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Evaluation of Music Performance Anxiety in Portuguese Classical Musicians

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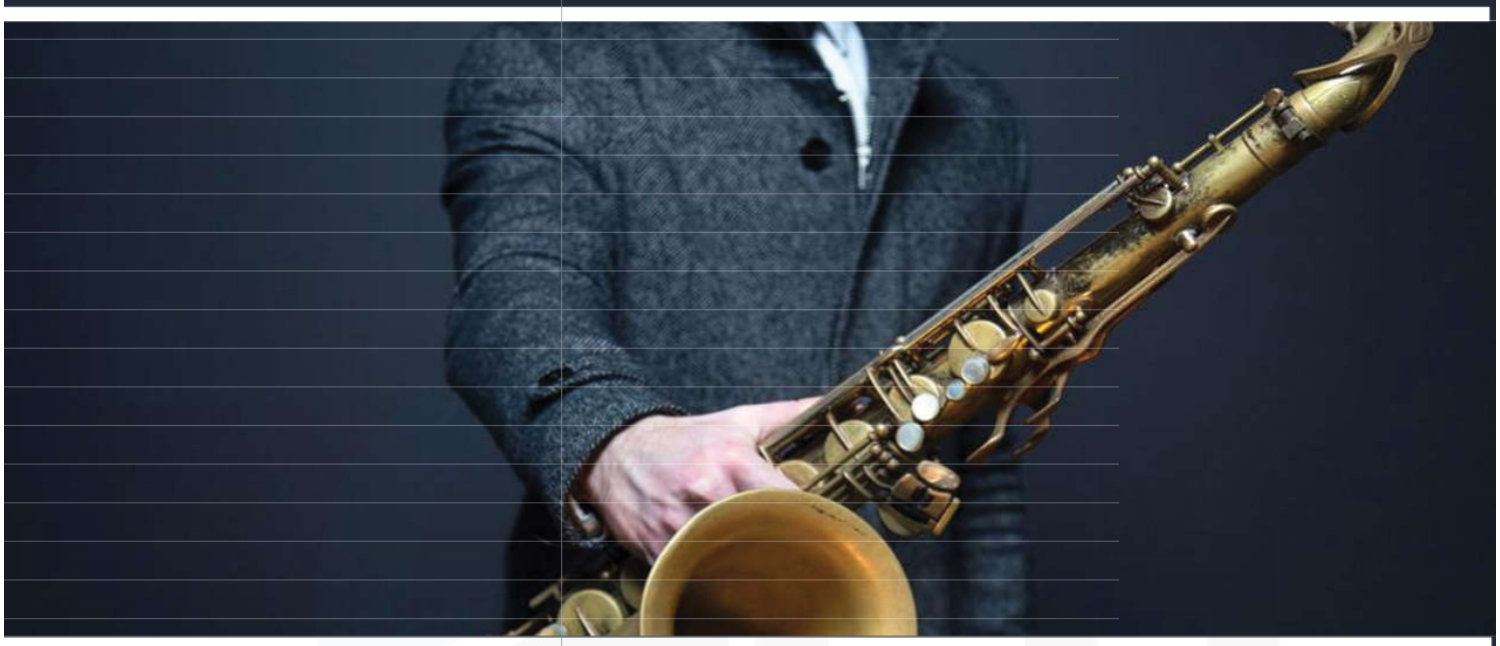

ABSTRACT

Music performance anxiety is a problem that affects musicians, potentially generating psychological and physiological symptoms that may sometimes be debilitating, and in many situations interfering with the quality of their performances. The present study aims to quantitatively analyze the levels of music performance anxiety of classical music teachers, singers and instrumentalists who are professionally Active either on mainland Portugal and or in its autonomous regions. We carried out a questionnaire survey in which professional musicians and students (n=188) participated voluntarily. The results revealed that 86.7% of Respondents also reported recourse to drugs, alcohol and psychotropic substances to deal with the problem. We conclude that music performance anxiety afflicts most musicians and that it would be highly pertinent to carry out further research in order to better grasp the extent and depth of this problem.

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INTRODUCTION

The Kenny (2016) defines anxiety as an emotion that may arise whenever we feel threatened by challenges susceptible to testing our abilities.

In the late nineteenth century, some musicians began to resort to psychotherapy consultations. Gustav Mahler and Bruno Walter consulted Sigmund Freud. Meanwhile, Sergei Rachmaninov, Robert Schumann and Anton Bruckner also consulted psychotherapists (Ostwald, 1987).

> Among the renowned musicians who have admitted to suffering from music performance anxiety arerenowned stars such as Maria Callas, Enrico Caruso, Pablo Casals, Leopold Godowsky, Vladimir Horowitz, Ignacy Paderewski and Sergei Rachmaninov (Valentine, 2002).

The experts correspondingly report that this problem does not only afflict amateurs and inexperienced musicians, but also constrains professional musicians across all levels (Wilson & Roland, 2002).

The literature presents several definitions of performance-related anxiety. The most The American Psychiatric Association (2013: 202) Defines this type of anxiety as a "heightened fear or anxiety about one or more social situations in which the individual is exposed to the possible evaluation of other people."

> According to Gaudry and Spielberger (1971), performance anxiety constitutes an emotional response to a stressful situation, perceived as threatening, or containing demands that are perceived as excessive or unattainable. In turn, ElizabethValentine (2002: 168) defines this anxiety as:

"Experience of a persistent and harrowing apprehension regarding performance skills in public, implying a degree of difficulty too high for the individual's musical aptitude, training and level of preparation."

Furthermore, Wilson and Roland (2002: 47) define music performance anxiety as follows:

"Performance anxiety, sometimes called stage fright, is an exaggerated, often disabling, fear related to public performance. As in any other type of phobia, the symptoms are those produced by the activation of the emergency system of the body, the sympathetic branch of the autonomic nervous system [...]

Dianna Kenny is the author of one of the most recent definitions of music performance anxiety. Thus, Kenny (2009) classifies music performance anxiety as the experience of a marked and persistent anxious apprehension, related to music performance, that arises through biological and/or psychological vulnerabilities, and which manifests itself through affective combinations, cognitive, somatic and behavioral symptoms. Kenny (2016) therefore correspondingly distinguishes this anxiety from social phobia performance.

Zeidner & Mattews (2011) mention anxiety as a process of confrontation that is often inappropriate or counterproductive.

Anxiety related to musical performance is a problem afflicting musicians and, in some cases,represents a debilitating factor that may generate negative impacts on both the standard of performance and the musician's prevailing health status.

The literature commonly reports performance anxiety as not only having negative impacts on the well-being and health of musicians (Owen, 2009; Steptoe, 2001) but that it also impairs performance quality (Craske& Craig, 1984; Brotons, 1994; Fredrikson&Gunnarsson , 1992; Wesner, Noyes & Davis; 1990, Yoshie, Kudo, Murakoshi&Ohtsuki, 2009).

Music performance anxiety may trigger actual physical problems such as accelerated heart beats, physical perspiration, and vision problems. Davis, Merritt and Richards (2001) mention how this specific type of anxiety can further increase muscle tension and provoke tremors. Lee (2002) notes that musical performance anxiety also generates emotional problems such as feelings of guilt and shame. This type of anxiety is often related to fears of failure and negative evaluations of the musicians 'performances (Osborne & Franklin, 2002; Wilson, 1999).

In studies with musicians of all age groups, music performance anxiety has been shown to attain higher levels of prevalence in female individuals (Kenny, 2006; LeBlanc, Jin, Obert, &Siivola, 1997; Osborne & Franklin, 2002; Osborne, Kenny, &Holsomback, 2005; Rae &McCambridge, 2004; Ryan, 2004).

According to Helmut Möller, vice president of the German Association of Psychology of Music and Medicine for Musicians, 25% to 30% of musicians regularly use medicines and alcohol to alleviate anxiety (German classical musicians turning to drugs and alcohol, 2008). Music performance anxiety represents such a serious problem that it has impeded many students from embarking on musical careers (Rae &McCambridge, 2004), while also contributing to career disruptions for many high-level musicians (Clark &Agras, 1991; Rocha, Dias-Neto&Gattaz, 2011).

There are no known studies that demonstrate the levels of prevalence of music performance anxiety in the Portuguese community of classical music teachers, singers and instrumentalists. The present study aims to quantitatively measure the prevalence of the problem in this group of individuals while also providing a comparison both between males and females and between professionals and students. We also obtained figures for the number of musicians who make recourse to medicines, alcohol and drugs to deal with music performance anxiety, as well as a list of the medicines consumed.

Method

The study consisted of a survey that collected quantitative data on the prevalence of musical performancerelated anxietyamong the musicians active in the field of classical musicin Portugal. Survey participants were volunteers. We deployed a questionnaire,accessed via an online platform, as our data collection instrument. This questionnaire was duly subject to testing and validation. We applied closed questions with the questionnaire containing the following:

- ✓ Do you suffer or have you already suffered from music performance anxiety?
- ✓ Do you use or have you ever used medication to deal with music performance anxiety?
- ✓ If you answered yes to the previous question, what was the name of the medication you took?

- ✓ Have you ever consumed alcohol or other drugs (e.g. psychotropic substances) to deal with music performance anxiety?
- ✓ Please indicate your instrument (e.g.violinist, pianist, singer, conductor).
- ✓ Please enter your gender.
- ✓ Please state your age.
- ✓ I am: professional/student.

The degrees of music performance anxiety intensity may vary; there can be mild and non-cumbersome anxiety or this may be an intense and debilitating anxiety that causes moments of suffering. In the first question (Do you suffer or have you already suffered from music performance anxiety?),we opted for the term suffer. The intention was to quantify the individuals with levels of anxiety that represent suffering with this intention duly conveyed to all participants.

We invited professional musicians (orchestra members, soloists, singers and maestros) and students from conservatories and professional schoolsto participate in the survey.

The participation invitations were sent by e-mail to all leading Portuguese institutions, which then subsequently delivered the questionnaire to the participants.

188 musicians aged between 15 and 67 years old responded to the survey.

We carried out descriptive statistical analysis of the data collected through recourse to Excel software. To facilitate the reading of the results, we produced graphs based on a percentage scale of 0% to 100%.

For the first question "Do you suffer or have you already suffered from musical performanceanxiety?" of the 188 participants, 163 responded affirmativelywith the remaining 25 stating that they did not suffer from this disturbance. Thus, in percentageterms, 86.7% of these musicians reported suffering from this type of anxiety while 13.3% said they did not suffer from the problem (Fig. 1).

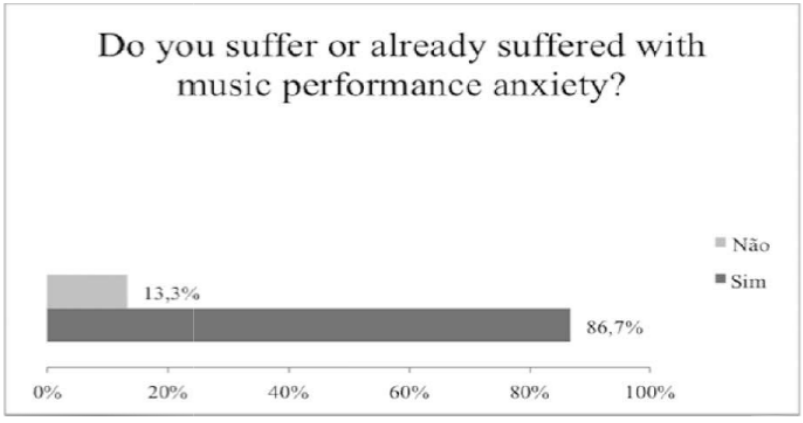

Fig. 1 - Graph of the number of musicians suffering and not suffering from music performance anxiety.

The second question had to do with the prescription and consumption of medication to deal with music performance anxiety ("Do you use or have you ever used medication to deal with music performance anxiety?").

Recourse to medication that blocks the effects of adrenaline is one of the most commonly adopted means by which musicians deal with the anxiety. Reber et al. (2009) report that beta-blockers are drugs that block the absorption of norepinephrine and epinephrine in beta-adrenoreceptors, which decrease the heart rate, reduce cardiac muscle activity, and cause constrictions in the bronchial tubes. Beta-blockers may cause side effects such as asthma attacks, heart problems, nausea or insomnia. According to Brotons (1994), beta-blockers may be effective temporarily when taken before or during performances.

The same author goes on to note that some studies have reported that this type of medication returns improvements to the tuning, to vibrato regularity, to bow control, to control over the dynamics, the precision, the memory, and the rhythm and timing.

Of the musicians participating in this survey, 72 reporting consuming or having consumed medication, with 116 correspondingly not taking or never having taken medication to deal with music performance anxiety (Fig. 2). Of the 72 musicians who reported using medication, there were 37 males and 35 females. Of this same universe of 72 musicians, 47 were professionals and 25 were students. The average age of the professional participants was 39 years of age with the average student age standing at 21.

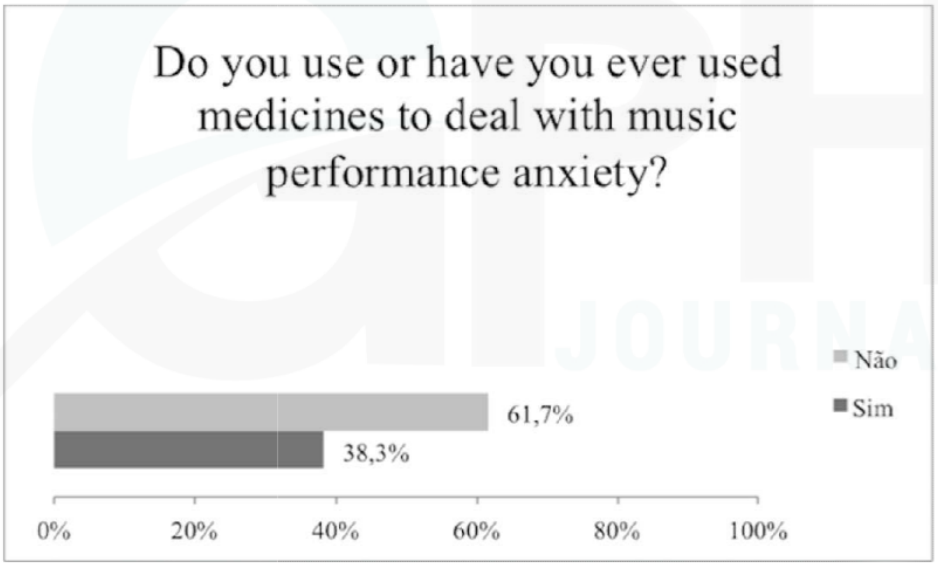

Fig. 2 - Graph of the number of musicians consuming and not consuming medication to deal with anxiety related to musical performance.

The medicine most commonly identify by study participants was a beta-blocker, Inderal®, which contains propranolol hydrochloride as its active ingredient. The medicines musicians mentioned consuming, their active principles, and the number of references were as following:-

- Inderal® (cloridrato de propranolol) n=47
- Valdispert® (valeriana) n=12
- Lexotan® (bromazepam/benzodiazepine) n=4
- Xanax® (alprazolam) n=2
- Victan® (loflazepato de etilo) n=2
- Stressfytol® (passiflora) n=2
- Sexodil® (mexazolam) n=1
- Trasicor® (oxprenolol) n=1
- Olcadil® (cloxazolam) n=1

Thus, beta-blockers (propranolol hydrochloride, oxprenolol), natural tranquilizers (valerian, passiflora), and anxiolytics (bromazepam, benzodiazepine, ethyl loflazepate, mexazolam, cloxazolam) all feature on the list of medicines consumed by musicians participating in this survey.

Fig. 3 presents the ratio of individuals who reported consuming alcohol or other non-pharmacological drugs to alleviate and deal with anxiety symptoms arising from musical performance. Out of the universe of 188 participating musicians, 11 reported consuming alcohol or other drugs (5.9%).

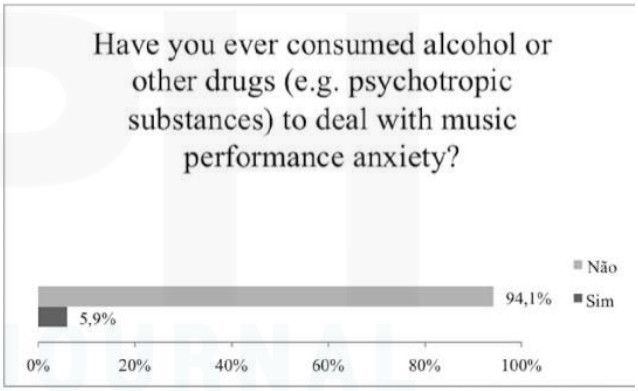

Fig. 3 - Graph of the number of musicians who reported having and not having consumed alcohol or other drugs to deal with musical performance anxiety.

Analysis of the group who responded to the questionnaire reports 100 (53.2%) male musicians and 88 (46.8%) female musicians (Fig. 4).

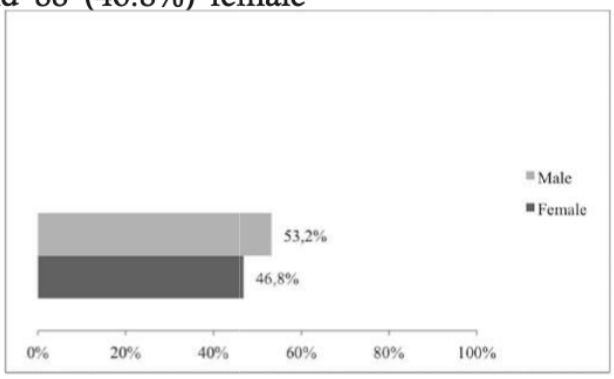

Fig. 4 - Graph representing the genre of participating musicians.

As shown in Fig. 5, 112 professionals (59.4%) and 76 students (40.6%) participated in the survey.

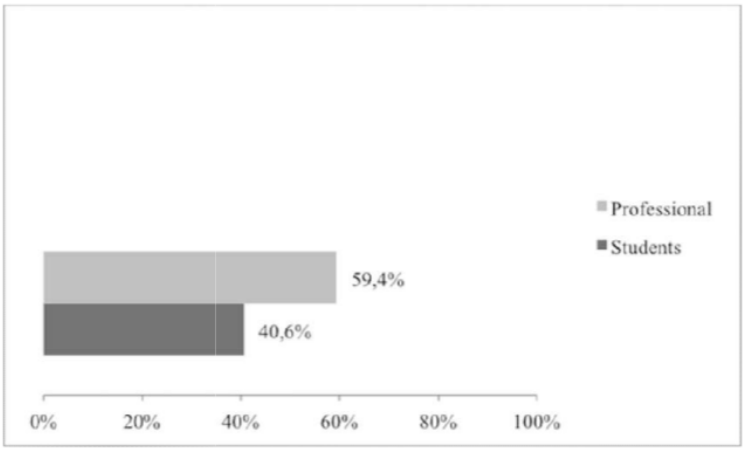

Fig. 5 - Graph representing the ratio of professional musicians and students.

Further analysis of the data collected reveals that 98 of the professional participants reported suffering from music performance anxiety and 14 reported not suffering from the problem. Of the students, 67 responded positively to suffering from anxiety and 9 responded negatively.

Discussion

Fishbein, Midlestadt, Ottati, Strauss and Ellis (1988) studied 2,122 professional orchestra musicians. They concluded that 24% suffered from stage fright, 17% from depression, 14% experienced sleeping disturbances, 13% had acute anxiety and with 10% incurring severe headaches.

In a study of 48 orchestras, Lockwood (1989) concluded that 24% of musicians suffered from stage fright (this study defined stage fright as the most severe form of music performance anxiety), 13% suffered experienced acute anxiety, and with 17% suffering from depression.

The observation of 55 orchestras made by James (1998) reported that 70% of their musicians suffered from intense music performance anxiety, and that this anxiety interfered with the quality of performance by the musicians. Some of those musicians (16%) reported feeling this anxiety more than once a week.

The result of the present study resemble those put forward by Möller. According to Möller, 25% to 30% of German musicians regularly make recourse to medicines and alcohol to deal with anxiety ("German classical musicians turn to drugs and alcohol", 2008). Of the 188 musicians participating in this study, 72 (37.7%) reported using drugs to deal with music performance anxiety. Of these 72 individuals, 46 were professionals and 25 were students. Comparing the data in percentage terms, professionals reported greater drug consumption than students with 64.8% of professionals affirming such recourse against 35.2%students.

The literature reports that among all age groups, the musicians most anxious about musical performance are female (Kenny, 2006; LeBlanc, Jin, Obert, and Siivola, 1997; Osborne & Franklin, 2002; Osborne, Kenny, and Holsomback, 2005; Rae &McCambridge, 2004; Ryan, 2004). The findings of this studypoint to 82% of the 100 male participants reporting suffering from this problem against 88.6% of the 88 female participants. However, we carried out inferential analysis that revealed that this difference in the gender percentages does not attain statistical significance. Considering this finding and contrary to the literature, the present study thus did not observe any significant difference in the prevalence of anxiety among male and female musicians.

In Portugal,the active community of classical musicians is relatively small at least when compared to other countries. Taking into account the size of the country, the number of professional orchestras and existing schools, we can consider the sample of 188 participants as significant. There are three symphonic orchestras and six smaller orchestras. These groups account for in the region of 400 resident musicians. We also identified six higher music schools and a wide range of conservatories.

The following points may represent limitations to the study:

Participant choice was not controlled (the participants were volunteers and therefore only those who felt a need to collaborate because of music performance anxiety may have participated in the survey, whereas those who did not suffer from the problem may have devalued contributing to the study).

- The possibility that some institutions did not pass on the requests for participation to their musicians and students.

- The eventuality that participants submitted false information in their replies to the questionnaire.

- The impossibility of determining whether professional musicians suffered from anxiety when they were students, or whether they only began to suffer from the condition after turning professional.

- The results indicate that 86.7% of individuals suffer from high levels of anxiety. This anxiety can interfere with the quality of their performances and generate physical and mental weaknesses. We therefore conclude that this problem is very common in the community studied and it would thus be useful to carry out further study to better analyze the interrelating issues in both quantitative and qualitative terms.

Given the percentage of musicians turning to pharmaceutical drugs to deal with anxiety (37.7%), we further conclude that it would be important to establish physical and mental training plans to deal with the problem and create means of avoiding the consumption of drugs. Training plans (or strategies for coping with anxiety) should be introduced from the very beginning of the training of musicians.

There are indications of recourse to alcohol and psychotropic substances to deal with music performance anxiety in the community of musicians active in Portugal. We know of no other national studies on this problem. In this study, 5.9% of participants reported using alcohol or other narcotic drugs. Of this 5.9%, we do not know the percentage of individuals who consume alcohol and the percentage of individuals who take other drugs (psychotropic substances), which constitutes another limitation to this study. As the consumption of psychotropic substances is illegal, potential consumers may be inhibited from referring to such practices. This may hinder future studies. We therefore conclude that an in-depth study of this subject would return significant results.

Future studies should also review and improve the items in the questionnaire deployed in this survey.

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