

Mindfulness Treatment Methods for Social Performance Anxiety among Musicians

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Abstract: Music performance anxiety often seeps into the minds of many musicians regardless of their age, gender, or race, especially in the realm of classical music. Due to its strict nature, many musicians often cope with social anxiety disorder (SAD) due to severe levels of performance anxiety in an effort to achieve perfection. The excessive criticism musicians place on themselves has led many performers to become reliant on prescription drugs. As an alternative to drugs, a number of musicians and researchers alike have begun to suggest alternative treatment methods. Mindfulness practice, as studied by Diaz, decreased mental distraction, increased awareness, and increased focus. Acceptance and commitment therapy (ACT) is another method in which the goal is not to reduce symptoms of MPA, but rather focus on improving performance quality. At last, the growth mindset helps performers accept that failure is a part of the learning process and that effort and persistence is a key component to success with little regard of talent and natural abilities. At end, the review of the literature revealed a need for further research regarding performance anxiety among musicians as well as alternative treatment methods to prescription drugs.

Keywords: social anxiety disorder, performance anxiety, classical musicians, mindfulness.

I. INTRODUCTION

Perfectionism is the desire to perform at an exceptionally high level while also being hyper-critical of one's performance. This is a very common disposition among musicians of high caliber. Perfectionistic strivings in general are viewed as positive, since it is often the result of intrinsic motivation and pushes people to exhibit behaviors related to their goal; however, perfectionistic strivings can lead people to become highly unsatisfied with themselves regarding their level of skill, which creates unnecessary impairments in how they view their musical performances and a heightened fear of making mistakes.¹ It is common for doctors to prescribe medicine to musicians to cope with their performance anxiety. However, alternative solutions which relate to teaching methods and mindful therapy techniques should be considered. This paper aims to touch upon current research related to performance anxiety and mindfulness techniques for treatment.

II. BACKGROUND

Music performance anxiety (MPA) is the result of three types of perfectionism: self-oriented perfectionism (SOP), other-oriented perfectionism (OOP), and socially prescribed perfectionism (SPP).² These three types of perfectionism relates to the development of self-derived attitudes regarding personal performance, the expectation to succeed from others, and the perceived perfection of other musicians, respectively. This all leads one to think that they are incompetent in their music playing abilities. Perfectionism, prevalent in early adolescence, builds pressure and MPA which usually comes in three ways: pressure from self, excessive arousal, and inadequate preparation.² For example, orchestral players tour around the world, which leaves them little time to practice. Performing excessively with minimal practice time forces players to sight-read a substantial amount of repertoire, which does not give them enough time to digest the material. Inadequate preparation makes performers feel stuck and afraid to play live because their attention will be focused on making sure the notes are correct.²

The symptomatology of MPA typically resembles the fight or flight response.³ Humans are unable to differentiate between physiological and psychological threats and in both cases will respond with rapid heart rate, muscle tension,

sweating, tremor, dry mouth and more. There have been minimal studies done on the impact of these physiological reactions on performers, for instance, dry mouth in singers.³ To better comprehend performance anxiety, an understanding of social anxiety disorder could help shed light on this matter.

Social Anxiety Disorder (SAD) also contributes to MPA. Specifically to musicians, SAD consists of the fear of being negatively evaluated by other people. This thought process manifests itself into physical symptoms such as palpitations, tremors, blushing, breathing problems, and sweating.⁴ Social anxiety disorder, common among adolescents and adults, is associated with an increased risk of depression and substance-use disorder.⁴ Since people who have social anxiety disorder visit their physicians less frequently than those with other disorders, people seek help through prescription drugs. Although psychotherapy is recommended, it is often disregarded for one reason or another.

For psychotherapy, Cognitive Behavioral Therapy (CBT) is known as a first-line treatment for SAD. Tests have shown that response rates of humans with social anxiety disorder were between 50% and 60% using the CBT, an outcome much higher than placebos.⁴ However, some people still resort to pharmacotherapy, or medication. These can include serotonin reuptake inhibitors (SSRIs) which are effective in reducing social anxiety disorder, however, only in the short-term. No significant differences were shown in the effects of treatment through medication.⁴ Although pharmacotherapy tended to work quickly, treatments such as mindfulness-based techniques and CBT produced more lasting effects. Patients in the study were also encouraged to increase social activities.

III. THE PROBLEM OF PRESCRIPTION DRUGS

Matei and Ginsborg, both professors at the Royal Northern College of Music, studied the impact of prescription drugs on music performance anxiety in various American symphonic orchestra.⁵ Immoderate amounts of MPA may also result in drug use if musicians feel like their performance anxiety symptoms are out of their control. This often leads many musicians to resort to external means of help. A survey conducted across America's orchestras found that 27% of the musicians who responded to an ICSOM (International Conference of Symphony and Opera Musicians) used propranolol or another beta-blocker (which reduces adrenergic receptors responsible for increased heart pressure) to fight against MPA, and of those 27% who reported using beta-blockers, most did not have a doctor's prescription which raises concern about the legitimacy of the drugs. Additionally, 96% of these respondents reported the drugs were effective in reducing MPA symptoms.⁵

Often, increases in MPA occur between ages 7 and 16 and has a direct relationship with the use of prescription medications and illicit drugs (studies done by Fishbein, Middlestadt, Ottati, Strauss, Ellis, Lehrer 1987).⁶ Among musicians in the professional music community, the use of beta-blockers and medication is seen as an acceptable alternative to alcohol abuse when dealing with severe music performance anxiety. Beta-blockers are incredibly effective because they prevent adrenaline from binding to the beta receptors in our body.⁶ It works to prevent rapid heartbeat, tremors, and stomach pains. However, it's not all positive. Beta-blockers can carry negative side effects such as dizziness, weakness, indifference, and headaches. Although they have been proven safe as long as it is prescribed by a doctor, musicians have a risk of becoming psychologically and physiologically dependent on such drugs. Gerald Klickstein comments that beta-blockers suit some musicians in specific situations—high-stakes performances and professional auditions but should not be used for every performance.⁶

A. Serotonin Reuptake Inhibitors

One common type of drug that musicians use is called Serotonin Reuptake Inhibitors (SSRIs). Often prescribed as an antidepressant, these work to increase serotonin levels in the human brain, which are known to contribute to a person's well-being and happiness.⁶ As stated in the aforementioned passage about prescription drugs, most musicians do not get their drugs prescribed, which may be of concern for minors. Serotonin Reuptake Inhibitors are often used to treat Social Anxiety Disorder because it is generally safe to use and has relatively low side effects.⁶ However, the use of SSRIs in minors should be treated with caution given its use can affect those diagnosed with depression, at risk of suicidal ideation.

B. Propranolol

Propranolol is the most commonly used beta-blocker among musicians. Administered by tablet, the drug significantly lessens the release of hormones into the sympathetic nervous system and as a result reduces the heart rate.⁷ It can reduce the heart rate to a pulse of less than 60 beats per minute, enough to cause light-headedness, fainting, and confusion. Some

side effects lead to an increased likelihood of abnormal cardiac rhythms, white and tender hands, insufficient blood flow, mental depression, weakness, vivid dreams, visual disturbances, and emotional lability.⁷ Propranolol can also lead to severe cases of bronchospasm or asthma. Currently, there are not many research performed on the effects of beta-blockers on respiratory function. Other potential illness, or the worsening of such illnesses, include: autoimmune disorders such as systemic lupus erythematosus, skin and mucous membranes such as the Stevens-Johnson Syndrome, genitourinary, and other diseases.⁷

In a recent survey administered by Patson, asks musicians on the prevalence of such medications to reduce performance anxiety. The figures depict as high as 20-30% among professional orchestral musicians. It is difficult to imagine other professions that require 30% of hired individuals to turn to drugs, prescribed or not, to perform their jobs.⁷ Despite its wide usage and belief that beta-blockers decrease stress and mental anxiety, they were not designed to reduce anxiety and were instead originally designed as a treatment for heart conditions. However, given beta-blockers reduce excessive activity in the sympathetic nervous system by decreasing heart rate and blood pressure, it may come doctor recommended in the proper dosage.

IV. MUSIC LISTENING FOR TREATMENT

Alternative to drugs, it is important to consider other methods of treatment. One such method incorporates the use of music itself to help musicians battle performance anxiety. In his article titled “Mindfulness, attention, and flow during music listening: An empirical investigation,” Diaz refers to mindfulness as ‘flow’ in which an individual will have a heightened experience by engaging in a task that is neither too difficult nor too easy in relationship to their skill.⁸ It allows individuals to examine their progress in a state of seamless absorption, high-level focus, and effortless immersion. Music provides an easy access to flow because musical skills are often matched with new challenges where goals are clearly established and feedback is commonly available. Diaz sought to understand ‘flow’ in regards to mindfulness to examine its relationship to the music listening experience and encourage mindful practice among music students.⁸

Diaz measured the concept of flow through the Continuous Response Digital Interface (CRDI), a device that registered responses nonverbally in real time with minimal invasiveness.⁸ It is a reliable tool for representing temporal topography of phenomenological experiences. The experimental manipulation in the study was whether participants engaged in a 15 minute mindfulness induction period before the listening, specifically Duke University’s Counseling and Psychological guided meditation task.⁸ The music used was Giacomo Puccini’s opera *La Boheme* because the music has been used in numerous studies and musically trained people would be familiar with it. Also in previous studies, the piece evoked the highest magnitude of aesthetic experience in relationship to the musical stimulus.

The majority of individuals in the study perceived benefits of mindfulness in relationship to attention. This included decreased mental distraction, increased awareness, and increased focus. One noticeable difference in this study compared to previous studies regarding the concept of flow was that 10 participants noted that they experienced a flow experience for the entire duration of the listening session.⁸ Since music listening is favored upon by many individuals, this study can present ways to enhance music listening through mindfulness practice.

V. THE IMPACT OF MINDFULNESS

A. Mindful Awareness Attention Scale

In another study, Diaz examined a sample of collegiate-level music students who engaged in different levels of meditative practices to test how much their music performance anxiety changed. Trait mindfulness, a centered state of awareness free from judgements, helped reduce the level of music performance anxiety; the amount of “trait mindfulness” that each person held was tested by the use of the Mindful Awareness Attention Scale, which recorded the duration and type of meditative practice a person engaged in—if at all.⁹ The concept of perfectionism, how people perceive the skills of their peers and themselves, was also recorded by use of a 45-item scale to measure the variance of MPA. Higher levels of perceived perfectionism, notably self oriented perfectionism (SOP) and socially prescribed perfectionism (SPP) increased the level of MPA.⁹

SOP: “When I am working on something, I cannot relax until it is perfect”

SPP: “The better I do, the better I am expected to do”

Engagement in meditation and mindfulness related activities decreased MPA among the students up to 9%, which means that higher levels of trait mindfulness could predict lower levels of performance anxiety.⁹ However, the idea of perfectionism predicted increased variation in MPA levels by up to 24%: perfectionism affects MPA stronger than trait mindfulness, so the use of at least weekly meditative practices can help account for meaningful decreases in MPA.⁹ The application of meditative practices can be applied to students by teachers to help reduce performance anxiety among perfectionistic students. It is a suitable alternative to medications and behavioral interventions.

B. Acceptance and Commitment Therapy

Another way to treat music performance anxiety is through the acceptance and commitment therapy (ACT). Its goal is not to reduce symptoms of MPA, but rather works to enhance psychological flexibility by focusing on improving performance quality while identifying each participants' MPA by becoming aware of it. ACT attempts to increase "psychological flexibility" by promoting mindfulness and accepting unwanted MPA symptoms.¹⁰ The study gathered a group of university vocalists who experienced MPA while performing. The study set out to answer three hypotheses:

- 1) ACT makes significant improves in mindfulness and values identification
- 2) Significant improvements in performance quality
- 3) Shame over MPA would be reduced

Participants were chosen if they selected all categories of MPA symptoms and when their ACT-related measure was more than one standard deviation above the normal mean.

The study used several tests to gauge the participants' MPA and how they perceived topics related to performance. These tests assessed mindfulness, acceptance and action taken toward values, cognitive defusion (higher scores show better internal consistency), importance and consistency of one's personal values, perceived control over internal anxiety-related emotions, the degree to which participants felt discomfort during performance, the degree to which one identifies with physical, emotional, and social components of shame.¹⁰

The first half of the treatment used Eifert and Forsyth's manual as a guide to treat MPA. It consisted of an orientation to the ACT program and specialized ways to improve mindfulness and defusion skills. For example, those who experienced shortness of breath were encouraged to defuse from anxious thoughts by noticing the thoughts that ran through their minds.¹⁰ The second half of treatment focused on improving psychological flexibility. They would do this by rating the severity of their MPA, and each performer would put a mild or moderate amount of expressivity into their performance. Students participated in weekly performances and all chose to perform in front of peers.¹⁰

This test was done to help participants persist with discomfort by encouraging participants to repeat emotionally charged words until it lost their meaning. The results showed that clients experienced anxiety-related thoughts less personally; they were also encouraged to engage in activities consistent with their values. In conclusion, significant improvements were made in students' pre-treatment mean scores.¹⁰ Significant improvements were also made in the quality of a student's performance. All students felt less of a need to control MPA symptoms and increased confidence in their performance skills. The students achieved valued outcomes in the performances while experiencing MPA.¹⁰

VI. THE ROLE OF TEACHERS

A. The Growth Mindset

To combat SAD, we must also examine the role of teachers. The fixed mindset that effort cannot change how talented or smart an individual is can be positively impacted by teachers and mentors. Musicians often carry a fixed mindset that younger players perform better than they do or believed that their peers seem to have a natural talent in a particular instrument that they do not possess. As a result, musicians with this fixed mindset are more likely not to take risks due to the fear of making mistakes. They are also prone to avoid experimentation and ask for less help believing that is a sign of a lack of natural talent.¹¹

The growth mindset, on the other hand, uses talent as the starting point; those with this mindset has a strong belief that effort and persistence is a key component to success with little regard of talent and natural abilities. They are often motivated intrinsically to grow and learn more.¹¹ Dr. Dweck examined teachers who exemplified the concept of the growth mindset – teachers who believed in the growth of students’ intellect and talent, regardless of their current standing in skill. Historically, only the top talents attended schools like Juilliard, but Dorothy DeLay, who taught famous violinists like Itzhak Perlman, Midori, and Sarah Chang, thought otherwise.¹¹ Other teachers at the time thought of talent has something that was inborn, but DeLay believed that it was something that could be acquired through effort and time.

In her book, Dr. Dweck examined world famous violinist Nadia Salerno-Sonenberg, who made her debut at age 10 with the Philadelphia Orchestra and was invited to learn under Dorothy Delay. When she first started getting lessons, Salerno-Sonenberg refused to change unhealthy habits pertaining to violin performance because it worked for her. She was unwilling to experiment with new ideas. As she grew older into her late teens, other students started catching on playing even better than her; her years of unwillingness led to a significant decrease in her confidence in violin performance.¹¹ It became so extreme that she eventually stopped bringing her violin to her lessons—because she was too afraid to even try. Although Ms. Delay demonstrated incredible patience up to this point, she did not no longer wanted to teach her pupil if she was going to waste her talent. After this wake-up call, Nadia Salerno-Sonenberg decided to shift her habits and start practicing with a growth mindset for the competition instead of constantly comparing herself to other performers.¹¹

The growth mindset helped Nadia succeed. Although this is a rare and extreme example, many musicians feel this way to an extent. Because of the expectation to play the right rhythm, intonation, and style, classical music can become extremely difficult to maintain; failure to adhere to these strict set of rules may result in poor performance, something no musician who wishes to succeed would desire.¹¹ Therefore it is easy to become trapped under the fixed mindset, often forgetting that mistakes are expected and important lessons to grow from.

B. Mindful Reflection

In one case study performed by Pamela D. Pike covered a first-year doctoral student named Dan who started an action research project that required he engage in reflective, mindful practice during rehearsals. Since Dan was starting to teach younger students, he was looking for efficient ways for students to practice. A common problem among beginner and intermediate students was that they used limited practice techniques. Teachers often believed that practicing was an activity that musicians must learn on their own; there were no specific guidelines for students to follow.¹² Teachers often had little idea of what students actually did during practice. Music students knew *what*, not *how* to practice.

Through this study, Pike strived to make practice procedures more explicit by encouraging mindful self-reflection during student practice. This also increases self-reflection and practice efficacy. Mindful practice guided under coaches is one approach that could be applied to the music education community. Schon’s reflective practitioner model is implemented in this study where the teacher listens to a student perform and addresses his or her technical and interpretive deficiencies; a crucial difference in this technique lies in the reflective conversation to clarify any teacher demonstration.¹² This works to minimize a mindless state during rehearsal.

During the study, Dan applied knowledge gained from discussions and personal reflections and applied it to his practice during the following days. It was a repeated procedure: experimentation, self-evaluation, and join assessment for four months.¹² Teachers can use these suggestions and consider new ways to foster environments where mindful reflection and self-regulation could be practiced. Significant improvements in confidence and playing ability showed. Often, there were too many practice strategy ideas to try out with not enough time, so the list became limited for specific sections.¹²

VII. CONCLUSION

The current literature has revealed a great need for further research. It also revealed a need for greater efforts from music educators to incorporate a mindfulness teaching method to help students focus on improving their skills instead of becoming overwhelmed with performance anxiety on stage. Another aspect of research needed is regarding the overreliance on prescription drugs, a common practice among performers. Mindfulness practice offer a healthier alternative but may not be effective for more severe cases of performance anxiety. All in all, it highlights an often overlooked problem in the world of classical music and the mental health of musicians.

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