MUSIC PERFORMANCE ANXIETY:
USE OF COPING STRATEGIES BY TERTIARY FLUTE PLAYERS

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Abstract

This article presents part of a master’s degree research, which focused on investigating causes, symptoms, and strategies used by tertiary flute players to cope with music performance anxiety in the performance of an unaccompanied flute work in recital of evaluative character. However, it will present only the results on strategies of twelve flute students from three music colleges in Brazil to cope with music performance anxiety. Seven of participants were male, and five were female. The procedures of collection and analyses of data occurred as in the study by Siw Nielsen (1999), that is, through the behavioral observation of the participants in the recital, and verbal reports by semi-structured interview. Both procedures were recorded in audio and video. The data were analyzed in four steps, the first and fourth quantitatively, and the others qualitatively. The first step aimed to determine the profile of the participants of this research, and at the ending of crossing of the data the total number of causes, symptoms, and coping strategies. The other steps sought to identify causes, symptoms, and coping strategies through the behavioral observation, and verbal reports analyses. Finally, we performed the crossing of the data for comparison between the two data analyses, and arrived at conclusions about some coping strategies. Thus, the positive self-talk was reported as the main strategy used by tertiary flute players to cope with music performance anxiety in this study.

Keywords: music performance anxiety, coping strategies, self-talk, tertiary flute players

1. Introduction

To be a professional, student, or amateur musician, it is necessary to learn to deal with a gamut of emotions, mainly when the activity is directly related to performance. Among emotions, there are those ones in which the performer has the intention of communicating with his/her audience through the music, and some emotions that can influence the musician in his/her music-making. In the second case, during the process of practicing of the repertoire for a concert, musicians can be confronted not only with the technical-interpretation difficulties that need to be learned and overcome, but also with social cultural contexts and deadlines that they are always submitted to, among other elements. Furthermore, there are expectations and desires generated by the performer and by the audience, what can drive the musician to state anxiety. Thus, Salmon (1990) states that the occupational stress inherent in the music profession provides a sensitizing backdrop against which individuals experience the physiological, behavioral and cognitive symptoms that typically accompany anxiety (Salmon, 1990 in Kenny et al., 2003, p. 579).

In musical performance, anxiety is an emotion that can restrict or impair the
performance through its different causes, and symptoms mainly in individuals that do not use to experience this process as in the case of music students. From this evidence, questions arose, such as: How could the tertiary flute players cope with music performance anxiety in the performance of an unaccompanied flute work in a recital of evaluate character? What strategies would the tertiary flute players use to cope with music performance anxiety?

2. Literature Review

The study of the relationship between stimulus (stress) and performance was initially observed by the psychologists Robert M. Yerkes and John Dillingham Dodson. It was represented by the Yerkes-Dodson’s Law (1908), which relates the increase of the performance quality to the physiological and/or psychological stimulus (stress) in different tasks from the simpler to more complex ones. In tasks that are considered simpler, the level of performance can be higher, while in the more complex tasks, the level can be the opposite, if it is compared to a simpler task. The Figure 1 refers to a more complex task that is represented by blue dotted line, and it is known as inverted-U curve.

![Figure 1](image.png)

Figure 1. The graphic of Yerkes-Dodson’s Law (1908) presents the inverted-U curve in blue dotted line, the X-axis refers to stimulus (stress), and the Y-axis to performance.

Yerkes and Dodson concluded that the performance reaches its highest level when the stimulus has moderate levels, and when the level of stimulation becomes very high, the level of performance tends to decrease appreciably. Stimuli (stress) in too low or too high levels tend to impair the level of performance. Steptoe (1983 in Valentine, 2004) confirmed this pattern graphic inverted-U curve in music performance while studying singers (students and professionals), and to request evaluation of emotional tension and quality of performance in different situations. The performance has reached its highest peaks in an intermediate level of tension, and after it has decreased. In simpler tasks the level of performance tends to be higher - as demonstrated by the red line in the graphic above - and after reaching this level, the anxiety level goes down significantly.

According to Andrade and Gorenstein (1998), anxiety is an emotional state with psychological and physiological components that are part of the normal spectrum of human experiences, and driving performances. However, anxiety can be both positive and negative, and it can influence the musical performance through its causes and symptoms.

However, Barlow (2000) has also defined anxiety as:

a unique and coherent cognitive-affective structure within our defensive motivational system. At the heart of this structure is a sense of uncontrollability focused on future threats, danger, or other potentially negative events (Barlow, 2000 in Kenny, 2011, p. 22).

According to Kenny (2011), the anxiety in musical performance may be a defense against experiencing or re-experiencing overwhelmingly painful affect or a fear of the possibility of facing an intolerable future threat, i.e., shame or humiliation following an impaired performance (Kenny, 2011, p. 23). For Cordioli and Manfro (2004), anxiety becomes pathological when it becomes an uncomfortable and unpleasant emotion that arises without external stimulus to explain it, i.e. when the intensity, duration and frequency increase and are associated with social or professional loss (Cordioli & Manfro, 2004 in Jarros, 2011, p. 20).

2.1. Causes of Music Performance Anxiety

According to Valentine (2002, p. 172), three factors contribute to anxiety in musical performance: the person, the task and the
2.2. Symptoms of Anxiety

According to Valentine (2004), symptoms can be classified into three types: physiological, behavioral, and mental (Valentine, 2004, p. 168). For Lehmann et al. (2007, p. 149), physiological symptoms, and cognitive behavior are interrelated and occur simultaneously during the preparation and performance of a musical work.

For Marshall (2008), physical/physiological symptoms of anxiety experienced during the performance are similar to those experienced in any stressful situation (Marshall, 2008, p. 9). Among the physiological symptoms in response to the excessive excitation of automatic nervous system are nervousness, headache, increased heart rate, palpitations, shortness of breath, hyperventilation, dry mouth, sweating, nausea, diarrhea and dizziness. Valentine (2004) comments that the behavioral symptoms may take the form of signs of anxiety such as shaking, trembling, stiffness, dead-pan expression, or impairment of the performance itself (Valentine, 2004, p. 168-169). Steptoe (2001) adds other signs such as the difficulty in maintaining posture, natural movement and technical failures (Steptoe, 2001, p. 295). These symptoms can exude clear signals to the audience that the performer is nervous or actually impair the performance itself (Williamson, 2004, p. 11). Mental symptoms can be classified into cognitive and emotional. Cognitive symptoms consist of loss of concentration, distraction, memory failure, inadequate cognition, incorrect interpretation of the score, among others (Steptoe, 2001, p. 295). Negative thinking, according to Williamson (2004), is often associated with overidentification of self-esteem and self-worth with performance success (Williamson, 2004, p. 11). Emotional symptoms arise from feelings of anxiety, tension, apprehension, dread or panic, which form the core experience of anxiety for many musicians (Steptoe, 2001, p. 295).

2.3. Coping Strategies for Music Performance Anxiety

According to Weinstein and Mayer (1986), learning strategies are:

Behaviors and thoughts that a learner engages in during learning and that are intended to influence the learner’s encoding process. Thus, the goal of any learning strategy may be to affect the learner’s motivational or affective state, or the way in which
the learner selects, acquires, organizes, or integrates new knowledge (Weinstein & Mayer, 1986, p. 315).

Jørgensen comments that strategies are usually consciously applied by the musician but may become automatic with repetition. The author maintains that every practitioner – from the student to the professional musician – must have a thorough knowledge of his or her repertoire of strategies and must be able to control, regulate, and exploit this repertoire (Jørgensen, 2004, p. 87).

For Nielsen (1999), a strategy involves thought and behavior likewise. The author states that it is not just a ‘pure’ cognitive information process, but consists also of different forms of action directed towards learning material (Nielsen, 1999, p. 276). From definition of learning strategies of Weinstein and Mayer, Nielsen defined two ‘objects’ that learning strategies intend to influence: (a) the learner’s motivational or affective state, and (b) the way the learner selects, acquires, organizes, or integrates new knowledge (Nielsen, 1999, p. 276). Similarly, Dansereau (1985) defined strategies intended to operate to the same two ‘objects’ as: primary and support strategies. Support strategies are used to maintain a suitable state of mind, which consist in maintaining concentration, mastering anxiety, establishing motivation and securing the efficient use of time (Dansereau, 1985 in Nielsen, 1999, p. 277).

According to Papageorgi et al. (2007, p. 90), strategies that musicians used to cope with anxiety may be important in how successful they are at controlling physiological arousal and alleviating the potential maladaptive effects of anxiety. Papageorgi (2007 in Papageorgi et al., 2007, p. 90) commented that research has indicated that students experiencing adaptive music performance anxiety use a combination of coping strategies focusing on adequate preparation maintain a positive attitude to the performance concentrating on communication with the audience and enjoyment of the music. Therefore, this article focuses only on support strategies, which can be divided into cognitive, behavioral, cognitive-behavioral, self-help, and other strategies to cope with music performance anxiety.

### 2.3.1. Cognitive Strategies

Cognitive strategies are supported by cognitive psychotherapy branching itself in other three ones: stress inoculation, positive self-talk, and the use of imagery (Kenny, 2011, p. 186). These strategies will be presented synthetically below.

The principal focus of cognitive therapy is identifying examining, and modifying maladaptive thinking styles through the process of teaching new skills such as rational responding, objective self monitoring, formulating and testing personal hypotheses, behavioral self-management, and problem solving (Newman & Beck, 2010 in Kenny, 2011, p. 183). According to Kenny (2005, p. 185), cognitive therapy is more concerned with changing faulty thinking patterns that give rise to maladaptive behaviors, such as excessive muscle tension, avoidance of the feared situation, or impaired performance. A particular manner of cognitive restructuration may be included in the therapeutic programs what is called by stress inoculation (Meinchenbaum, 1985 in Wilson 1999, p. 241). Stress inoculation aims to replace the negative thoughts that possibly will be part of a given situation by positive ones, which will anticipate the anxiety symptoms. Thoughts are constantly and rarely noticed, but they are powerful enough to create the most intense emotions. The internal dialogue has been called ‘self-talk’ by rational emotive therapist Albert Ellis, and ‘automatic thoughts’ by cognitive theorist Aaron Beck (Dunkel & Dunkel, 1989, p. 87). For Kenny (2011), self-talk is a related strategy in which the performer focuses on his/her internal dialogue to identify negative self-statements, and substitution these with more realistic, positive self-statements (Kenny, 2011, p. 186). After self-talk, there is the use of imagery that according to Salmon (1991), in the cognitive domain, the performer may reinterpret autonomic arousal as normal, performances-enhancing excitement rather than as a signal for an impending performance disaster (Salmon, 1991 in Kenny, 2011, p. 186). In the behavioral domain, the performer may be asked to visualize an anxiety-provoking performance situation such as an audition and rehearse in
imagination, confronting the situation adaptively (Kenny, 2011, p. 186).

### 2.3.2. Behavioral Strategies

Behavioral strategies are supported by behavioral psychotherapy, and its strategies that are used in studies as: systematic desensitization, progressive muscle relaxation, and counter conditioning (Kenny, 2011, p. 181). Behavior therapy refers to the techniques based on classical conditioning, devised by Wolpe (1958) and Eysenck (1960) to treat anxiety. In current practice, the terms ‘behavior therapy’, ‘behavior change programs’, and behavior modification’ are used interchangeably to denote therapeutic programs based on the principles of learning theory (Kenny, 2011, p. 179-180). Behavioral therapies focus primarily on changing the dysfunctional behaviors that arise when people feel anxious. Wilson (1999, p. 239) explained one of the techniques used in behavioral therapy is the systematic desensitization, which emphasizes the need for gradual exposure to the object of fear while maintaining a relaxed state. Through relaxation techniques musicians learn to recognize the feelings of deep relaxation, a sense of weight, loss of muscle tension and calm, then trying to recreate those feelings in stressful situations. The relaxation exercises are usually done gradually with the musician to relax through the muscle groups, until the whole body is relaxed, and are simple ways to achieve a state of relaxation. Slow and deep breathing is associated with sleep and the body begins to relax (Meharg, 1988). Breathing is also considered a strategy of self-help, which may be associated with the practice of yoga or even the breathing exercises designed to woodwind and brass players in general that aims to work capacity and control of air emissions.

### 2.3.3. Cognitive-Behavioral Strategy

The cognitive-behavioral strategy consists of cognitive-behavioral psychotherapy, which comprises the strategies used by both cognitive and behavioral psychotherapies. The most cognitive-behavioral therapies interventions have four major components. There are: (i) exposure to thoughts, objects, situations, and bodily sensations that are not dangerous but are feared, avoided, or endured with great distress; (ii) training in basic stress-management techniques; (iii) application and training in cognitive therapy techniques; (iv) training in specific skills that constitute areas of specific individual concern or weakness (Sadock, Sadock, & Ruiz, 2009 in Kenny, 2011, p. 187).

### 2.3.4. Self-Help Strategies

According to Kenny (2011, p. 278), the self-help strategies consist of meditation, breathing exercises, physical exercises, yoga, among others. Thus, we need to understand what constitutes synthetically each of these strategies. Meditation is a disciplined practice that cultivates concentration and mindfulness. The purpose of meditation is to learn to experience life fully as it unfolds – moment by moment. Through the practice of meditation, one can develop greater calmness, clarity and insight in facing life’s experiences and in turning them into occasions for learning, and thus deepening one’s wisdom (Kabat-Zinn & Santorelli, 1999 in Lin et al., 2007, p. 140). According to Stencel et al. (2012, p. 40), studies on the influence of staying in good physical condition and with healthy habits and preparation for performance has been little discussed. Greco & Ray (2004 in RAY, 2009, p. 169) conducted a thorough study and found that “the singers and wind instrumentalists musicians are more concerned with the effects of food on their performance on stage”, but only on the eve of performance and not in acquiring healthy eating habits.

### 2.3.5. Other Strategies

Among other strategies to cope with music performance anxiety are Alexander technique, biofeedback, hypnotherapy, besides pharmacotherapy, that is, anxiolytics drugs that operate in the emotional center of the brain in reducing the acquisition and expression of the conditioned emotional
responses (Wilson, 1999, 238). Alexander technique is a method that aims to increase body awareness through movement reeducation. The body reeducation and movements are encouraged through exercises that seek to correct body posture and the correct positioning of the head relative to the trunk as well as the observation of muscle work aiming to accomplish daily tasks with the least possible effort. Although the technique has not been developed with the aim of directly reducing anxiety in musical performance, researchers attest to its effectiveness in controlling heart rate, strengthening a positive attitude on performance and level of reported anxiety in musicians (Valentine, 2004 in Lehmann et al., 2007, p. 150-151). The treatment is accomplished via biofeedback through of the using monitoring devices with visual displays, musicians are made aware of the physiological responses their bodies are exhibiting (e.g., accelerated heart rate, higher skin temperature, increased tension in muscles). When they successfully employ relaxation techniques and other coping strategies, they have the benefit of seeing the positive results in physiological measures (Lehmann et al., 2007, p. 150).

Hypnotherapy seeks to suggest emotional states desirable to the patient. It is a kind of psychotherapy that facilitates suggestion, reeducation and analyses personnel seeking details of past situations (memory regression) that could explain their emotional difficulties and/or social at the moment. And, beta blockers are drugs that act on the body's physiological control, reducing the action of adrenaline in the bloodstream. It has been used by professional musicians, often without medical supervision, to control anxiety in musical performance.

It is important to highlight that all strategies has been presented above are available to the musician to cope with music performance anxiety. The using of strategies combined with specific treatments may reduce the negative effects of anxiety. On the other hand, it is important to emphasize that moderate rates of anxiety also have beneficial effects on music performance, making the performance more vivid, true and real.

It is accountability of the aware interpreter your personal process and based in your daily practice to find mechanisms that may assist in your physical, behavioral, cognitive and emotional balance.

3. Method

This study has a qualitative approach, primarily by enhancing the description and interpretation of data, and the subjectivity of the individuals, that is, both the researcher and the participant of the investigation. In order to facilitate the categorization the sample, demographic data of the participants were treated by descriptive statistic, aiming the description of investigated population. A convenience sampling of non-probabilistic nature was used for this study, which participants were selected based on their presumed similarity with the useful population and in its availability (Rea & Parker, 2002, p. 150). Some parameters were outlined for this research as participants, task and situation of music performance, and the procedures of collection and analyses data. These parameters will be described below.

3.1. Participants

All participants were flute players enrolled in Bachelor of Music – Flute Performance from three music colleges in Brazil. In total, 12 flute players participated integrally in the study, 5 from State University of Minas Gerais, 5 from Faculdade Cantareira, and 2 from Federal University of Pelotas. Moreover, three flute players had only participated in the first stage of collection data, and then they abandoned the research. From twelve participants, 7 were males and 5 were females. However, it is important to note that results of this research will not be treated on the basis of gender. Other demographic data that contributed to determine the profile of the participants were average of age, years of flute practice, and the semester they were attending at that moment. The average age of the participants was approximately 23 years old, and the youngest student reported to be 18; and the oldest, 34.
The average years of flute practice was about 8 years among participants. These same flute players were attending different semesters in the music colleges which ranging between the first and seventh semester.

3.2. Task and Situation of Music Performance

In order to investigate only, and exclusively the tertiary flute players in their musical performance, the researcher asked the professors of flute from the music colleges to guide their respective students in the choice of a work from unaccompanied flute repertoire. It should be realized according to the evaluation of professor on the technical-interpretative difficulties of each flute players. After the choice, each participant should prepare the unaccompanied flute work, that is, solve the technical-interpretative difficulties during the semester with your professor of flute. Meanwhile, three participants chose an unaccompanied flute work that had been studied by them before, and its study was retaken in the semester in which the collection data occurred.

The construction of music performance situation for this research was supported on some situations pointed by Hamman that according to the author, can allow the susceptibility of the performer to the action of music performance anxiety. At the same time, we also opted for a situation that is very familiar to music students, thus the recital was chosen as more adequate situation for the research. However, other characteristics were added to it as evaluative, and the presence of an audience that comprised the researcher, professor of flute, and other flute students.

3.3. Procedures of Collection and Analyses Data

The procedures of collection and analyses of data occurred as in the study by Siw Nielsen (1999), that is, through the behavioral observation of the participants, and verbal reports. Thus, the first stage refers to the recital, and the second one to the semi-structured interview. The recital was realized according to the characteristics mentioned above, that is, the performance of an unaccompanied flute work that was chosen and studied by the participant in a recital of evaluative character. In the second stage, the semi-structured interview was used for the collection data of verbal reports of the participants after the recital. An itinerary was developed for the semi-structured interview, and it was thought as a support tool for the researcher. Its aim was to solicit the comment of the participants about some topics found in the literature review. The participants were interviewed individually in a room offered by the professors of flute. But the sequence of the interviews was not the same in the recital. At the end of the semi-structured interview, the researcher solicited the participants to the reading and signing of the Statement of Free and Informed Consent. Both stages were recorded in audio and video. First, because it allowed a posterior observation of the behavior of the participants by the researcher in order to dialogue to the data obtained in the second stage. Secondly, it refers to the existence of a visual and corporal language during the interview beyond the emotions and subjectivities between the researcher and the interviewee. The collection data were realized in three dates and different locations. The dates were defined with the professors of flute according to the calendar of the music colleges.

The analyses data occurred in three stages. First the observational analyses of the behavior of the participants in the recital. Secondly, the analyses of verbal reports from the semi-structured interview. Finally, the crossing of data.

The observational analyses were realized in two different moments. First, when the researcher was present in the recital to watch and record it in audio and video, and secondly when the researcher watched the recordings, allowing at least two observational analyses of behavior of the participants. The first analyses contributed to drive some questions during the semi-structured interview from notes of the behavior of the participants in the recital. Therefore, the researcher was responsible for observing and reporting the behavior of the flute players, and the sounding results through
the researcher was able to make hypotheses through analyses observational for symptoms that each participant had experienced in their musical performance, which would be confirmed by the analyses of verbal reports.

In the analyses of semi-structured interview, the researcher sought to identify causes, and symptoms of anxiety reported by the participants. After that, the researcher sought to identify the strategies used by tertiary flute players to cope with music performance anxiety. The structure of the analyses of verbal reports was composed by the presentation of analyses data followed by excerpts of semi-structured interview of the participants.

The crossing of the data consisted of the comparison of data obtained in the observational analyses of the behavior of the participants in the recital and the analyses of the verbal reports of the semi-structured interview. Thus, the hypotheses made by the researcher in the observational analyses were confirmed or not by the reports of the tertiary flute players.

4. Results

Twelve tertiary flute players reported in total eighteen strategies to cope with music performance anxiety. From larger to minor, the following strategies were reported: the positive self-talk that was used by seven participants, breathing exercises by five tertiary flute players. Relaxation and individual study of the flute were reported by four of them, while the concentration was reported by only three participants as a strategy to cope with music performance anxiety. Furthermore, drink water, and the focus on the musical text were strategies used by two tertiary flute players in this research. Finally, some strategies were reported by each participant: physical exercises, body awareness exercises, choice of repertoire, meditation, use of imagery, low level of concern, submission to the stressful situation, memorization, Bach flower, anxiolytics, and the reading of book.

Research focused on investigating causes, symptoms, and strategies used by tertiary flute players to cope with music performance anxiety. Thereunto, professors of flute from three music colleges in Brazil were willing to collaborate to the research through their flute students. The methodology used in this investigation was as in the study by Siw Nielsen (1999), which collect and analyses of data were processed by the observation of the behavior of the participants in the recital, and verbal reports by semi-structured interview.

The main strategy used by tertiary flute players to cope with music performance anxiety was the positive self-talk. This kind of strategy was used by the participants when they were on the stage, and it was related to negative thoughts, fear of failure and judgment, and unresolved technical-interpretative difficulties. The positive self-talk was reported mainly as a strategy for cognitive symptoms. It is important to highlight that one of the participants told to have learned this strategy with your superior during the military training in the army, where he has a career. Secondly, breathing exercises that flute players use to know as a way to help them the production and maintenance of sound. It can be used to reduce the sensation of breathlessness and effects of increased heart rate, and relax. These are some of physiological and behavioral symptoms.

For relaxation were reported the use of the following strategies: physical exercises, breathing techniques, and body movements before and during the performance. The individual study were pointed by tertiary flute players as a strategy to cope with music performance anxiety, that is, practicing of the flute efficiently with the solving of technical-interpretative difficulties, beyond the optimizing of the time through the planning and evaluation of the goals achieved in the end of the study session. This strategy should be closely linked to technical-interpretive problems occurred in the recital.

Drink water is related to dry mouth, which is a physiological symptom of anxiety. However, this strategy was reported by four tertiary flute players, though some of them had drunk water when took the stage, but did
not report in the semi-structured interview as a coping strategy for music performance anxiety. The focus on musical text was a strategy to cope with a cognitive symptom that is characterized by the lack of concentration.

Physical exercises, body awareness exercise, meditation, use of imagery, low level of concern, Bach flower, anxiolytics, and the reading of book are strategies that were closely related to cope with physiological and behavioral symptoms of music performance anxiety. The choice of repertoire was reported as a strategy to cope with music performance anxiety that comes from the task. The submission to stressful situation was a strategy reported by a tertiary flute player that has used it to become confident in different musical performance situations as: masterclass, recital, audition, etc.

Strategies as cognitive, behavioral, and cognitive-behavioral therapies were not mentioned by the flute players or even Alexander technique, biofeedback, yoga, etc. However, we cannot state the reasons for not using these other coping strategies. It is important to highlight the Participant 7 presented the larger coping strategies repertoire for music performance anxiety among them. At the same time, the coping strategies repertoire of each tertiary flute player did not contemplate all causes and symptoms had been reported by them.

References


