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Performing Arts and Performance Anxiety

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PERFORMING ARTS AND PERFORMANCE ANXIETY

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APPROVAL OF THESIS

We, the faculty supervising the work of Jacklyn Sue Bascomb, affirm that the thesis, *Performing Arts and Performance Anxiety*, meets the high academic standards for original scholarship and creative work established by the Master of Science in Exercise Science and the College of Health Professions. This work also conforms to the editorial standards of our discipline and the Graduate College of Marshall University. With our signatures, we approve the manuscript for publication.

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ABSTRACT

Background: Performing arts are a broad view of a range of human activities that occur in front of an audience with the attempt to express human experience and emotion. Performing artists consist of dancers, instrumental musicians, vocal musicians, and drama/comedy or theater/actors. Actors and instrumental musicians participate in tremendous training to provide the emotional story they deliver. Multiple factors contribute to mental and physical stress experienced by a performer. Performance anxiety results from a performer's fear of an adverse reaction or evaluation of their performance. Performance anxiety can be debilitating with negative effects on a performer's performance, career, and health.

Purpose: The purpose of this comparative study was to investigate performance anxiety in actors and musicians using the validated Performance Anxiety Inventory (PAI). We hypothesized that the PAI will predict performance anxiety and that actors perform differently than musicians on the PAI.

Methods: 22 performing artists out of 25 were included in the study (6 actors and 16 musicians). The age range of participants ranged from 19-23 years old. All participants completed the PAI and data collection form. One-way ANOVA was used to determine between-group differences in the PAI score. Multiple regression and Receive Operator Characteristics analysis were used to determine the responsiveness of each item of the PAI to determine the effect of performance anxiety.

Results: No between-group differences were found for the reported anxiety, the reported performance anxiety, the SF-12 health survey, and the PAI scores. Multiple regression revealed that all items of the PAI contributed to the validity of the PAI score except item 13. Separate

multiple regression analysis for each group revealed differences in the individual item responsiveness.

Conclusion: This investigation provides evidence that the PAI can assess the level of performance anxiety in instrumental musicians and theater actors. Given the between-group differences in the contribution of individual items of the PAI to the total scores, it appears that the actors and musicians might experience performance anxiety differently. Future research should establish the responsiveness of the PAI on assessing performance anxiety in larger sample sizes and more diverse populations of performing artists.

CHAPTER 1

INTRODUCTION

Stage Fright
Ng (2006)
The curtain will soon be rising.
All is in readiness.
Again I must play my role.
I am well trained.
I have delivered these lines many times.
And yet I am afraid to return to the lights of this theater
My apprehension mounts.
Should I call in an understudy?
Or perhaps just walk away?
Last night we gave our utmost,
And despite all, the unthinkable occurred:
That darkest of curtains fell.
As I don that familiar costume, I try to distance myself
Then I glance at my reflection
And see only gaping chinks in my armor
My company looks to me for leadership and reassurance.
Are they fooled by this artful mask of feigned confidence
Or do they see my trembling and self-doubt?
Again I review my part.
Surely I can do this.
The show must go on.
The house lights dim
Boldly I step out onto the boards
And now too soon the curtain rises again.

Background

Performing arts are a broad view of a range of human activities that occur in front of an audience with the attempt to express human experience and emotions (Manchester, 2009). The performing arts consist of dance, instrumental musicians, vocal musicians, and drama/comedy or theater/actors. Performers of all forms use fine motor control, technical skills, emotional expression, artistic interpretations, creativity, and the ability to conform to each art or story (Hamilton & Robson, 2006). Performers are multitaskers being able to use multiple skills to conform themselves to an interpretation of a story while connecting with an audience.

To be an actor means being able to see the world in a larger way. An actor must tap into their feelings quickly and with precision. An actor goes through training to learn technique, patience, bravery, and sympathy. An actor will expose themselves through their work. An actress, Rosalind Russell describes acting as "standing up naked and turning around very slowly," meaning an actor is always on display (Fox, 2017). An actor must prove themselves repeatedly through headshots, resumes, demos, and auditions. It is an endless cycle of finding the next role or job (Fox, 2017). Being a musician is likened to being a chameleon; a musician has to become a story without being seen or through speech but by using sound. A musician is a multitasker, as many musicians play multiple instruments, read or transcribe music, listen and interpret music, and follow direction or cues, as well as lead or direct. A musician has to communicate through an instrument to others and be able to tell a story without words. A musician needs to be flexible and be willing to put time into constant playing, learning, performing (Cole, 2014). A musician's appearance is not as big a factor because they are one of many. However, an actor is judged on how they look or present as someone or something through a performance. Actors may be part of a large cast, just as a musician would be in an orchestra or ensemble, but an individual actor is looked at and judged on appearance and resemblance to a character. Actors are judged on appearance as well as the portrayal of a character. Actors need to remember lines, actions or blocks, and cues. The high demand of technique required by a performer can lead to overwhelming feelings, which can affect overall performance.

Performers within the performing arts experience mental and physical activities that can contribute to several adverse health factors. These adverse health factors include body shape concerns and negative beauty characteristics or negative self-imaging, self-medicating habits due

to stressors, performance anxiety, and rejection (Hamilton & Robson, 2006). Rejection, judgment, and fear of performing can lead to those adverse health factors. The expectation of flawless technique and the extraordinary demands performers go through, as well as the judgment and critiques performers get about performance, can contribute to the development of the performance anxiety (Hays, 2002). Performance anxiety is caused by fear of an adverse reaction or evaluation of performance by others (Goodman & Kaufman, 2014). A performer will become anxious, and those feelings can translate into fear or apprehension about performing. Performance anxiety can affect memorization, reading or placement, instrument/ speaking abilities, and interfere with grip and appearance (Wilson & Roland, 2002). Performance anxiety can affect any performer and can affect their overall performance, career, and life.

The interest in the study of performance anxiety is less of an issue of whether or not a performer will experience performance anxiety, but rather how performance anxiety will affect the performer. The prevalence of the development of performance anxiety can be seen through the expectation of flawless technique and the extraordinary demands performers go through, as well as the judgment and critiques performers get about a performance (Hays, 2002). With this high demand for perfection, performance anxiety in performing arts is not an issue of whether a performer will experience performance anxiety but rather how performance anxiety will affect them. If performance anxiety affects the performer to the point where performance anxiety is debilitating and has a negative impact on the artist's performance, performance anxiety is a concern and is often diagnosed as a social phobia.

Measurement for performance anxiety is important because performance anxiety does not only appear on stage or in front of a public audience. Any level of performer can experience performance anxiety at any time because they can perform in class, audition, rehearsal, or the

main show. All performers go through evaluations and critiques by numerous numbers of people (McQuade, 2008). Furthermore, the pressure from the competition in achieving a role or part is extremely high in any artistic field (Wanke et al., 2012). Therefore, performing artists perform and practice in an anxious atmosphere and have the risk of suffering from performance anxiety, and a measurement tool can help a performer and clinician treat a performer's performance anxiety before it adversely affects them. Through research, performance anxiety has been mainly focused on instrumental musicians. The research has shown that a range of factors, including unfavorable personal characteristics, mastery level, situation, and personal thoughts of performance can affect performance anxiety in instrumental musicians (Perdomo-Guevara, 2014). Research has also produced multiple tools to measure performance anxiety in an instrumental musician, but there are no specific tools for other forms of performing arts.

Measurement is needed in other forms of the performing arts because the ability to measure performance anxiety can help identify what is causing their performance anxiety and therefore allow the performer and clinician to form a plan or solution to treating their performance anxiety. A method of measurement will also prevent performance anxiety affecting other parts of a performer's life. Specifically, in actors, a performance anxiety measurement tool would be extremely beneficial because an actor's appearance, concentration, and opinion of an audience are different and risk for heightened anxiety is possibly higher than other forms of the performing arts.

Statement of the Problem

A review of the literature reveals gaps in the research that show a lack of research on performance anxiety in actors. More attention has been placed on the assessment of performance anxiety in musicians. The literature points out this gap in McQuade (2008) that looked at

performance anxiety and reported through "empirical data regarding various types of performers such as singers, dancers, and actors are scarce" when comparing musicians. Goodman and Kaufman (2014) stated, "one of the most overlooked areas of performance in the study of stage fright is… acting." Researchers have pointed out that actors are not a common subject to look at in performance anxiety. The gap of research limits actors from receiving the best care they could receive from healthcare providers. As well as not knowing if a screening tool or having a screening tool will work to measure performance anxiety is not allowing or being able to fully monitor an actor for performance anxiety. The inability to monitor an actor for performance anxiety can lead an actor to being at a higher risk for adverse health effects and possibly the ending of one's career.

Purpose

The purpose of this study was to investigate and compare performance anxiety in actors to musicians using the validated Performance Anxiety Inventory by Nagel, Himle, and Papsdorf (1981). In order to understand the similarities and differences between the different types of performing artists can help guide clinicians for treatment and care of the performers. Wanke et al. (2012) note the importance of the health of a performer because a performer's body is the center of the performance. Any interference with the projection of a performance can be noticed. Therefore, if clinicians can understand if there are similarities between actors and musicians regarding performance anxiety, clinicians can help treat performers before anxiety affects other parts of a performer's life.

Research Question

Are there similarities in actors' performance anxiety when compared to musicians using the validated Performance Anxiety Inventory (PAI) developed for musicians?

Null Hypothesis

There will be no differences between actors and musicians on the PAI.

Alternative Hypothesis

1. PAI will predict performance anxiety.
2. Actors perform differently than musicians on the PAI.

Defined Terms

- Performance anxiety and stage fright are considered the same, but social phobia is different.
    - Performance anxiety and stage fright- symptoms and fears
    - Social phobia- the diagnosed condition
- Actor/actors will be used to describe a drama/comedian or a stage/theater performer.
    - An actor is "a person whose profession is acting on the stage, in films, or on television" (Oxford Dictionary).
- Musician/musicians will be used to describe instrumental musicians.
    - A musician is "a person who plays a musical instrument, especially as a profession, or is musically talented" (Oxford Dictionary).
- This study does not look at vocalist musicians or any other area of the performing arts such as dance.

CHAPTER 2

LITERATURE REVIEW

The purpose of this study is to compare performance anxiety between actors and musicians. Performance anxiety or stage fright is an exaggerated and incapacitating fear of performing in public. Specifically, the study will explore similarities or differences between these two subgroups of the performing arts, on the Performance Anxiety Inventory (PAI). The PAI was developed in order to determine the level of performance anxiety of musicians. The results of the study will help determine if a clinician can measure performance anxiety using the PAI in actors. Measuring performance anxiety is important because it can be used as a prevention tool from performance anxiety developing career altering circumstances or different adverse health concerns, as well as allow a performing artist to experience enjoyment and fulfillment of their performance.

This literature review will define performing arts and explore differences amongst performing artists, more specifically, the similarities and differences between an instrumental musician and a theater actor. This review will also define and discuss the issues of performance anxiety, including the effect on performers, the factors that lead to performance anxiety, the psychology of performance anxiety, and the current methods of measuring performance anxiety in the performing arts.

Defining Performance Anxiety

Performance anxiety, the technical term of stage fright, is a subcategory or subtype of social phobia (Wilson & Roland, 2002). Social phobia is an anxiety disorder where a person avoids social situations where they can be watched. The disorder is often “associated with shame and fear of loss of identity as an artist” (Hinkamp et al., 2017). Social phobia is often associated

with the fear of humiliation. Performance anxiety can be diagnosed as a social phobia when it leads to impairment and distress (Osborne & Franklin, 2002). According to Matei and Ginsborg (2017) for someone to "qualify" as having a social phobia or social anxiety they must have suffered from "persistent fear, anxiety or avoidance for at least six months, and to have considerably impaired social, occupational or general functioning"(Matei & Ginsborg, 2017). Performance anxiety is brought on or caused by the fear of a negative reaction or evaluation by observers of one's performance by others. Jackson and Latane (1981) describe stage fright as "highly negative and anxiety-arousing, if transitory, emotion" or in other words that stage fright is apprehension and can cast a fear or embarrassment to a person. Stage fright is when a performer becomes anxious, and a performer's emotions translate to fear or apprehension of the performance, which can affect memorization and overall performance.

What Leads to Performance Anxiety

According to Goodman and Kaufman (2014) confidence, optimism, age, ethnicity, experience, accomplishments, and personality are variables that affect one's performance and can lead one to experience performance anxiety. Another characteristic that can be associated with performance anxiety is perfectionism (Kenny, Davis, & Oates, 2004). Memorization can play a role in performance anxiety. Memorization can have a stressful effect on many performers and can lead to factors that can contribute to performance anxiety (Nordin-Bates, 2012). Performance anxiety develops through a transition of factors throughout life, starting in childhood. Including "the type of parenting and other interpersonal experiences that we have, our perception and interpretation of the world around us, our technical skill and mastery, and specific performance experiences that may have positive or negative outcomes" (Kenny, 2006). Sadler and Miller (2010) study shows a negative emotional behavior can predispose an individual to

performance anxiety in both a social-interaction and emotional state. Walker and Commander (2017) state someone "who suffers from anxiety, or lacks confidence and self-esteem, is less likely to succeed." Robb, Due, and Venning (2018) found similar results that performers, specifically actors have a tendency to "over-analyze their own behavior, thoughts, and feelings" which can lead to persistent self-doubt, self-unworthiness, and self-criticism which is often associated with anxiety and depression. Performance anxiety also affects all age ranges with more frequency in women when compared to men (Wesner, Noyes, & Davis, 1990). Jackson and Latane (1981) found in a talent show that nervousness and tension are higher within individuals who perform solo compared to when performing in a group and that a larger audience size can increase nervousness and tension. Performance anxiety can affect any performer. However, a history of negative behaviors, emotional and interpersonal experiences through one's life can have a predisposing factor on how an individual reacts with performance anxiety. Also, if a performing artist has a negative emotional behavior, it can be a predisposing factor to developing performance anxiety.

The health of a performing artist can be hindered by performance anxiety, including adverse health effects like eating disorders such as anorexia, bulimia, and binge-eating, and self-harm, as well as alcohol or other substance abuse to suppress emotions which can also lead to depression, alcoholism, disease, and even death. These adverse health alterations can be related to body or image changes as well as self-medicating habits to suppress a performer's performance anxiety (Hamilton & Robson, 2006; Popalisky & Herbert, 2000; Robb et al., 2018; Wanke et al., 2012). Wanke et al. (2012) found through a survey of German theater students that 79.5% of the male students were an average weight and 78.1% of females were average weight according to the body mass index. When asked about body satisfaction, diet, and substance use,

only 21.6% stated they were “very content” with their body. However, 67.7% stated they are “partially content” with their body. Looking deeper into their self-image, 32.4% thought they were “too fat,” 29.7% thought they were too thin, and 37.8% thought they were “just right.” When looking at injury rate, 45.9% claim to sustain an orthopedic injury twice a year and 29.7% said 3-4 times a year with the lower extremity the most commonly injured. Other health factors included 11.6% had “mental stress,” 12.7% had “physical fatigue,” 5.3-7.9% “pressure by a teacher or the school,” 5.8% “other psychological causes,” and 4.2% had “bad drinking habits” (Wanke et al., 2012). Topoğlu, Karagülle, Keskin, Abacıgil, and Okyay (2018) found that in 220 musicians that participated in Turkish state symphony orchestra that 87.6% reported musculoskeletal pain and their general health status was 64% low risk, 18.7% at moderate risk and 17.3% at a high risk of mental health problems. They also found that 81.8% showed Music Performance Anxiety (MPA) before and during a performance, but only 60% of musicians state that it negatively affected their performance. Topoğlu et al. (2018) and Wanke et al. (2012) data show the common occurrences of health risks with performers. Although both are different subjects and different countries, they both show a prevalence of health and specifically mental health issues in a performance setting. These studies show why it is essential to understand why the health of a performer is important to evaluate because it could lead to affecting their performance.

Defining Performing Arts

The performing arts consist of dance, instrumental musicians, vocal musicians, and theater performers/actors. All performing artists “encompass fine motor control, technical skill, emotional expression, artistic interpretations, creativity, and the ability to conform to esthetic requirements within each art form” (Hamilton & Robson, 2006). The purpose of the performing

arts is the "presentation to an audience" or the ability to share art with others through interaction and relationship between the performer and spectator (Hays, 2002). The Performing Arts Medicine Association (PAMA) in 2009 came out with a definition of performing arts as a view of;

> Broadly, happily including a range of human activities that occur in front of an audience (at least some of the time) and attempt to add to our understanding, appreciation, and/or celebration of the human experience. They may or may not involve some form of competition, but this will not be the primary reason for the activity. They will require varying amounts of energy expenditure, but the best performances will not be determined primarily by how much energy was expended (Manchester (2009), p. 102).

There is an "emphasis on flawless technique and performance" on performing artists which places a high demand on a performer's performance (Hays, 2002). The emphasis of perfection on a performer can turn a performer into a perfectionist, which can lead to a spiral of unhealthy behaviors.

Performers can experience mental and physical activities that can lead to adverse health effects in the performing artist. These adverse health effects include a negative body image, self-medicating habits, substance abuse, and performance anxiety (Hamilton & Robson, 2006; Robb et al., 2018; Wanke et al., 2012). A performer and the effect of negative body image can be from the "pressures around body image" from pop culture (Popalisky & Herbert, 2000). Media supports specific ideals of how a person should look through tv shows, magazines, movies, and social media. Popalisky and Herbert (2000) note that negative body image has become such a focus of many performers that performers can be seen using a mirror as an "obsession" with their appearance rather than a feedback tool for awareness on technique. A performer's obsession with body image can lead to drastic body shape changes through eating disorders and diet pills to surgical or cosmetic alterations. Self-medicating habits and substance abuse are often seen in performers from the consumption of alcohol to the use of depressant medications to calm nerves.

The common use of these substances often can lead a performer to over and misuse, which can lead to addiction or overdoses. These factors can interfere with one's ability to perform at one's full potential and can lead to a concept called performance anxiety also known as stage fright and can affect a performers ability to fulfill or receive a role or spot in a performance, their overall "live" performance, and can affect a performer's career.

Defining a Musician

Music accompanies many activities of everyday life and can be associated with work, dancing, and storytelling with the ability to trigger an emotion or reaction of an audience or listener (Johansson, 2002). Musicians have the ability to regulate common human experience and emotion. Musicians are commonly seen as a whole versus an individual with the exception of a solo or a single musician performance. A musician has the ability to fade into the background and the ability to stand out in a crowd, meaning the music they play may be adding to a performance, or that their music is the performance which makes them so unique. Another characteristic that makes a musician unique is their ability to memorize. A musician can "memorize long, complex bimanual finger sequences and translate musical symbols into motor sequences" (Johansson, 2002). Ziv, Ayash, and Ornstein (2013) describe musicians as being different personality types for the type of instrument they play.

The uniqueness of a musician is what has developed the interest of a musician and their health, from musculoskeletal injuries to general health considerations. Research in the health and wellbeing of a musician is well developed, with the common health topic of performance anxiety or Music Performance Anxiety (MPA).

Research has found that different instrumental musicians have different personality characteristics. Brass musicians are thought to be more extroverted, dominant, nonneurotic, and

have a higher liking for alcohol than other sections. Brass musicians also tend to view themselves as confident and jovial (Ziv et al., 2013). String musicians are more introverted, neurotic, anxious, sensitive, aloof, conscientious, and have a high emphasis of willpower. String musicians also seem easily provoked to be upset and more emotional (Ziv et al., 2013). Woodwind musicians are thought to be introverted and view themselves as sensitive and individualistic (Ziv et al., 2013). Woodwind musicians are also thought to be more imaginative (Builione & Lipton, 1983; Ziv et al., 2013). Musicians are also subjected to gender stereotypes. Gender stereotypes are transmitted through media and illustrate a gender social role. Gender stereotypes can lead to prejudice and discrimination among musicians. For example, many "masculine" instruments can be considered drums or tuba and a "feminine" instrument can be considered a flute or harp. Million, Perreault, and Cramer (2002) found when a female plays a "feminine" instrument, they are perceived as "more caring, warm, and sensitive, and better adjusted." However, when males played a "feminine" instrument, they were perceived as "less dominant and active and had fewer leadership skills" showing a gender stereotype, while there is no difference of perception of female or male when considering a "masculine" instrument (Million et al., 2002). A musician can be affected by the judgment of appearance by the type of instrument they play to their gender. The judgment a musician receives can affect the way they perform or if they continue to perform.

Figure 1. Example of a Musician/ Musicians (2018)
The photograph was taken during the Marshall University School of Music Symphonic Band Concert (2018) Photograph taken by Ben Powell https://muphotos.marshall.edu/Music-concerts-Oct-2018-Ben-Powell/

Defining an Actor

When referring to an actor Goodman (2011) wrote about how an actor does not usually comprise a single personality type because of their ability to easily access emotions and a high ability to empathize. An actor's skill set can include an intertwined memory, emotion, and imagery, imitation skill, and natural ability to deliver a memorized text, choreographed movement and portrayed emotion to an audience. An actor uses a high demand of abstract thinking to portray a script that contains no inner dialogue or descriptions of behavioral motivations. In other words, they control the presentation of an author's words or "fool the audience" as well as themselves "into believing the event is taking place in the present and, that the event contains real consequences" (Goodman, 2011). An actor's ability to portray a story or bring someone into a new world allows them to have an increase in empathy.

Robb et al. (2018) describe an actor as an individual with the ability to have empathy through their heightened sense of the ability to read other people's emotions and understand the perspectives and needs of others. However, many actors can exhibit a narcissistic behavior and actually mimic the behavior of empathy and other emotions (Goodman, 2011). An actor's ability to improvise can also be associated with an act of emotion versus a real emotion. An actor's ability to mimic emotion is commonly associated with an actor's struggle of maintaining boundaries of character and themselves. Due to the immense amount of time an actor spends on researching, exploring, and rehearsing a role, an actor often becomes or transforms themselves into another person and has a lack in ability to return to their core self (Robb et al., 2018). Robb et al. (2018) found actors see themselves as "explorers, curious and inquisitive, with love of solving the puzzle of a character." Most actors use what is called a meaning-based process to memorize their lines, which is understanding the meaning of the story taking place and has shown that it helps an actor learn their place, cues, and lines quickly and with more accuracy. In other words, an actor distinguishes their needs based on the character they are portraying. According to Goodman (2011) an actor's skills for memorization consist of seven components:

1. A search for meaning in dialogue and behavior
2. The development of the characters schema
3. Memorization of the dialogue
4. Memorization of staging
5. Memorization of costume changes and prop use
6. Belief that the situation is happening right now
7. Spontaneity

The actor's defining component that differs from other performing artists' is the actor's ability to slightly change a performance from night to night depending on audience reaction (Goodman, 2011). These characteristics help form an actor into a character and allow an actor to be able to see the world in a different or a larger way and to give them the power to portray and tell a story of not themselves but as multiple people and things in multiple settings. However, an actor's ability to transform into characters can make them lost to one's true or core self as well as the development of perfectionism to be the best or perfect character which can lead to stressors and confusion. An actor is always on display and is under critiques and judgment from others as well as themselves, and it can lead to different adverse heath affects, including body image or beauty characteristic issues to a struggle with performance. The struggle with performance can be from a lack of confidence or a fear of public reaction and thoughts, which could be a form of performance anxiety.

Figure 2. Example of an Actor/ Actors (2018)
The photograph was taken during the Marshall University School of Theatre Production of *Alabama Rain* by Heather McCutchen (2018) Photograph by Sholten Singer
http://www.marshall.edu/theatre-history/?showID=544

Comparing a Musician to an Actor

Musicians and actors are not measured by speed or distance like an athlete would be but judged by a qualitative evaluation by multiple and diverse audiences. An audience has the ability to control the box office revenue as well as an actor or musician's popularity which turns into their salary and amount of future productions/ performances. The control an audience has on the future of a performer can cause actors and musicians to have a fear of evaluation from the public and critics because it defines and evaluates their success of their career (Goodman, 2011; Robb et al., 2018). An actor and a musician both deal with "two distinct arenas, the audition and the performance" where both require skill but with the difference of purpose and audience in each "arena" (Goodman, 2011). Both actors and musicians put in strenuous and exhausting hours of work into their performance, through countless rehearsals, personal practices, and research into the meaning or story of their performance.

There are differences between a musician and an actor, such as the differences between the personalities of an actor and a musician. Actors tend to be "extroverted and expressive" while a musician is more "introverted and low in novelty-seeking" (Goodman, 2011). There are also differences based on the audience judgment or critiques. Both types of performers are judged on overall performance or portrayal of the story that is being told, but the physical judgments can be different. A typical appearance of a musician is usually in black or formal apparel and are seen as cohesive among others. An actor will change their physical attributions (clothing, hair, and even body size) for different characters or roles creating a visual representation of who they are supposed to portray and are often different from others that they appear with on stage, creating a different type of critique from an audience of the two types of performers. According to Hinkamp et al. (2017), today's theater setting is more complex than ever before. There are

special effects and computer-generated images to create a scene more vivid and real to an audience. These effects can create loud noises and split-second transitions or movement of people and scenery with changes that happen in between intense lighting and darkness, which can produce an error if not at the right time.

Overall performing arts encompass multiple types of performers, including; dancers, vocalist musicians, instrumental musicians, and actors. All performers have one goal; to deliver a story to an audience. Specifically, a musician and an actor must have a specific set of skills to be able to deliver their particular performance with immense amounts of preparation and rigorous rehearsals. Though both groups perform in front of an audience, actors have a significantly different "spotlight" on them compared to a musician. An actor is commonly judged individually while a musician is judged based on a group. The way they are judged could lead to a difference in the way one performer feels or identifies themselves and could lead to performance anxiety.

Performance Anxiety in Performing Arts

There is minimal research done on performance anxiety in theater actors. Goodman (2011) states that theater actors are "one of the most overlooked performance domains" and acting is "the one that gets the most attention from public" (Goodman, 2011). With support from Robb et al. (2018) that literature on the wellbeing of actors is "scant" and Brandfonbrener (1992) states that actors are the "forgotten patients." McQuade (2008) saw through empirical data of performance anxiety that it is scarce in singers, dancers, and actors. Actors face a "plethora of stressors" and can negatively affect and impact their wellbeing; that is why there needs to be research done with an actor population (Robb et al., 2018). The minimal research done by Goodman (2011) on performance anxiety and the research of both Robb et al. (2018) and

McQuade (2008) on personality and overall health effect of an actor has suggested that actors are in a position where they could be affected by performance anxiety.

There is an immense amount of research on performance anxiety in musicians and public speaking. The research that has been done in instrumental musicians has led to the use of the term Music Performance Anxiety (MPA) to describe stage fright in instrumental musicians. MPA can be defined as "the experience of persisting, distressful apprehension and/or actual impairment of, performance skills in a public context, to a degree unwarranted given the individual's musical aptitude, training, and level of preparation"(Salmon, 1990). Matei and Ginsborg (2017) described MPA as "a complex phenomenon caused by the interaction of many factors, including genetics, environmental stimuli and the individual's experience, emotions, cognitions, and behaviors." MPA is caused by a range of factors, including unfavorable personal characteristics, mastery level, situation, and personal thoughts of performance (Perdomo-Guevara, 2014). Pressure from self, excessive arousal and inadequate preparation for performance have also been associated as causes of MPA (Matei & Ginsborg, 2017). Wesner et al. (1990) found in musicians that the most common symptoms included poor concentration, rapid heart rate, tremor, sweating, and dry mouth. In Perdomo-Guevara's (2014) study, classical musicians reported less elation (delight or happiness), joy, positive arousal, and confidence, as well as reported higher amounts of worry and fear compared to non-classical musicians. Kenny et al. (2004) found that vocal musicians reported higher trait anxiety and higher occupation role concerns and personal strain. The study found that high trait anxiety was not associated with high personal strain at work. Also, anxiety was not related to an occupational role or physical work demands. The result shows that work anxiety and performance anxiety are separate qualities of a vocal musicians' life. Lastly, perfectionism was associated with anxiety, and that perfectionism

is related to social worry. Nicholson, Cody, and Beck (2014) found that music performance anxiety can be found in three different settings of a professional musician's life. The first setting being practice or rehearsal with low amounts of anxiety, and the second playing as part of a group or ensemble, which showed heightened anxiety, and the third/ last setting being playing as a solo musician, which showed the largest or most intense amount of performance anxiety. Other than the differences between settings there was a component of "the fear of negative evaluation" from "public audience, teachers, judges, and peers"; the fear was related to how the evaluation could affect a musicians career and "self-concept" (Nicholson et al., 2014). MPA is a specific term used when describing performance anxiety in musicians with the common factors associated with performance anxiety; the difference is MPA is associated with a musician's specific activity as well as the development of specific tools or inventories to measure MPA.

Overall, extensive research has been done on musicians and has led to the term of MPA, which is a combination of factors including genetics, stimuli, experience, emotion, thoughts, and behaviors (Matei & Ginsborg, 2017). The combination can lead to unfavorable or negative characteristics within a musician. A musician with MPA often has pressures from oneself and others (public, teachers, judges, and peers), is not as well prepared, and is easily aroused or very anxious. A musician can also be seen having a characteristic of perfectionism, which affects a performer's social worry or how an audience portrays their talent or delivery of performance. Symptoms of a musician with MPA include; poor concentration, rapid heart rate, tremors, sweating, and dry mouth, which can affect the way a musician plays an instrument (Wilson & Roland, 2002). MPA is specific to a musician because it specifically looks at the fear of performance when performing a music component. In other words, MPA is a specific term for

performance anxiety for musicians as it relates to performance of music and is also why there are specific inventories that measure MPA to ask specific questions about one's music performance.

Psychology

To fully comprehend performance anxiety, one must understand the physiological responses of performance anxiety. The activity of the sympathetic branch of the autonomic nervous system results in the physiological symptoms associated with performance. Also known as the flight or fight response, in the sense of performing arts, the fear is not of physical attack but fear of humiliation. Performance anxiety can also be thought as a threat vs. challenge concept and this process can inhibit a performer's ability to act or perform at one's full potential. Wilson and Roland (2002) give examples including increased heart rate, which supplies additional oxygen to muscles which can provide a distressing or tense feeling. Another symptom is an increase in breath rate, which increases oxygen consumption and widens the airways which give a performer a sense of being breathless. Other symptoms include blurred vision which can affect readings and placement, as well as a dry mouth which affects vocal and musical instrument playing abilities and sweating which can interfere with grip and appearance (Hinkamp et al., 2017; Wilson & Roland, 2002). Performance anxiety symptoms can interfere with any performer's performance. Specifically, with a performer such as a musician or an actor anything affecting the way they play an instrument, speak a line or hold an instrument or a prop can affect overall performance and make them more anxious and panic. In other words, their appearance may be altered due to performance anxiety and can affect the way an audience portrays them.

Factors that Contribute to Performance Anxiety

Multiple factors are associated with the development of performance anxiety within the performing arts. These factors can be gender, emotional stability, performance type (solo, duet,

or group) and audience size, flow, and personal characteristics. Goodman and Kaufman (2014) examined common factors or triggers and found that a performer who is emotionally unstable and has a low locus of control, or individuals who don't believe they have control of the situations, have a higher chance of having performance anxiety.

Gender may also play a role in performance anxiety. Many tend to believe that gender does not affect whether someone will more likely have performance anxiety and that men and women are both likely to develop performance anxiety, but research has shown differently. Wesner et al. (1990) found that women musicians more frequently reported impairment from performance anxiety in both performance and audition settings and that performance anxiety affects their careers when compared to men musicians. Goodman and Kaufman (2014) found that gender, specifically female, was a "significant predictor" and specifically found that females monitored their performance more, had a greater response to stress, a heightened vulnerability, and low levels of emotional stability than males. Therefore, females may be affected by performance anxiety more because of their personality and emotional behavior differences.

Perdomo-Guevara (2014) points out that the type of genre can have an impact on the stresses placed upon musicians. Specifically, classical musicians have more stressors placed on them than non-classical musicians. In other words, diverse types of musicians or artists can have different expectations, and that can increase or decrease stressors. Different genres can also reflect on how a musician handles performing. However, Perdomo-Guevara (2014) found that both groups experienced some level of performance anxiety. Another difference is the level (academic, recreational, or professional)/ experience (years) a performer may have. Wesner et al. (1990) looked at both graduate and undergraduate students and faculty at various levels of their careers and found all performers experienced performance anxiety. Wesner et al. (1990) also

found that age does not affect performance anxiety nor does the type of performing artist, meaning everyone can be affected by performance anxiety. A wide age range is shown throughout all studies, and all studies had performance anxiety, with no difference in age. But more specifically Wesner et al. (1990) looked at performance anxiety in musicians, and they specifically noted that there was no difference in age; all ages experience performance anxiety. From this information one could draw that experience may not play a factor in performance anxiety but something else could play a factor in developing performance anxiety. Jackson and Latane (1981) looked at how the size of a performance (audience amount, location, press, etc.) and how many performers are on stage can affect how someone feels. One of the critical factors that can contribute to performance anxiety was originally just singers but also a talent-show which encompasses both a musical and theatrical population. Jackson and Latane (1981) found with the singer group that size of an audience affects the way the singers felt. Jackson and Latane (1981) also saw with both groups that more people on stage in an act or a chorus the less nervous or tense the performers were. Therefore, level/ experience may not affect a performer but whether they are performing alone or how big an audience is could play a role in how anxious a performer could be.

Flow or optimal performance can also affect how a performer performs. De Manzano, Harmat, Theorell, and Ullen (2010) found that flow is linked to increased arousal with increased heart rate and breath rate which is similar to that of performance anxiety. Kirchner, Bloom, and Skutnick-Henley (2008) looked at flow in performers and found that when a performer experiences low or no flow they are more likely to suffer from performance anxiety.

Kenny et al. (2004) show that perfectionism may be a factor of performance anxiety. Kenny et al. (2004) linked perfectionism in elite opera artists to having a higher stress levels and

an increase of social worry, which in return affects their ability to perform with the increase of self-doubt or the development of performance anxiety. Robb et al. (2018) also found in actors that burn-out and perfectionism affected the "pursuit" or their dedication to a show. Perfectionism was described as exhausting and affected a self-view, in terms of unable to switch off and an overwhelming feeling of failure (Robb et al., 2018). Wilson and Roland (2002) defined perfectionism as "having an unrealistically high expectation of yourself and others" with the tendency to dwell on what is wrong over what is right. A performer is also considered more self-critical and can suffer from low self-esteem because of perfectionism which can lead to an uncomfortable or unstable feeling to succeed and can lead to performance anxiety (Wilson & Roland, 2002). Therefore, perfectionism may be a trend to performance anxiety specifically in the performing arts, as it is linked specifically in musicians to performance anxiety, there may be a trend seen with actors and other performing artists.

More factors can affect a performer and add to the risk of performance anxiety. Wanke et al. (2012) looked at many of these factors, and the main concept that they drew was that because there are so many factors that it is important for performing artists to have available care and ways to help monitor and manage performance anxiety so performing artists can perform at their best, as well as having a health care provider that can help performers be screened and monitored as well as manage their anxiety. Research has shown that there are several questionnaires that look at performance anxiety, with a pattern of inventories made for musicians leaving dancers, vocalists, and theater/actors out of being able to be screened (McQuade, 2008; Wanke et al., 2012).

Performance anxiety or stage fright can be brought on by a fear of an evaluation of a performance by an audience. Size of an audience does not matter; however, gender, specifically

females, age, or years of experience might affect a performer. Performance anxiety has a fight or flight response with an increase in heart rate, breath rate, sweating, and blurred vision. Performance anxiety has been heavily studied in musicians while there has been little to no research done with actors. Both actors and musicians have been associated with perfectionism. In musicians, perfectionism can be a factor that plays into a musician's performance anxiety. Actors may have a similar factor with perfectionism due to the imposing judging and critiques an audience can impose on a performance. However, it is unknown what factors could affect actors due to performance anxiety since it has only been heavily researched in musicians and dismal in actors.

Instrumentation

Numerous performance anxiety research looks at MPA such as Performance Anxiety Inventory for Musicians (PerfAIM), Performance Anxiety Scale for Music Students (PASMS), along with others. The three inventories that are considered "silver standards" for validation are the State-Trait Anxiety Inventory (STAI), the Performance Anxiety Inventory (PAI), and the revised Kenny Music Performance Anxiety Inventory (revised K-MPAI). Differences among these inventories are the domains that the inventory looks at, such as the PerfAIM, which looks at somatic, cognitive, affective and behavioral domains but the revised K-MPAI does not look at those domains. The revised K-MPAI looks at interrelationships between state and trait anxiety, occupational stress, perfectionism, and aspiration (Barbeau, 2011).

There are multiple ways to measure the way a person feels or sees the world. A common tool used within psychology is the State-Trait Anxiety Inventory (STAI) which looks at general anxiety. However, it is also one of the most frequently used assessment instruments for MPA. The inventory consists of 40 items that measure state and trait anxiety (Vitasari, Wahab,

Herawan, Othman, & Sinnadurai, 2011). Hoffman and Hanrahan (2012) discussed how the STAI may not be a relative tool for performance anxiety and how a tool that is more tailored to performance would be more useful in measuring performance anxiety. Nagel et al. (1981) developed the Performance Anxiety Inventory (PAI) for musicians based on the STAI. There is no specific performance anxiety test for theater actors/performers within the research.

The PAI measures performance anxiety with a questionnaire with a 1 to 4-grade scale (1 indicates almost never while 4 shows almost always). When adding all questions together, there is a 20 to 80 score (high score indicating high-performance anxiety). Specifically, the score of 39 or lower is considered "a performer with few complaints of performance anxiety" while a score of 55 is "average prevention score" or is recommended for employing prevention strategies. When a performer does receive a form of prevention, a score of 38 or a difference of 17 is considered a change in performance anxiety (Nagel et al., 1981). The inventory consists of 20 questions that focus on a performers experience while performing. The inventory has the "common assumption, that anxiety is composed of cognitive, behavioral, and physiological components" (Nagel, Himle, & Papsdorf, 1989). Nagel et al. (1989) addressed the internal consistency reliability of the PAI with a coefficient alpha score of 0.89 for the entire inventory, which is considered "highly satisfactory." The PAI has been found to "be a useful instrument for the measurement of performance anxiety," however, it is also noted that "future research is needed on this instrument… to lead to its refinement and further development" (Nagel et al., 1989). The PAI is a general tool looking at anxiety in performance while considering the cognitive, behavioral, and physiological components and is also made with the ability to refine and develop new inventories, which researchers have done to form more specific music performance anxiety inventories.

The revised K-MPAI is an assessment that was developed to look at psychological vulnerabilities to assist in aiding in the full comprehension of performance anxiety for treatment. It consists of 40 questions with a grade of 0 to 6 with the understanding of strongly disagree to agree strongly. The range of scores is from 0 to 240 and takes 10 to 12 minutes to complete. The revised K-MPAI is broken up into eight categories and when interpreted the higher the score, the more likely someone is to possess a psychological condition/behavior (Kenny, 2009).

Other Instrumentation

The SF-12 health survey is a shorter version of the SF-36 health survey. The SF-12 is comprised of 12 questions to measure functional health and well-being from a patient's point of view. The inventory is made for "general" use and clinical use to compare health between populations and between diseases. The SF-12 measures eight health domains;

1. Physical functioning- limitations in daily life because of health problems.
2. Role physical- limitations because of physical health problems.
3. Bodily pain- pain frequency and pain interference with usual roles.
4. General health- individual perception of general health
5. Vitality- energy levels and fatigue.
6. Social functioning- extent that ill health interferes with social activities.
7. Role emotional- if emotional problems affect usual roles
8. Mental health- psychological distress

The SF-12 consists of 12 questions with the breakdown of two-item questions for physical functioning, role physical, role emotion, and mental health and one-item question for bodily pain, general health, vitality, and social functioning. High scores are interpreted with better health. Specifically, in mental health "low scores represent high levels of nervousness and

depression, while high scores characterize someone who feels peaceful, happy, and calm" (Busija et al., 2011).

There are multiple instrumentation tools to measure music performance anxiety for instrumental musicians. The PAI is one of the first inventories made with other researchers expanding on the needs of a musician and creating multiple tools. There is no specific tool made for actors. Therefore, to use the PAI with an actor population to determine if the PAI can examine performance qualities of actors, the first step must be to examine if an actor and musician test differently. The SF-12 will have the use of looking at general health of both actors and musicians since performance anxiety has multiple factors that can cause adverse health effects.

Conclusion

Performing artists such as dancers, instrumental musicians, vocalists, and theater/actors perform to please and entertain an audience. Research has shown that stressors and fear can be placed upon the performing artists to be perfect or flawless in their delivery of performance. When the stress and perfection get to be too much, and the joy or flow is gone from performing, performers are left lost and anxious which can lead to performance anxiety. Performance anxiety can lead to multiple factors including adverse health effects. It also can lead to a career-ending show. Therefore, this study is looking to answer whether there are similarities in actors' performance anxiety when compared to musicians using validated performance anxiety inventories developed for musicians. The null hypothesis: There will be no differences between actors and musicians on the PAI. The Alternative Hypothesis: PAI will predict performance anxiety and actors perform differently than musicians on the PAI.

CHAPTER 3

METHODS

Purpose

The purpose of this comparative study was to investigate and compare performance anxiety in actors to musicians using the validated Performance Anxiety Inventory (PAI). The PAI measures the performance anxiety in musicians. Performance anxiety can be debilitating and can have a negative effect on a performer's performance, career, and lead to adverse health factors. There has not been an investigation into the PAI ability to measure the performance anxiety of actors. There has been an increase in the healthcare of performing artists, but limited research on performers that sing, dance, and/or act. Therefore, using the research exploring performance anxiety of actors and making comparisons to musicians, will answer whether the same tool can measure if an actor's performance anxiety symptoms are similar to an instrumental musician's.

Null Hypothesis

There will be no differences between actors and musicians on the PAI.

Alternative Hypothesis

1. PAI will predict performance anxiety.
2. Actors perform differently than musicians on the PAI.

Participants

The participants included in this study are collegiate students ages 18 to 24 years old, who participate in the theater or music department at Marshall University. All participants involved in the study volunteered to complete the inventory. A minimum of five theater actors to a max of 20 theater actors and a minimum of 10 musicians and a maximum of 40 musicians will

complete the Performance Anxiety Inventory and Data Collection Forms, 1 to 3 hours before the first show of the music department and theater department performances of the Spring 2019 semester.

Inclusion Criteria: Participants are students at Marshall University, between the ages 18 and 24, participate in the theater or music department and are performing in a Marshall University performance.

Exclusion Criteria: Participants are NOT students at Marshall University, between the ages 18 and 24, participate in the theater or music department and will not perform in a Marshall University performance.

IRB Approval

This study was approved by the Marshall University Institutional Review Board and was approved on March 27, 2018. IRBNet ID# 1194964-1 (Appendix A). All participants signed and verbally agreed to participate in this study (Appendix B).

Instrumentation

The demographic part of the research study questionnaire was used to gather information on age, sex, gender identity, major, level in school, performing arts experience, and participants' physical fitness. The data collection form was used to gather information on patient perception of general anxiety and performance anxiety through a single item score. There were two questions having the participant rate their anxiety and performance anxiety on a scale of 0 to 100 with 0 being no performance anxiety and 100 being maximal performance anxiety. There were also two questions that have the participant rate the level of effect their anxiety and performance anxiety has affected them. The anxiety question asked the participant to rate the effect of their daily activities during the past week, and the performance anxiety question asked the participant to

rate the effect of their performance anxiety during their most recent performance. Both questions are on a 5-question scale with the first option as “no difficulty” and the last option as “cannot perform.” This information we are using to access the effect of current and past performance anxiety and anxiety. (Appendix C and E).

The SF-12 health survey is a 12-item questionnaire to measure functional health and well-being from a patient’s point of view. High scores are interpreted with a better health on a 0-100 scale. (Busija et al., 2011). (Appendix D).

Performance Anxiety Inventory (PAI) measures cognitive, behavioral, and physiological factors (Hoffman & Hanrahan, 2012). The PAI was developed for musicians and is based on the State-Trait Anxiety Inventory (STAI) that assesses state and trait anxiety. The PAI has 20-items which are measured on a four-point scale that ranges from one which is almost never, two sometimes, three often and four which is almost always. All scores are added together, with a numerical value of a minimum of 20 to a maximum of 80. A higher score indicates higher performance anxiety with 39 or lower being considered low-performance anxiety (Nagel et al., 1981). Reported internal consistency is 0.89 by Nagel et al. (1989) (Appendix E).

Pilot

A pilot lab was conducted in the Spring 2018 semester. This lab consisted of 15 participants who were part of the Marshall University Theater Program and performed in a Spring show. The information and agreement to be a part of the study were discussed and completed with the performers during the warm-up time of the last rehearsal. A demographic inventory, single-item questionnaire, and the PAI were administered during the warm-up time before the first show. The time it took the participants to complete the inventory, and the PAI was six to nine minutes. The data from the PAI and the single -item questionnaire were exported

to statistical software SPSS 21.0 (SPSS, Chicago, Il). When looking at the single-item question of rating their anxiety and rating their performance anxiety, there was no statistical significance ($p = 0.36$). However, when looking at the correlation between each single-item question and the PAI score there was statistical significance ($p < 0.05$). The correlation of rating anxiety to PAI was $r = 0.705$, and the correlation between rate your performance anxiety to PAI score was an $r = 0.671$. The PAI showed a range of scores within the 15 participants and saw a range of 23 to 55, which met within the scale of the PAI that Nagel et al. (1981) found as 20-80. With that, Nagel et al. (1981) also stated that a 39 or lower is a person with "few complaints of performance anxiety" while a score of 55 is an "average prevention score." Looking at the three highest scored participants (55, 54, and 52) there was a relation of higher scores in anxiety and performance anxiety single-item scores. A similar relationship was found with the three lowest scored participants (23, 27, and 27) with low scores in anxiety and performance anxiety single-item scores, signifying a relation between the PAI score and overall personal rating. This pilot study was used to determine the appropriate way to administer forms for this study and to demonstrate that the instruments, specifically the PAI is responsive in determining performance anxiety.

Procedure

Day 1 Procedures: An informational session was conducted the day before each performance. The session included a brief discussion of the purpose of the study and the procedures of the study. The instructions for the participants that day if they choose to participate and that they could change their mind at any time was to complete the Consent Form, Demographic Questionnaire, and the SF-12 Health Survey and once completed to turn them into

the researcher (Appendix B, C, and D). The performers had 15 to 20 minutes to complete all forms. The researcher stood by for any questions or concerns that a performer had.

Day 2 Procedures: the researcher passed out the PAI and Data Collection Form, 1.5 hours before the first showing of the first show and concert of both the theater performers and the musicians of the Spring 2019 season. All performers were told by the researcher to read the instructions at the top of the inventory and to fill each component out in an honest manner and how they interpret the statement, and to answer the four questions on the back of the inventory on how they feel. The researcher stood to the side of the room to remove any pressures they may place on the performers. The performers completed the PAI and Data Collection Form in 10 minutes. All inventories were then placed on a table and collected without the researcher knowing who filled them out, keeping the performer's identity private with a subject number already assigned so it could be joined with Day 1s inventories. The researcher collected all forms and filed each form into the corresponding folder (Appendix E).

All forms were analyzed for completeness and then recorded and exported to statistical software (SPSS 21.0 (SPSS, Chicago, Il)) for statistical analysis.

Delimitations

A single collegiate institution was used in this study. The participants were at least 18 years of age to ensure an adult population, and the maximum age of 24 years to gather all students. Participants must have performed in the Spring performance, and they participate in the theater or music department to participate in this study. The terms recital and concert were referred to as performance for theater students, for the proper terminology of their performance.

Data Analysis

The data analysis consisted of evaluating every inventory to confirm the completeness and adding up each inventory to receive a score. There was a between-group comparison with a statistical analysis performed to compare results between theater and music. A one-way ANOVA statistical analysis was used to determine between-group differences in the PAI score. Regression analysis was used to determine the ability of the PAI to predict the single item outcomes anxiety, performance anxiety and the effect of performance anxiety scores. Multiple regression and ROC analysis were used to determine the responsiveness of each item of the PAI. All statistical analysis was performed with SPSS 21.0 (SPSS, Chicago, Il). Statistical significance was determined at $P \leq 0.05$, Bonferroni correction for multiple was used when appropriate.

CHAPTER 4

RESULTS

Demographics

The results included 6 actor participants and 16 musician participants. A total of 25 forms were collected, but 3 participants were not included in this study because of incomplete data; all were musician participants. Therefore, 22 participants were included in this study. The age range of the participants ranged from 19-23 years of age, with the mean age being 21 years old. Sex (male or female) demographics: there was a total of 14 females (56%), 8 males (32%), and 3 unreported (12%). The gender demographic (participant provide the gender they identified with) revealed that there were; 10 females (40%), 6 males (24%), and 9 unreported (36%). The youngest age that participants stated performing was 2 years, and the oldest was 17 years with the mean age of 9 years of age. All the participants have performed in a Marshall University performance before. Academic level showed 3 freshman, 4 sophomores, 3 juniors, 9 seniors, and 2 others (above senior level), with 4 unreported. The majors included 14 music (56%), 6 theater (24%), 1 both theater and music (4%), 1 other (4%), and 3 unreported (12%).

The results included 16 musicians, with 3 exclusions, ages 19 to 23 years of age and a mean age of 20 years. Out of the musicians, there were 9 females (47.4%), 7 males (36.8%) and 3 unreported (15.8%). The musicians identified (gender) as 5 females (26.3%), 5 males (26.3%), and 9 (47.4%) unreported. The musicians had 14 music majors (73.7%), 1 both theater and music major (5.3%), 1 other (5.3%), and 3 unreported (15.7%). The musician's academic level revealed; 3 freshmen (15.7%), 4 sophomores (21.1%), 1 junior (5.3%), 5 seniors (26.3%), 2 others (10.5%), and 4 unreported (21.1%). The musician group experience ranged from starting at age 2 years old to 14 years old, with the mean age of 9 years old.

The results included 6 actors with no exclusions, ages 20 to 23 years old and a mean of 21 years. In the actor group, there were 5 females (83.3%), and 1 male (16.7%) and all identified (gender) the same. All actor participants (6) were theater majors (100%). The actors had 2 juniors (33.3%) and 4 seniors (66.7%). Within the actor group, their performing arts experience ranged from starting at age 5 to 17 years old, with the mean age of 9 years old.

No sex differences were found with the PAI, reported performance anxiety or anxiety, or the SF-12 health survey scores.

Questionnaires

Musicians					
		Minimum	**Maximum**	**Range**	**Mean**
Anxiety		15	90	75	60.0
Performance Anxiety		20	100	80	69.3
PAI		30	66	36	38.8
SF-12	**Physical**	33.9	60.3	26.4	50.8
	Mental	16.6	62.9	46.3	35.9

Table 1. Basic Descriptive Statistics of Musicians
The minimum, maximum, range, and mean figures for reported anxiety, reported performance anxiety, PAI, SF-12 Health Survey physical and mental scores for musicians.

Actors					
		Minimum	**Maximum**	**Range**	**Mean**
Anxiety		0	85	85	43.7
Performance Anxiety		20	90	70	50.8
PAI		31	60	29	45.0
SF-12	**Physical**	39.9	58.1	18.2	52.0
	Mental	24.2	52.6	28.4	40.3

Table 2. Basic Descriptive Statistics of Actors
The minimum, maximum, range, and mean figures for reported anxiety, reported performance anxiety, PAI, SF-12 Health Survey physical and mental scores for actors**.**

		All Participants		Musician		Actor		T-Test	P-Value
		Mean	Standard Deviation	Mean	Standard Deviation	Mean	Standard Deviation		
Anxiety		55.1	28.1	60.0	23.7	43.67	36.4	-1.204	0.144
Performance Anxiety		63.8	24.2	69.3	21.8	50.83	26.5	-1.628	0.752
PAI		40.3	20.7	38.8	22.8	45.00	12.7	0.632	0.209
SF-12	**Physical**	51.1	7.9	50.8	8.0	52.022	8.4	0.317	0.750
	Mental	37.1	12.9	35.9	13.9	40.337	10.3	0.710	0.422

Table 3. Statistics
The mean and standard deviation for all participants, musicians, and actors for the reported anxiety, reported performance anxiety, PAI, and Health Survey physical and mental scores. Also included are t-test and p-value figures for reported anxiety, reported performance anxiety, PAI, SF-12 Health Survey physical and mental scores.

PAI

The musicians' PAI group mean was 38.8 and the actor PAI group mean was 45.0 meaning there was no group difference between the means (Table 3).

PAI did predict performance anxiety because the PAI scores of instrumental musicians and the PAI scores of theater actors correlated to their reported performance anxiety scores. Within all the participants the mean PAI score was 40.3, musicians' mean PAI score was 38.8, and the actors had a mean PAI score of 45.0. The mean scores of reported performance anxiety for all participants was 63.8; musicians' mean reported performance anxiety score was 69.29, and mean reported performance anxiety score for actors was 50.8 (Table 3). There was a positive correlation between the PAI score ($r = 0.571$, $P = 0.009$) and the self-rated performance anxiety score.

Multiple regression revealed ($r2 = 1.00$, $P < 0.001$) that all items of the PAI contributed to the variability of the PAI score except item 13. Separate multiple regression analyses for each

group revealed differences in the individual item responsiveness (Figure 3). Specific PAI item lines (questions) in a regression showed each question produced change or a predictor in the score except 13 (*During recitals I am so tense that my stomach gets upset*). When looking at just musicians, questions 20, 14, 3, 1, 11, 2, 9, 4, 6, 15, 18, 17, and 13 produced change or was a predictor in the score and excluded questions 5, 7, 8, 10, 12, 16, and 19. When looking at just actors, questions 20, 7, 10, 5 and 1 produced change or was a predictor in the score and excluded questions 2, 3, 4, 5, 6, 8, 9, 11, 12, 13, 14, 15, 16, 17, 18, and 19.

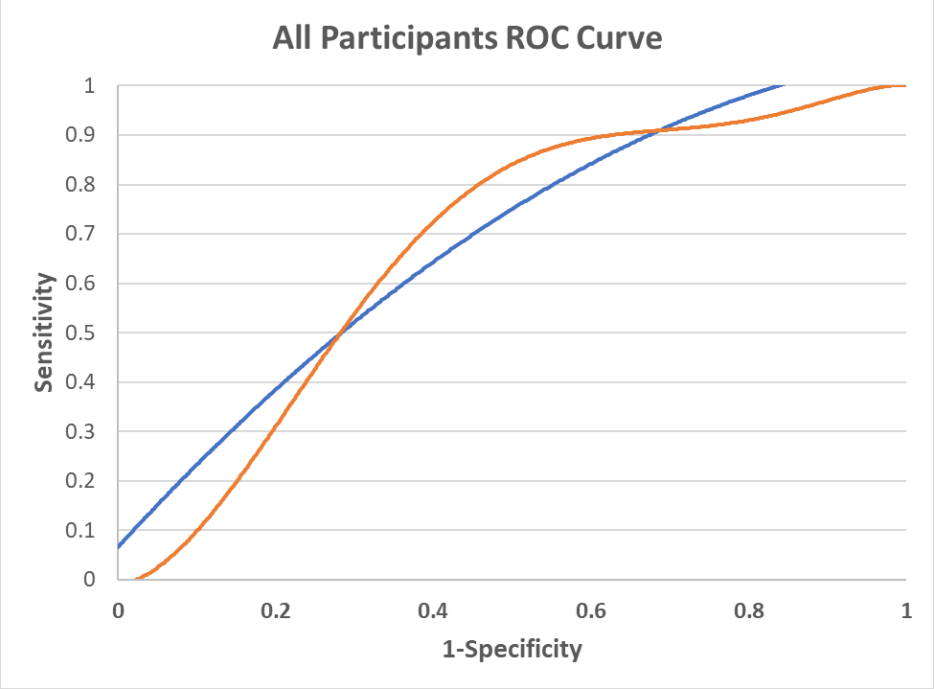

Figure 3. ROC Curve for All Participants
All participants' scores of reported performance anxiety (blue line) and PAI scores (orange line). The area under the curve for reported performance anxiety was 0.682 and PAI was 0.667. The Standard Error for reported performance anxiety was 0.121 and PAI was 0.126.

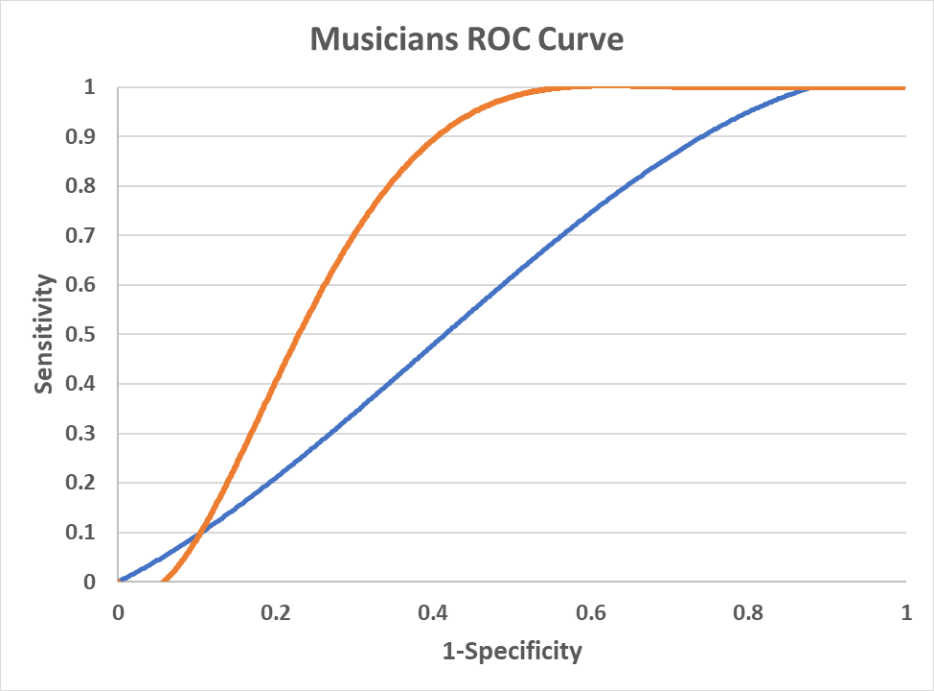

Figure 4. ROC Curve for Musicians
Musicians' scores of reported performance anxiety (blue line) and PAI scores (orange line). The area under the curve for reported performance anxiety was 0.571 and PAI was 0.755. Standard Error for musicians' reported performance anxiety was 0.162 and PAI was 0.146.

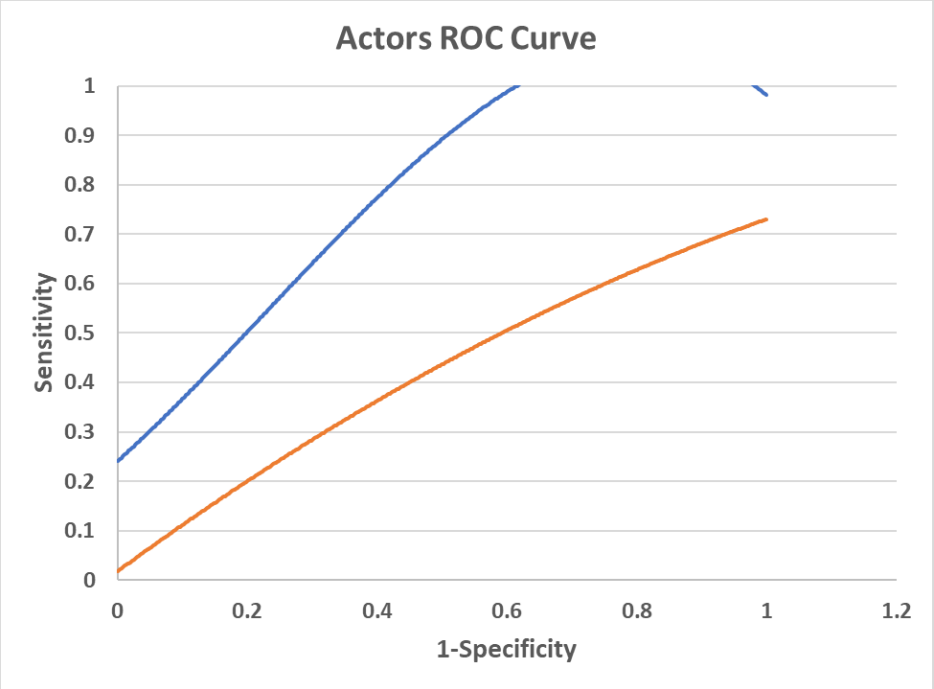

Figure 5. ROC Curve for Actors
Actors' scores of reported performance anxiety (blue line) and PAI scores (orange line). The area under the curve for reported performance anxiety was 0.813 and PAI was 0.375. Standard Error for actors' reported performance anxiety was 0.198 and PAI was 0.296.

ROC analysis was performed in order to determine the utility of the PAI to determine the effect of performance anxiety. The most common (11/22) response on the single item/ reported performance anxiety effect question was 3 (moderate effect). The cut level for the ROC analysis was set at the effect level of 3. A PAI score of 31 produced a sensitivity of 1.0, while a PAI score of 67 produced the highest specificity (Figure 3). The PAI score that produced the optimal sensitivity (0.89) and specificity (0.55) was 44. The area under the ROC curve was 0.667 ± 0.126 (P = 0.210). For the musician group, a PAI score of 46 produced a sensitivity of 1.0, while a PAI score of 67 produced the highest specificity. The PAI score that produced the optimal sensitivity (0.86) and specificity (0.71) was 48 (Figure 4). The area under the ROC curve was 0.755 ± 0.162 (P = 0.110). For the actor's group, a PAI score of 30 produced a sensitivity of 1.0, while a PAI score of 61 produced the highest specificity. The PAI score that produced the optimal sensitivity (0.50) and specificity (0.50) was 45 (Figure 5). The area under the ROC curve was 0.813 ± 0.198 (P = 0.247). Reported performance anxiety was a self-reported score of 0 to 100 with 0 being no performance anxiety to 100 being max performance anxiety. A ROC analysis was conducted in order to explore between-group differences in the responsiveness of the reported performance anxiety scores. A reported performance anxiety score of 48 produced the sensitivity of 1.0, while a reported performance anxiety score of 87 produced the highest specificity (Figure 3). The reported performance anxiety score that produced the optimal sensitivity (0.68) and specificity (0.55) was 63. The area under the ROC curve was 0.682 ± 0.121 (P = 0.171). For the musician group, a reported performance anxiety score of 48 produced the sensitivity of 1.0, while a reported performance anxiety score of 95 produced the highest specificity. The reported performance anxiety score that produced the optimal sensitivity (0.71) and specificity (0.57) was 63 (Figure 4). The area under the ROC curve was 0.571 ± 0.162 (P = 0.655). For the actor group,

a reported performance anxiety score of 38 produced a sensitivity of 1.0, while a reported performance anxiety score of 80 produced the highest specificity. The reported performance anxiety score that produced the optimal sensitivity (1.0) and specificity (0.50) was 38 (Figure 5). The area under the ROC curve was 0.813 ± 0.198 ($P = 0.247$).

CHAPTER 5

DISCUSSION

The purpose of this comparative study was to investigate the differences in performance anxiety between actors and musicians using the validated Performance Anxiety Inventory (PAI). The PAI measures the performance anxiety in musicians. There has not been an investigation into the PAI's ability to measure the performance anxiety of actors. In the current study, the PAI did predict performance anxiety due to the moderate to strong positive correlation ($r=0.571$, $p=0.009$) of the PAI and the self-rated performance anxiety score. This finding supports H1 the PAI did predict the performance anxiety of both actors and musicians. The second hypothesis was rejected. Actors and musicians had similar scores on the PAI. However, the results suggest that there might be differences in the contribution of individual items of the PAI and the responsiveness, between actors and musicians.

Performance anxiety can be debilitating and can have a negative effect on a performer's performance, career, and lead to adverse health factors. There has been an increase in the healthcare of performing artists, but limited research on performers that sing, dance, and/or act. Therefore, using the research exploring performance anxiety of actors and making comparisons to musicians, will answer whether the same tool can measure if an actor's performance anxiety symptoms are similar to an instrumental musician's performance anxiety.

According to the Nagel et al. (1981) guidelines, to score the PAI all scores are added together, with a numerical value of a minimum of 20 to a maximum of 80. A higher score indicates higher performance anxiety with 39 or lower being considered low-performance anxiety. Within all the participants the mean score was 40.28; musicians mean score was 38.79, and the actors had a mean score of 45.00. There was no explanation of how Nagel et al. (1981)

developed the score of 39 and 55; we assume through a similar type of study. However, this study shows that the score of 39 might not be the same cut-off score as it was when Nagel et al. (1981) developed it. The difference in scores from this study and Nagel et al. (1981) could be because of different times including a 38-year difference in studies as well as a difference in how performing artists are trained and live in today's world, as well as the age range (19-24) we collected from in this study. These differences could mean several different things; one, that the PAI should be updated to meet the current time and two, the age range could affect score ranges. More research should be done to determine if the present time or age range has an effect on cut off scores of the PAI.

Reasons that actors performed similar to musicians were because of small and similar sample size within the actor participants. A larger more diverse group of actors may have shown differences. There were two similarities amongst both groups on specific items on the PAI: Question 20 (*During a recital I get so nervous that I block*) and question 1 (*I feel confident and relaxed while performing before an audience*). Blocking could mean several things to both groups, and it would be interesting if they interpreted the question or the word block in the same way. Future investigators could perform a qualitative investigation to determine how each group interprets the questions on the PAI to discuss if their similarity is actually similar or different. It is interesting that there are no similarities with the questions relating to symptoms of performance anxiety. Breaking the PAI down there are 5 questions (2, 8, 11, 13, and 18) that specifically ask about the physical symptoms associated with performance anxiety. These questions ask about cold hands, feeling jittery, sweaty hands, upset stomach, and fast beating heart, as Wilson and Roland (2002) pointed out as some of the examples of performance anxiety symptoms which can again interfere with a performers performance. The actors did not show

change with any symptom question while the musicians had 4 questions (11, 2, 18, and 13) that predicted performance anxiety that was anxiety symptoms. The only question musicians did not have was question 8 (*I feel jittery when giving an important recital*). The physical symptom finding suggests that musicians appeared to be impacted by physical symptoms of performance anxiety more than actors. More research should be done to determine if actors manifest more physical symptoms of performance anxiety to discover if that is a noteworthy finding and therefore a difference in musician and actor performance anxiety.

Perfection and the PAI questions have a relationship. There are 8 specific questions on the PAI that could be related to perfectionism personalities. Of the 20 item questions on the PAI, the 8 specific questions (3, 4, 6, 7, 9, 16, 17, and 19) could relate to perfectionism. The musicians had 5 questions (3, 9, 4, 6, and 17) and actors had one question, 7 (*Thoughts of doing poorly interfere with my performance*), of these specific questions. Kenny et al. (2004), Robb et al. (2018), and Wilson and Roland (2002) found the relationship of perfectionism and performance anxiety in musicians and the similarities in the scores of musicians within this study agrees with other research that perfectionist qualities could be a factor in developing performance anxiety. Question 7 supports what Robb et al. (2018) and Wilson and Roland (2002) found about perfectionism and negative thought or self-doubt which question 7 discusses. Therefore, actors could also have the same trend of perfectionism leading to performance anxiety, but more research should be done to confirm that relation.

The differences of a musician and an actor from our demographic data included experience (when they began participating in performing arts) and scholar level. The musician population had the longest experience or started at the youngest age, but the actors were at a higher scholar level. The biggest difference between musicians and actors are on how they are

perceived or evaluated. Hinkamp et al. (2017) discussed the atmosphere of an actor is very intense due to the elements of a performance that musicians often do not perform in. On the PAI two questions (3 and 10) asked about evaluation and feedback of a performance. There was a difference in the scores of the musician and actors' scores; the musicians had question 3 (*Thinking about the evaluation I may get in a recital interferes with my performance*), and the actors had question 10 (*I start feeling very uneasy just before getting feedback on my performance*). The differences in responses between actors and musicians support the concept that Hinkamp et al. (2017) discussed of how the judgment of the performance could be different for the setting of a performance because there are different pressures placed on both musicians and actors. The difference between the musicians' and the actors' response to question 3 and 10 could be a difference in mindset. The musician group could be thinking about specific aspects or moments in a performance/ recital and be self-conscious about that specific moment, while the actor group could be more concerned about the entire performance and the feedback afterwards. The possible difference is important because the judgment or pressures could be because of the difference in how a performing artist perceives different judgment and pressures. As discussed before future investigators could perform a qualitative investigation to discover the perceived meanings and pressures placed on different groups of performing arts.

Another difference included the experience and academic level of the groups. The musicians had a more diverse group while the actors were all very similar. The musicians included a variety of freshmen (3), sophomores (4), junior (1), seniors (5), and other / above senior level (2) while the actor group included only juniors (2) and seniors (4). The similitudes in academic level supports Wesner et al. (1990) that found no difference between undergraduate, graduate, and faculty performance anxiety and supporting the concept that experience does not

play a factor in performance anxiety. However, because the actor population was similar in scholar level more studies should look at that to fully conclude and support that experience is not a factor in developing performance anxiety.

Goodman and Kaufman (2014) and Wesner et al. (1990) discussed that gender, specifically females, can be a contributing factor to performance anxiety. Within both groups, there was no evidence that supported that females were more likely to develop performance anxiety on the PAI, reported performance anxiety or anxiety scores or with the SF-12 Health Survey. More research should be done to determine if there are sex differences in performance anxiety in other forms of the performing arts, such as in actors, dancers, or vocal musicians.

Lastly, the SF-12 Health survey scores of instrumental musicians and SF-12 health survey scores of theater performers showed no correlation of performance anxiety and negative behavior. The lack of a relationship between mental and physical health and PAI scores supports the concept that mental and physical health and moderate to low-performance anxiety are separate from each other. Concerns of negative health behavior could be formed with heightening or extreme performance anxiety. The correlation of reported performance anxiety and anxiety showed a possible connection to general anxiety and experiencing performance anxiety. Again, more research should be done to look at the relationship of performance anxiety and anxiety farther, including that performance anxiety is not affecting a performer's physical health. Therefore, if one was affected by performance anxiety with their mental or physical health, they may suffer severely and be clinically diagnosed with performance anxiety. More research should be conducted to conclude that a certain level of performance anxiety is what could lead to negative mental and physical health.

Limitations

Limitations to this study included all participants were collegiate students at Marshall University and were 18 to 24 years old. The instrumental musicians consisted of brass, wind, and percussion and no string. Other limitations of this study include the number of participants from each performance arts group, as well as only collecting data from one performance from each group. A varied amount of performances, and the different type or styles (drama, comedy, romance, Shakespeare, classical, jazz, blues, gospel, folk/country, etc.) of performances could have produced different data. Specifically within the actor group where there are differences of characters could have affected how one may have felt (gender role, sexual identity (straight/gay), physical attributes, etc.) as Perdomo-Guevara (2014) stated could have an impact on the stresses placed on performers. The study also did not include dancers or vocal musicians in a part of the groups of performing arts because we wanted one control and one comparison for this study. We choose instrumental musicians for they have more research than vocal musicians and actors because of their heightened risk of performance anxiety and they were more available to collect data from than dancers. Research has been conducted on vocal musicians as it is a part of the Music Performance Anxiety (MPA) research, but there is minimal research done on dancers' performance anxiety. Future research should be done on bigger performance arts groups as well as groups that vary in age or are in different parts of their performing arts career as Jackson and Latane (1981), and Wesner et al. (1990) discussed that size or experience was not a factor for musicians; however, other performing arts groups could be affected.

Future Research

A next step would be to repeat this study on a larger population to see whether there would be any statistical differences within the groups, as well as looking at the third major group

of performing artists, dancers, and to determine if dancers perform differently than other performing arts groups on the PAI. Other next steps in research of performance anxiety in the performing arts can include forming new and more precise questionnaire forms for theater actors as there are for musicians. Research can also look farther into each individual group such as in acting and look at theater actors and media (television, movies, etc.) actors to see if their performance anxiety is similar, as well as, including professional and recreational or community performing arts performances in all forms of performing arts. As other research has stated, other areas of interest can look at prevention and treatment of performance anxiety in all forms of performing arts, as well as the correlation between FLOW or optimal performance and performance anxiety in the performing arts which could be used as a teaching tool on how to cope with performance anxiety.

Conclusion

In conclusion, it appeared that musicians and actors perform similarly on the PAI and therefore answering yes there are similarities in actors' performance anxiety and musicians' performance anxiety using the PAI. It also appeared that self-reported performance anxiety could be as effective as a 20-question form. There were no significant findings due to such a small sample size. However, even with a small sample size, it appeared that experience (scholar level or when someone started performing) did not affect performance anxiety which supports other research. This study showed that the PAI was responsive to an actor population and future research could expand on bigger and more diverse populations to confirm the possibility that the PAI could work in an acting population. The actors and musicians responded similarly meaning that performance anxiety could respond similarly within two populations of the performing arts. The similar response could also mean easier care and screening processes for the entire

performing arts community and in a bigger picture help screen performing artists on performance anxiety, so it does not affect their health or career. Therefore, this study can be used to continue the research and fill the gaps of performance anxiety within the performing arts world for actors as well as plant the seed to compare other forms of performing arts.

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APPENDIX A: OFFICE OF RESEARCH INTEGRITY APPROVAL LETTER

MARSHALL UNIVERSITY
www.marshall.edu

Office of Research Integrity
Institutional Review Board
One John Marshall Drive
Huntington, WV 25755

FWA 00002704

IRB1 #00002205
IRB2 #00003206

March 27, 2018

Mark Timmons, PhD
Marshall University, Dept. of Kinesiology

RE: IRBNet ID# 1194964-1
At: Marshall University Institutional Review Board #1 (Medical)

Dear Dr. Timmons:

Protocol Title:	[1194964-1] Performing Arts and Performance Anxiety	
Expiration Date:	March 27, 2019	
Site Location:	MU	
Submission Type:	New Project	APPROVED
Review Type:	Expedited Review	

In accordance with 45CFR46.110(a)(7), the above study was granted Expedited approval today by the Marshall University Institutional Review Board #1 (Medical) Chair for the period of 12 months. The approval will expire March 27, 2019. A continuing review request for this study must be submitted no later than 30 days prior to the expiration date.

If you have any questions, please contact the Marshall University Institutional Review Board #1 (Medical) Coordinator Trula Stanley at (304) 696-7320 or stanley@marshall.edu. Please include your study title and reference number in all correspondence with this office.

APPENDIX B: INFORMED CONSENT

Informed Consent to Participate in a Research Study

Performing Arts and Performance Anxiety

Mark K Timmons PhD ATC, Principal Investigator

Introduction

You are invited to be in a research study. Research studies are designed to gain scientific knowledge that may help other people in the future. You may or may not receive any benefit from being part of the study. There may also be risks associated with being part of research studies. If there are any risks involved in this study then they will be described in this consent. Your participation is voluntary. Please take your time to make your decision, and ask your research doctor or research staff to explain any words or information that you do not understand.

Why Is This Study Being Done?

Performance anxiety can have negative effects on the health of performing artists. The purpose of this study is to increase the understanding how performance anxiety is measured in performing artists.

How Many People Will Take Part In The Study?

About 60 people will take part in this study. A total of 80 subjects are the most that would be able to enter the study.

What Is Involved In This Research Study?

During the study you will fill out 3 questionnaires. The first questionnaire will ask questions about your feelings about stress and anxiety. The other questionnaires will ask question about your health. and your participation in the performing arts participation.

How Long Will You Be In The Study?

You will be in the study for one testing sessions that will take about 20 minutes to complete.

You can decide to stop participating at any time. If you decide to stop participating in the study we encourage you to talk to the investigators or study staff to discuss what follow up care and testing could be most helpful for you.

The study doctor may stop you from taking part in this study at any time if he/she believes it is in your best interest; if you do not follow the study rules; or if the study is stopped.

What Are The Risks Of The Study?

Being in this study involves some risk to you. You should discuss the risk of being in this study with the study staff.
You should talk to your study doctor about any side effects that you have while taking part in the study.

Subject's Initials _____

Risks and side effects related to the testing session include: exposure of your reactions to stress and anxiety you experience associated with performing arts.

There may also be other side effects that we cannot predict. You should tell the research staff about all the medications, vitamins and supplements you take and any medical conditions you have. This may help avoid side effects, interactions and other risks. There are no funds available for compensation for any injury that occurs as a result of your participation in this study.

Are There Benefits To Taking Part In The Study?

If you agree to take part in this study, there may or may not be direct benefit to you. We hope the information learned from this study will benefit other people in the future. The benefits of participating in this study may be: You will gain information about the function of your wrist and hand.

What Other Choices Are There?

You do not have to be in this study. You should talk to your doctor about all the choices you have.

What About Confidentiality?

All study information will be identified by a number assigned by the researcher. Your name will not will not appear on any of the questionnaires. We will do our best to make sure that your personal information is kept confidential. However, we cannot guarantee absolute confidentiality. Federal law states that we must keep your study records private. Nevertheless, certain people other than your researchers may also need to see your study records. By law, anyone who looks at your records must keep them completely confidential.

Those who may need to see your records are:

- Certain university and government people who need to know more about the study. For example, individuals who provide oversight on this study may need to look at your records. These include the Marshall University Institutional Review Board (IRB) and the Office of Research Integrity (ORI). Other individuals who may look at your records include: *the federal Office of Human Research Protection*, This is done to make sure that we are doing the study in the right way. They also need to make sure that we are protecting your rights and your safety.

If we publish the information we learn from this study, you will not be identified by name or in any other way.

What Are The Costs Of Taking Part In This Study?

There are no costs to you for taking part in this study. All the study costs will be paid for by the study. Costs for your regular medical care, which are not related to this study, will be your own responsibility.

Will You Be Paid For Participating?

Subject's Initials _____

You will not be paid if you decide to participate in this study.

Who Is Funding This Study?

This study is being sponsored by Marshall University School of Kinesiology

What Are Your Rights As A Research Study Participant?

Taking part in this study is voluntary. You may choose not to take part or you may leave the study at any time. Refusing to participate or leaving the study will not result in any penalty or loss of benefits to which you are entitled. If you decide to stop participating in the study we encourage you to talk to the investigators or study staff first to learn about any potential health or safety consequences.

Whom Do You Call If You Have Questions Or Problems?

For questions about the study or in the event of a research-related injury, contact the study investigator, Mark K Timmons ATC, PhD at (304)696-2925. You should also call the investigator if you have a concern or complaint about the research.

For questions about your rights as a research participant, contact the Marshall University IRB#1 Chairman Dr. Henry Driscoll or ORI at (304) 696-7320. You may also call this number if:

- You have concerns or complaints about the research.
- The research staff cannot be reached.
- You want to talk to someone other than the research staff.

You will be given a signed and dated copy of this consent form.

SIGNATURES

You agree to take part in this study and confirm that you are 18 years of age or older. You have had a chance to ask questions about being in this study and have had those questions answered. By signing this consent form you are not giving up any legal rights to which you are entitled.

_____
Subject Name (Printed)

_____ _____
Subject Signature Date

_____ _____
Person Obtaining Consent Date

_____ _____
Principal Investigator Date

Subject's Initials _____

APPENDIX C: RESEARCH STUDY QUESTIONNAIRE

Subject ID Number_____ Date____/____/_____

Initial Data Collection Forms

Procedure Checklist

1. Inclusion & exclusion criteria
    a. Eligibility Screening exam
2. Subject Informed Consent
    a. Read, discuss, ask questions, sign
3. General Questions- Eligibility and Screening
    a. Initial Data Collection Form
    b. Research Study Questionnaire
    c. Patient Reported Outcomes (SF12V2 and PAI)

Inclusion criteria:

____1. At least 18 years of age

____2. An Marshall University Theater or Music Student

____3. Perform in the current/upcoming show/concert

Exclusion criteria (any 1 excludes):

____1. Older than 24 years of age

____2. Not a Marshall University Theater or Music Student

____3. Are not performing in current/upcoming show/concert

Subject meets inclusion/exclusion criteria (circle one): 1= Yes 2= No

Subject ID Number_____ Date____/____/_____

Research Study Questionnaire
Participant completes:

DOB (mm/dd/yy): _____/_____/_____ **Age:** _____ (years)

Sex (Circle One): Female Male **Gender Identity:**_____

Major (Circle One): Music Theater Both (Double Major) Other_____

Academic Level (Circle One): Freshmen Sophomore Junior Senior Other_____

Instrument played (Musician only) (Circle One):

Strings Brass Percussion Wood Winds Other_____

Role in the current performance: _____

_____

1. **At what age did you begin participating in the Performing Arts** _____
2. **Is this your first production / concert while attending Marshall University?** No Yes
3. **Do you participate in other forms of performing arts other than your major?**

   No Yes (If yes, explain)_____

4. **Are you physically active?**

   No Yes (If yes, explain)_____

5. **How often a week do you exercise?**

   Number of days a week_____

   Average amount of time per day (minutes or hours)_____

APPENDIX D: SF-12 HEALTH SURVEY

Subject ID Number_____ Date____/____/_____

Your Health and Well-Being

This survey asks for your views about your health. This information will help keep track of how you feel and how well you are able to do your usual activities. *Thank you for completing this survey!*

For each of the following questions, please choose an answer that best describes your situation.

1. **In general, would you say your health is:**

1	Excellent
2	Very good
3	Good
4	Fair
5	Poor

2. **The following questions are about activities you might do during a typical day. Does your health now limit you in these activities? If so, how much?**
   a. Moderate activities, such as moving a table, pushing a vacuum cleaner, bowling, or playing golf.

1	Yes, limited a lot
2	Yes, limited a little
3	No, not limited at all

   b. Climbing several flights of stairs.

1	Yes, limited a lot
2	Yes, limited a little
3	No, not limited at all

3. **During the past week, how much of the time have you had any of the following problems with your work or other regular daily activities as a result of your physical health?**
   a. Accomplished less than you would like.

1	All of the time
2	Most of the time
3	Some of the time
4	A little of the time
5	None of the time

b. Were limited in the kind of work or other activities.

1	All of the time
2	Most of the time
3	Some of the time
4	A little of the time
5	None of the time

4. During the past week, how much of the time have you had any of the following problems with your work or other regular daily activities as a result of any emotional problems (such as feeling depressed or anxious)?

a. Accomplished less than you would like.

1	All of the time
2	Most of the time
3	Some of the time
4	A little of the time
5	None of the time

b. Did work or other activities less carefully than usual.

1	All of the time
2	Most of the time
3	Some of the time
4	A little of the time
5	None of the time

5. During the past week, how much did pain interfere with your normal work (including both work outside the home and housework)?

1	Not at all
2	A little bit
3	Moderately
4	Quite a bit
5	Extremely

6. These questions are about how you feel and how things have been with you during the past week. For each question, please give the one answer that comes closest to the way you have been feeling. How much of the time during the past week...

a. Have you felt calm and peaceful?

1	All of the time
2	Most of the time
3	Some of the time
4	A little of the time
5	None of the time

b. Did you have a lot of energy?

1	All of the time
2	Most of the time
3	Some of the time
4	A little of the time
5	None of the time

c. Have you felt downhearted and depressed?

1	All of the time
2	Most of the time
3	Some of the time
4	A little of the time
5	None of the time

7. During the past week, how much of the time has your physical health or emotional problems interfered with your social activities (like visiting with friends, relatives, etc.)?

1	All of the time
2	Most of the time
3	Some of the time
4	A little of the time
5	None of the time

(SF12v2 Acute, US Version 2.0)

APPENDIX E: PAI AND DATA COLLECTION FORM

Subject ID Number_____ Date____/____/_____

Performance Anxiety Inventory

Read each of the following statements carefully and then circle the appropriate number to indicate how you *generally* feel regarding performing before an audience. There are no right or wrong answers. Do no spend too much time on any one statement, but give the answer which seems to describe how you *generally* feel with regard to recitals and concerts.

	Almost Never	Some-times	Often	Almost Always
1. I feel confident and relaxed while performing before an audience	1	2	3	4
2. While giving a recital my hands are cold	1	2	3	4
3. Thinking about the evaluation I may get in a recital interferes with my performance	1	2	3	4
4. If I make a mistake, I usually panic	1	2	3	4
5. During a recital I find myself thinking about whether I'll even get through it	1	2	3	4
6. The harder I work in preparing for a concert, the more likely I am to make a serious mistake	1	2	3	4
7. Thoughts of doing poorly interfere with my performance	1	2	3	4
8. I feel very jittery when giving an important recital	1	2	3	4
9. Even when I'm well-prepared for a recital, I feel very anxious about it	1	2	3	4
10. I start feeling very uneasy just before getting feedback on my performance	1	2	3	4
11. During recitals my hands sweat	1	2	3	4
12. I wish recitals did not bother me so much	1	2	3	4
13. During recitals I am so tense that my stomach gets upset	1	2	3	4
14. I seem to defeat while working on important recitals	1	2	3	4
15. I feel very panicky when I approach an important recital	1	2	3	4
16. If I were to take an important recital examination (jury), I would worry a great deal before taking it	1	2	3	4
17. During recitals I find myself thinking about the consequences of blocking	1	2	3	4
18. I feel my heart beating very fast during recitals	1	2	3	4
19. As soon as a recital is over, I try to stop worrying about it, but I just can't	1	2	3	4
20. During a recital I get so nervous that I block	1	2	3	4

Subject ID Number_____ Date____/____/_____

Data Collection Form

1. **Rate your anxiety on a scale of 0 to 100 (0 being none and 100 being max)_____**

2. **How much has your anxiety affected your normal daily activities in the past week?**

____No difficulty, has not affected my daily activities

____Mild difficulty with my daily activities

____Moderate difficulty with my daily activities

____Severe difficulty with my daily activities

____Cannot perform any of my daily activities

3. **Rate your performance anxiety on a scale of 0 to 100 (0 being none and 100 being max)_____**

4. **How much has your performance anxiety affected your most recent performance?**

____No difficulty, performance anxiety has not affected my performance

____Mild difficulty with my performance

____Moderate difficulty with my performance

____Severe difficulty with my performance

____Could not perform