-perception, social expectations, or coping strategies, as highlighted in earlier studies on performance-related anxiety (Ryan & Andrews, 2009).

Age is also a significant factor, with the youngest group (18–24 years) showing higher anxiety levels compared to older participants. This may reflect differences in stage experience, emotional regulation, and professional identity formation. Similarly, professional experience is linked to anxiety levels, with the 5–10 years group reporting the highest anxiety. This finding could be interpreted as a result of heightened performance demands during mid-career stages, when expectations for technical and artistic excellence are particularly high.

Interestingly, no significant differences were found based on amateur or professional status, or between Western and Turkish music choir membership. This suggests that the core experience of performance anxiety in choral singing may be more strongly influenced by individual psychological and experiential factors than by the specific musical tradition or formal status within the choir.

Recommendations

Based on the findings of the study, several recommendations can be made to address music performance anxiety among choir singers. Regardless of musical style or professional status, choir members may benefit from structured performance anxiety management programs that incorporate techniques such as controlled breathing, cognitive restructuring, and mindfulness-based stress reduction. Given that female choristers exhibited higher anxiety levels, gender-sensitive interventions focusing on self-efficacy, confidence-building, and social support are advised. For younger singers, particularly those in the 18–24 age group, mentorship programs and increased stage experience opportunities could help develop resilience and reduce performance-related stress early in their careers. Similarly, the elevated anxiety observed among individuals with 5–10 years of professional experience suggests a need for mid-career development initiatives that balance performance expectations with mental well-being. Finally, choir institutions should adopt inclusive policies that normalize open discussions about performance anxiety, enabling members to seek support without fear of stigma, thereby fostering both artistic growth and psychological well-being.

Ethical approval

The study was approved by Batman University Ethics Committee (date: 16.01.2025, number: 2025/01).

Author contribution

Study conception and design: YK; data collection: YK; analysis and interpretation of results: YK; draft manuscript preparation: YK. Author reviewed the results and approved the final version of the article.

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Conflict of interest

The author declare that there is no conflict of interest.

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