

Mindfulness and the Musician: Case Studies of an 8-Week Meditation Class for
University Music Students

by

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ABSTRACT

I designed a qualitative study that focused on music students' experiences of an 8-week meditation class. Through surveys and interviews, I assessed to what extent they applied the information or practices from the meditation class into their musical practice and performance. There is little extant research on the role of meditation and music, most of it focusing on the role of practices such as meditation and yoga in ameliorating performance anxiety. Outside of music, qualitative research into meditation has given us a window into how people experience learning meditation, applying it to their lives, and making sense of the new ideas they encounter. Thus, the current study contributes both to our growing understanding of how people process meditation as an experience as well as how musicians might integrate meditative practices into their musical practice and performance.

A group of music students ($N = 7$) participated in an 8-week meditation class, introducing them to a diversity of meditative practices. Completing weekly surveys and a post-interview, each of the participants answered a series of questions relating to their perceptions of music practice, music performance, and meditation. Questions also asked how they had or how they might apply what they had learned in the meditation class to their musical activities. Assessed through a phenomenological orientation, the results present both detailed individual accounts as well as common themes across participants. Results show consistently positive reactions to the class, and results also show a variety of positive benefits attributed to the class, ranging from increased somatic awareness to changes in perception of thoughts and feelings. Moreover, the rich, first-person accounts offer us a window of how people try to make

sense of meditation in relation to their spiritual/religious backgrounds and how they reconcile it with their own personal philosophies of music making.

Given the small sample size and lack of a control group, further research is needed to assess the validity of themes that emerged in the results of this study. Moreover, future classes may focus more explicitly on transferring meditative practices into musical practices, or, furthermore, may even make an effort to help participants integrate meditative practices and approaches into their musical philosophies.

CHAPTER 1:

Introduction

Background and Statement of Problem

Many people begin music study with an attitude of fascination. Casual observation can tell you that many people move to music, sing along without worrying about pitch and tuning, and display high levels of engagement. Casual observation of an accomplished musician like Yo-Yo Ma or Keith Jarrett will show you similar levels of engagement paired with highly refined technical skills and musicianship. Many people in between these two ends of the spectrum may find themselves with one or the other, sometimes pursuing technical skill through formal training at the expense of engagement and enjoyment. It seems as though Picasso had a point when he said, “All children are artists. The problem is how to remain an artist once he grows up.”

The question of how to improve the quality of this journey from child to artist is a vast one. In higher education, teachers encounter students at a unique place in their lives. In a thoughtful essay entitled “Stress in the Lives of Music Students,” David Sternbach (2008) articulates a few of the unique stressors facing performing arts majors: “Music students are... engaged in the additional challenge of trying to balance personal life with their music activities, an issue that begins for some at a very young age and is a constant challenge through high school and college” (Sternbach, 2008, p. 44). In the face of rising technical and expressive demands, students push themselves in the pursuit of professional performance. Thus, music students are in the process of becoming both adults and artists.

In addition to potential negative effects on levels of engagement with music, these growing pains can also result in serious health problems such as chronic stress and depression. While music organizations and music schools have become increasingly aware of occupational safety hazards like exposure to loud volumes and the physical dangers of over-practice/rehearsal, they also have an opportunity to provide students with resources that support well-being. These resources can serve both as personal enrichment and preventive medicine. There are many options for such programs, but practices such as yoga, tai chi, and meditation have been around for thousands of years. Having emerged in the research literature more recently, yoga and meditation, in particular, have been studied for their connections to well-being, stress, and even performance anxiety (Brown & Ryan, 2003; Chang, Midlarsky, & Lin, 2003).

Evolved from Buddhist traditions, mindfulness meditation can be defined simply as “paying attention, on purpose, in a non-judgmental way” (Kabat-Zinn, 1994, p. 4). The practice of meditation has been linked to physiological effects (Cysarz & Bussing, 2005) and psychological benefits (Brown & Ryan, 2003) in various populations. Compared to other forms of stress relief, it is relatively non-invasive, is accessible at most moments (all you need is your breath and a place to sit or stand), and it is free. Yet, many people choose not to meditate for various reasons, ranging from concerns over the spiritual background of meditation to the simple anxiety of being still. As Pascal was quoted as saying, “All man’s miseries derive from not being able to sit in a quiet room alone.”

Much of the extant research on meditation focuses on its health benefits, either psychological and/or physiological. The research frames meditation as a lifestyle factor contributing to positive health outcomes. In particular, meditation has been researched as

a complementary intervention for various psychological maladies, ranging from depression to schizophrenia, with mixed results (Toneatto & Nguyen, 2007). In music, a few studies have been published on the relationship between meditation and performance anxiety (Khalsa et al., 2009; Lin et al., 2008; Chang et al.; 2003), yet the benefits of meditation practice are not completely understood in the context of musicians' lives.

Purpose/Significance of Study

The purpose of this study is to examine the effects of an 8-week mindfulness meditation class on six music students at different levels of musical training (ranging from first and second-year undergraduates to doctoral students near completion of their terminal degrees). Data will be collected from participants via weekly reflective writings and face-to-face interviews at the completion of the study to ascertain whether or not mindfulness meditation has had any perceived effects on their everyday lives as well as on their experiences of music practice and performance.

To date, no qualitative research relating music and meditation exists. Research that is currently available includes assessments of the effects of meditation on performance anxiety, but a qualitative study like this will provide an opportunity to observe how music students learn meditation and potentially apply it to their music practice and performance. The interview and survey data will help researchers see what concerns participants might have in learning meditation as well as potential applications. On a broader scale, qualitative research into the process of learning meditation and how it applies to other skill domains opens up the possibilities of connecting disparate fields of

skill acquisition in a larger project of utilizing the cognitive and psychological potential of meditation to enhance both experience and performance in various skill domains.

Primary Research Questions

1. How does engaging in a mindfulness class affect participants' perceived levels of well-being?
2. How does mindfulness training affect musicians' experience of both practice and performance?
3. What are the differences in how learners of with varying levels of musical expertise respond to the practice of meditation and its effects?
4. Finally, based on analysis of participant responses, what themes emerge that could serve as catalysts for further study?

Hypotheses

1. Based on the assumption that transfer depends partly on expert domain knowledge, those with more musical experience are more likely to find ways to integrate meditation into their music practice and performance.
2. Even without explicit cues to do so, I predict that the music students in this study will find ways to integrate meditation into their music practice and performance.
3. As reflected in the literature on meditation, I predict that participants will self-report positive changes in their day-to-day well-being.
4. Lastly, based on extant research, I would predict that themes of acceptance of thoughts/emotions and somatic awareness would emerge across participants.

Methodology

Participants

Participants were seven music major students enrolled at Texas Tech University. The cohort represents the full-range of experience in the school of music at Texas Tech: underclassmen, graduate students, and pre-professional students nearing the end of their terminal degree (in this case, DMA or PhD in Fine Arts). 3 participants identified as male, while the other 4 identified as female. Participants ranged in age from 20 to 56. Lastly, 6 of 7 participants were native speakers of English, while the 7th spoke fluent English as a 2nd language. None of the participants reported any previous experience with formal meditation, though, afterwards, came to view some of their previous activities as forms of meditation (see **Results/Discussion**).

Procedure

Participants were recruited via email/listserv. Participants agreed to take part in the study, signing a consent form acknowledging that they had the right not to answer any questions where they felt unwilling to do so. Additionally, participants filled out a pre-class survey, listing any current sources of stress and method of stress relief. Participants were also asked about substance use in relation to stress, as well as if they took any prescription drugs. All of this was meant to establish a baseline for stress and coping behaviors.

The meditation intervention consisted of a combination of weekly classes and regular home practice. The participants attended weekly classes, each lasting 45-60

minutes, for an 8-week experimental period. Taught by a certified meditation instructor and registered yoga teacher, these classes focused on meditation practice more broadly, introducing participants to concepts related to mindfulness, a variety of meditation practices, ending with a brief group discussion of experience. Home practice was encouraged at a rate of 3-4 times each week for 10 – 15 minutes at a time.

The protocol used fits on a continuum of short-term and long-term studies of meditation. Unlike mindfulness-based stress reduction (MBSR), with home practice requirements of close to an hour of meditation per day, the practice requirements of 20 minutes, three to four times a week seem less unwieldy while still significant enough to expect results over an 8-week testing period (Mrazek, et. al, 2013; Zeidan et. al., 2010). In addition, participants will engage in reflective writing as a complementary practice to the formal meditation. Participants also filled out weekly questionnaires in the last few minutes of each class. The weekly writings will focus on a series of open-ended questions (see Appendix A) about experiences, challenges, and suggestions for the program. The questions are consistent week to week, excepting a final evaluation after the class (see Appendix B).

Following the eight-week course, participants each took part in post-intervention interviews, which were recorded and transcribed. Questions were adapted from exit interview and focus group questions from Cohen-Katz et al., 2005, modified to be more relevant to music students. Interviews were conducted individually, hopefully allowing for more authentic responses. The standard interview questions (see Appendix B) were intended to leave the participants the freedom to respond more open-endedly. The

questions asked how the participants have adapted their training to their daily lives and musical activities.

Analysis

The writings and transcribed interviews served as qualitative data to be used to interpret and summarize participants' experiences relating to the meditation training and its perceived applicability to their lives in general and to their musical activities, particularly practice and performance. Observational data, collected via writings and live interviews, was coded by the researcher for potential themes. Results were compiled into both individual profiles, highlighting salient responses and organized into a coherent narrative of each person's experience, as well as common themes that were compared with extant literature on meditation.

Theoretical Orientation

As a qualitative study, the results will focus on the reports of the participants, as assessed by surveys and interviews. This study will utilize a phenomenological framework, specifically the Interpretative Phenomenological Analysis of Jonathan A. Smith (2004). This framework is marked by a focus on individual accounts, and it starts with a thorough examination of each individual case before moving on to any potential connections. In short, this methodology allows the results to 'speak for themselves' while also placing a layer of interpretation when it comes to making sense of those individual perspectives and common themes. See (Chapter 3 - Methodology) for a more thorough review and explanation of this methodology.

Assumptions, Limitations, and Scope (Delimitations):

One assumption of this study is built into the participant demographics. Here, experience is assumed through degree program. One would expect a doctoral student to have more of both musical experience and expertise, given the more difficult admissions standards for graduate students (assessed mostly through in-person or audio/video audition).

The primary limitations of this study include sample size ($N = 7$). Though the methodology in this study encourages the focus on individual accounts, it becomes important to see them as just that, individual. Though common themes offer opportunities to connect to extant literature, we must remember that a different group with a similar number of participants may yield a different collection of themes.

Thus, the scope of this study is largely exploratory, in line with the methodology described above. Rather than assessing a pre-established theory or attempting to establish theory, this project is focused on assessing, through individual accounts, how musicians might (or might not) integrate meditative practices and perspectives into their music practice and performance. From a learning perspective, how do they integrate this new information? Do they choose to assimilate meditation into their pre-existing ideas of music making, or do they change at all their conceptions of music practice and performance to accommodate meditation as a new way of looking at both?

CHAPTER 2:

Review of Literature

Cultural Context of Meditation

Mindfulness has become a cultural buzzword, espoused in bestsellers and in constant admonitions to be mindful of our surroundings, mindful of others, or mindful of what we are doing. Mindfulness and meditation have found their way into public schools (Broderick & Metz, 2009), corporate health initiatives (Cohen-Katz, Wiley, Capuano, Baker, & Shapiro, 2005), and modern scholarly research (For a review, see Baer, 2003). Meditation provides an alternative, non-invasive, and indirect approach to facing both psychological and physical stressors (Wayment, Wiist, Sullivan, & Warren, 2011). With chronic stress and anxiety a part of many people's lives (APA, 2011), meditation offers an approach that can serve as a complement or alternative to more traditional treatments in Western medicine. For others, it is a way to develop a spiritual element in their lives, in or out of the context of organized religion.

Though mindfulness *vis-à-vis* meditation has become a popular secular practice in modern life, meditation has its roots in Buddhism. It is believed that the Buddha, Siddhartha Gautama, sat under a tree until he reached the ultimate result of meditative practice: *samadhi*, or enlightenment, the end of suffering (Skillton, 1997). In Buddhism, mindfulness is one part of the Eightfold Noble Path, a code of conduct that is supposed to lead to the alleviation of suffering. According to Bhante and Henepola Gunaratana, the authors of *Mindfulness in Plain English*, the word *mindfulness* is an English translation of the Pali word *Sati*. The authors emphasize that there is no real translation;

it is an experience, one that existed before language. Meditation, as they see it, is an activity designed to develop a more continuous state of mindfulness (Gunaratana & Gunaratana, 2011). Mindfulness thus serves as both a concept and a state, sometimes the result of formal meditation.

Say the word *meditation* and some people call to mind an image to mind of a person sitting cross-legged. Even with this caricature, meditation itself can be a difficult term to define. There are multiple schools or styles of meditation, such as *insight*, *transcendental*, *mindfulness*, and *loving-kindness* (and many others). Moreover, they emanate from various spiritual traditions: meditative practices exist in Buddhism, Hinduism, Taoism, and Christianity. At its core, meditation can be divided into two basic categories: directive and non-directive. *Focused attention* meditation is considered a directive practice involving a singular, conscious point of focus, whereas *open monitoring* meditation is non-directive, and involves simply noticing all that passes before one's awareness without necessarily focusing on any of it (Lutz, Slagter, Dunne, & Davidson, 2008; Bond et al., 2009). Much of what has been studied in terms of focusing on the breath or following an audio track, for example, would fall under the category of concentrative, directive, *focused attention* meditation: training one's attention through practice, with patience. Given the variety of meditative practices and related practices like yoga, tai chi, and qi gong, there is still some debate over what makes a particular practice meditation and another non-meditative (Bond et al., 2009).

Before meditation became a scholarly research topic in the western world, it was more of a cultural phenomenon—in 1968, The Beatles took a high-profile trip to India to study meditation, and westerners such as Ram Dass (1971) implored Americans through

his book, *Be Here Now*, to stay present. This cultural introduction was followed by the establishment of meditation centers, such as the Insight Meditation Society in 1975, co-founded by Jack Kornfield, Sharon Salzberg, and Joseph Goldstein. Kornfield, an American, came into contact with Buddhism during a stint with the Peace Corps in Thailand (Wu, 2014). He took the vows of a monk, immersed himself in silence and practice, and claimed to have returned to America fundamentally transformed. Other religious figures, such as the Vietnamese monk Thich Nhat Hanh (nominated for the Nobel Peace Prize by Dr. Martin Luther King, Jr.) and His Holiness the Dalai Lama, brought additional attention to Buddhism, meditation, and mindfulness through their own efforts for peace in the form of activism, speaking, and publishing.

In addition to individual proponents, larger cultural and demographic changes also paved the way for meditation's emergence in the United States. For example, landmark immigration legislation in 1965 made the United States more accessible to people from Asian countries where Buddhism and Hinduism were more prominent than in America. According to Vohra-Gupta, Russell, and Lo (2007), lifestyle changes within the United States contributed to development of suburbia during this time, emphasizing a less community-oriented and more individualistic lifestyle. This gradual change, they argue, when combined with Generation-X's move away from organized religion, coincided with the development of more individualized expressions of spirituality and religion, one such practice being the practice of meditation (both in and out of the context of a spiritual/religious ideology) (Vohra-Gupta, Russell, & Lo, 2007).

Various statistics bear out the current cultural significance of meditation in Western culture. Data from a survey of nearly 90,000 adults found that, in 2007, 9.4% of

respondents had tried meditation that year, falling only slightly to 8.0% in 2012, slightly less than the number of people who had practiced yoga, tai chi, or qigong in the same time period (10.1%) (Clarke, Black, Stussman, Barnes, & Nabin, 2015). Hickey (2010) notes that the federal government spent \$51 million on meditation research in the fiscal years 2008 and 2009. The author cites an increase in research from 7 studies in 1998 to over 100 studies in 2008 and 2009, in addition to over 100 clinical trials currently funded by the federal government (Hickey, 2010). Most of the research studies focused on three types of secular meditation techniques: Mindfulness-Based Stress Reduction (MBSR), Mindfulness-Based Cognitive Therapy (MBCT), and Dialectical Behavioral Therapy (DBT), with only a handful of studies done utilizing Transcendental Meditation and other methods.

The Development of Scholarly Research on Meditation

Much of the modern scholarly study of mindfulness traces its roots back to the work of the medical doctor Jon Kabat-Zinn. As a student at the Massachusetts Institute of Technology, Kabat-Zinn encountered Buddhist teachings and was inspired to seek out guidance from experienced meditators, including Thich Nhat Hanh. Kabat-Zinn saw potential for mindfulness in the treatment of chronic pain and stress and consequently developed a program to help individuals dealing with these issues (Kabat-Zinn, 1982). The result was a form of mindfulness training that was secularized and adapted for a Western audience. Mindfulness-based stress reduction (MBSR) is a formalized protocol, and it has been studied extensively (For reviews, see Bishop, 2002; Toneatto & Nguyen,

2007). The practice consists of both sitting and moving meditations, and normally involves between 30 and 60 minutes of practice on a daily basis for 8 weeks.

Meditation serves many potential purposes. Either as part of religious or personal spiritual practice, or simply as a form of stress management, it can be a lifelong companion with varied personal rewards. Research that addresses the effects of continued practice, particularly through the use of the MBSR program developed by Kabat-Zinn, demonstrates positive effects of meditation over time on well-being and attention (Chiesa & Seretti, 2009). Evidence suggests that effort involved in sustaining and directing attention can decrease over time with more practice, as participants in a month-long meditation retreat not only outperformed a control group on a sustained-attention task but also reported higher levels of perceived concentration and less mind-wandering (Zanesco, King, MacLean, & Saron, 2013). Short-term meditation practice may also result in decreased mind wandering. Test takers who participated in a two-week mindfulness training received higher scores on the verbal portion of the GRE than did participants who underwent nutritional counseling instead (Mrazek, Franklin, Phillips, Baird, & Schooler, 2013).

Recent research also reveals insight into the more immediate benefits of even a handful of meditation sessions. Zeidan, Johnson, Diamond, David, and Goolkasian (2010) report that as little as 20 minutes of mindfulness exercises over 4 days correlated with participants' increased ability to sustain attention. Practice periods of 10 to 20 minutes have also been found to ameliorate particular effects studied in social psychology: reactions based on implicit learning (Whitmarsh, Uddén, Barendregt, & Petersson, 2013), stereotype threat (Weger, Hooper, Meier, & Hoptrow, 2012), suppression of

self-threatening information (Saunders, Barawi, & McHugh, 2013), and self-control depletion (Friese, Messner, & Schaffner, 2012). All together, these studies suggest that there are both immediate and cumulative effects that result from engaging in meditation practice.

Physiological and Cognitive Effects of Meditation

Inquiries into physiological changes related to the practice of meditation have provided additional evidence as to meditation's effects. Some studies have focused on physiological mechanisms such as heart and respiratory rate (Sudsuang, Chentanez, & Veluvan, 1991), while more recent investigations have incorporated the use of modern technology to measure more specific covert effects of meditation practice (Lazar et al., 2000). Developing technologies have allowed increasingly precise measurements of changes in activity in specific regions of the brain, as well as more accurate identifications of networks of brain regions involved in meditation (Hasenkamp & Barsalou, 2012). Finally, these effects have been demonstrated in both novice and expert practitioners (Tang et al., 2007; Brefczynski-Lewis, Lutz, Schaefer, Levinson, and Davidson, 2007).

Authors of early research into meditation focused on the comparison between meditation and rest. Studying Transcendental Meditation, Dillbeck & Orme-Johnson (1987) showed differences in skin response measures (though not in heart rate) in participants who had practiced or participated in transcendental meditation as compared to a resting control group. Comparing meditation and relaxation techniques, the authors of one study found that while both were effective in reducing stress, meditation was more

effective in reducing distractive thinking (Jain et al., 2007). Broderick (2005) extends this line of research, testing meditation against relaxation and rest in their respective effects on dysphoric mood. Meditation was found to be more effective at alleviating dysphoric moods, and Broderick hypothesized that meditation's effects were due, in part, to its function as a healthy form of distraction.

Long-term meditation practice may alter practitioners' ability to pay attention: they may do so with less effort. For example, (Brefczynski-Lewis, Lutz et al. 2007) found that brain activation varied with levels of experience: expert meditators (19,000+ hours) had heightened response in areas of the brain associated with attention when compared to much less experienced meditators. Yet, even more experienced meditators (those having accumulated 44,000+ hours) showed less activation in those same areas than the expert group. The proposed explanation is that, while sustaining attention is initially effortful, long-term practice can result in an effortless quality of attention. An increased ability to maintain attention with less effort can take place over shorter periods as well. Evidence suggests that perceived effort involved in sustaining and directing attention can decrease over time with more practice, as participants in a month-long meditation retreat not only outperformed a control group on a sustained-attention task but also reported higher levels of perceived concentration and less mind-wandering (Zanesco, et al., 2013). Elsewhere, Lumma, Kok, and Singer (2015) note that, in some forms of meditation, such as loving-kindness meditation (in which a person has to generate positive affective content), participants exhibit increased physiological arousal at first, as the meditation initially demands more of their cognitive resources. This move from effortful to effortless is parallel to how we learn just about any new skill: initial attempts require concentration,

whereas experts have more consolidated knowledge structures that operate without the same level of conscious effort (Ambrose, Bridges, DiPietro, Lovett, & Norman, 2010).

Moving beyond cognitive benefits, meditation has been shown to produce physiological effects that extend to the immune system. Davidson et al. (2003) reported that patients in a meditation group showed higher antibody response to an influenza vaccine as compared to a wait-list control group. Findings support the result of more recent research demonstrating positive immune response in breast cancer patients who participated in an MBSR program (Witek-Janusek, et al., 2008). In spite of these potentially promising results, the authors of a meta-analysis focusing on MBSR interventions with diagnosed cancer patients are supportive of meditation's abilities to improve psychological function, but they stop short of endorsing MBSR for its physiological benefits (Ledesma & Kumano 2009): it can certainly help patients cope with cancer, but it is not a panacea.

Over the years, advancing technologies in observing brain activity have been used to study meditation. EEG technology has been utilized in investigations of brainwave patterns within and outside periods of meditation practice. Research in transcendental meditation, a form of directive meditation, consistently shows a pattern of increased alpha and theta brainwaves, both of which are indicative of deep states of rest and/or relaxation (Dillbeck & Orme-Johnson, 1987). There is evidence to suggest that the theta brain waves persist even minutes after the meditation practice has ended (Kasamatsu & Hirai, 1966). In addition to transcendental meditation, the examination of other, similar meditation techniques have showed comparable results in increased alpha- and theta-waves (Lagopoulos, et al., 2009).

Using functional magnetic resonance imaging (fMRI) technology, which measures blood flow in the brain, researchers have found patterns in the brain's response to meditation. One area to show consistent response to meditation is the anterior cingulate cortex (ACC), with even short-term practice resulting in changes in white matter in this region (Tang et al., 2010). The ACC is implicated in both autonomic responses and cognitive functions, such as impulse control. Accumulated experience in meditation is also correlated with larger volume of hippocampal gray matter and greater thickness in the prefrontal cortex, an area associated with planning, decision-making, and self-control. By contrast, the prefrontal cortices of patients with major depressive disorder show reduced volume when compared to those without the same diagnosis (Rajkowska et al., 1999). In addition, experienced meditators showed decreased activity in the default mode network, associated with mind-wandering and worry, compared to novice meditators (Brewer, Worhunsky et al. 2011).

In addition to physiological evidence of growth and change in the brain as a result of meditation, there's even evidence to suggest that meditation can have an effect on how meditators respond to stressful situations. In studies on loving-kindness meditation, expert meditators showed greater response in areas implicated in emotional processing, especially of negative stimuli (Lutz, Brefczynski-Lewis, Johnstone, & Davidson, 2008). Studies of loving-kindness meditation show decreased amygdala reaction in response to emotional stressors: (Desbordes et al., 2012) examined the effects of meditation practice on participants when in a non-meditative state, finding a diminished amygdala response as a result of an 8-week meditation course. Goldin and Gross (2010) found that, after

mindfulness training, participants showed a quicker initial reaction in the amygdala while returning to a baseline level more quickly than in the pre-test condition.

Though the body of research on the neurobiological effects of meditation helps illuminate the many areas of the brain engaged by meditation, this line of research also leaves some questions unanswered. Tang, Holzel and Posner (2015) implore future researchers to consider the confluence of neural networks involved in meditation, as mindfulness in their view is not a singular neural phenomenon but a multi-faceted state of consciousness that involves many areas of the brain. Jevning, Wallace, & Beidebach (1992) characterize the state of mindfulness as both active and restful simultaneously, marked by physiological changes indicative of both relaxation and alertness. These kinds of assessments will require more sophisticated technology, but acknowledging meditation and mindfulness as multi-faceted states is a step towards assessing the holistic effects of meditation practice.

Effects of Meditation on Psychological Well-being

Meditation experience, be it 20 minutes or thousands of hours, has been shown to alter the physical structure of the brain. Given that we can see change as a result of meditation, a growing body of research assesses the application of mindfulness interventions in addressing psychological disorders, such as depression, anxiety, and mood disorders. In a meta-analysis of 39 studies, mindfulness-based therapies had a positive effect on anxiety and mood disorders (Hofmann, Sawyer, Witt, & Oh, 2010). Sometimes, mindfulness interventions can be helpful to patients coping with other medical difficulties. In the face of cancer diagnosis and treatment, Birnie, Garland, and

Carlson (2010) found that MBSR proved helpful in reducing mood disturbance and perceived stress for both the patient and their partners. Thus, as we saw previously, MBSR has potential to act as an adjunct to cancer treatment, helping mitigate the psychological toll of diagnosis and treatments. In a population of veterans with PTSD, participation in MBSR generally resulted in a reduction of PTSD symptoms (Kearney et al., 2012).

While meditation shows potential in dealing with anxiety and depression, meditation may also benefit other psychological disorders. Compared to sleep hygiene education (SHE), mindfulness practice resulted in better sleep quality for a population of elderly patients with mild-to-moderate sleep disturbances (Black, O'Reilly, Olmstead, Breen, & Irwin, 2015). Some kinds of meditation may also help with emotional regulation. One form of meditation in particular that has received attention is loving-kindness, or compassion, meditation, which consists of intentionally cultivating positive affect towards the self and others. Despite a small number of studies and a lack of consistency within the loving-kindness meditation interventions, Hofmann, Grossman, and Hinton (2011) argue that, as long as it is paired with an evidence-based treatment like cognitive behavioral therapy, loving-kindness meditation has potential as a treatment for anger-management and other interpersonal concerns.

Other researchers have looked at the potential benefits of meditation with healthy (non-clinical) populations. In a meta-analysis of ten studies focusing on the effects of MBSR on healthy individuals, Chiesa and Serretti (2009) find evidence that mindfulness-based stress reduction did in fact reduce stress in a healthy population as well as relaxation training, yet MBSR also resulted in less ruminative thinking as measured by a

self-reported survey of ruminative thinking. As one example, Oman, Shapiro, Thoresen, Plante, and Flinders (2008) assess a college undergraduate population: measured using MAAS (Mindful Attention Awareness Scale). They found that students in the meditation conditions reported less perceived stress and less rumination after 8 weeks than did a waitlist control. Using a mindfulness scale, the authors hypothesize that higher levels of mindfulness at the follow-up assessment mediated the other positive outcomes.

As meditation involves some amount of introspection, some research has attempted to assess its role in the development of emotional intelligence. In a population of 351 working adults, Chu (2010) found that more meditation experience (defined as a practice of at least 20 minutes daily over any number of years) correlated with higher levels of emotional intelligence and lower levels of perceived stress. The same paper includes a study of 20 graduate students, where the 10 participants in the meditation group showed the improved emotional intelligence when compared to a control group who were simply received instructions to ‘relax.’ As with other critiques of the meditation literature, this lack of an active control group is a concern (see Criticisms... below), while the data correlating meditation experience with increased emotional intelligence provide a picture of the potential benefits of long-term meditation. Overall, the research suggests a positive role for meditation as a complementary treatment for psychological distress and as a practice for developing positive psychological attributes.

Qualitative Research

While much of the experimental research focuses on outcomes of meditation, a smaller body of qualitative research focuses on the experiences of meditators (Smith,

Graham, & Senthinathan, 2007; Morone, Lynch, Greco, Tindle, & Weiner, 2008). Smith, Graham, & Senthinathan (2007) utilized mindfulness-based cognitive therapy (MBCT) with a group of 30 participants over the age of 65 who were suffering from depression. Participants continued to use skills and tools from the training after the intervention, and their comments focus on the benefits of meditation in dealing with depression. Mason and Hargreaves (2001) utilized MBCT in the treatment of clinical depression, and they emphasized the role of qualitative study: "...its strength lies in its ability to capture the nuance of personal experience, the 'unexpected,' and the diversity of experiences of the 'same' therapy" (Mason & Hargreaves, 2001, p. 210). Key among their findings was the consonance between participant expectations for the program and their insights gained.

In addition to depression, qualitative studies have addressed participants dealing with physical pain and stress. Morone et al. (2008) utilized meditation as one of many interventions to help participants deal with chronic pain in their lower backs. Meditation had both immediate and long-term benefits, as noted in participants' journal entries, with participants elaborating on how the meditation helped them notice areas that weren't in pain and gave them a different perspective on their condition. Cohen-Katz et al. (2004/2005) studied multiple cohorts of hospital nurses dealing with occupational burnout who participated in a mindfulness program, using both qualitative and quantitative measures (Cohen-Katz, Wiley, Capuano, Baker, & Shapiro, 2004; Cohen-Katz, Wiley, Capuano, Baker, & Shapiro, 2005; Cohen-Katz et al., 2005). Nurses participating in an 8-week mindfulness course reported continued practice on their own and sought out resources for further study. Many participants communicated improvements in close relationships and in their ability to engage in self-care.

With their focus on first-hand accounts, case studies serve to emphasize the individual, experiential nature of meditation. Early case studies (Tart, 1972, for example) were limited to first-hand reports of the authors, mostly out of curiosity, treating the meditative state as one of many altered states of consciousness. A handful of qualitative case studies delve into the experience of learning meditation and its effects on different psychopathologies. Case studies involving meditation and psychological disorders such as schizophrenia (Johnson, Frederickson, Meyer, Kring, & Brantley, 2009) and binge eating (Baer, Fischer, & Huss, 2005) demonstrate unique applications for meditation, though the results are mixed with some of the participants having difficulty maintaining the focus necessary to meditate. All together, qualitative and case studies serve to enrich our understanding of the experience meditation while supporting quantitative evidence of meditation's effects on various psychological and physiological measures.

Proposed Mechanisms of Effectiveness

While much of the existing research focuses on what effects may result from a meditation intervention, scholars also wrestle with questions of what makes meditation effective at all. Is it simply a relaxation response or the result of focusing our attention, both of which could be achieved through any number of means? Dillbeck & Orme-Johnson (1987) demonstrated that relaxation training and meditation have different outcomes, and a meta-analysis by Eberth & Sedlmeier (2012) pushes this discussion further. Proceeding from the observation that Western psychology lacks a theory of meditation's effects on practitioners, the authors trace different theories of understanding:

from seeing meditation as another form of relaxation techniques to meditation as special form of concentration/attention training.

Some research suggests that the focusing itself plays role, but it does so in relation to other mental activities such as mind wandering and rumination. Mrazek et al. (2013) posited that the effects of mindfulness interventions may be explained by alterations in attention. Similarly, Broderick (2005) and Wolkin (2015) theorize that the positive effects of meditation on depression may come from its ability to interrupt ruminative thinking. Wolkin suggests that the creation of distance between one's attention and one's thoughts or feelings is only possible through the development of attentional skills (Wolkin, 2015). Broderick (2005) found that distraction was more effective than rumination in resolving dysphoric mood states, but it is possible that mere distraction has obvious consequences such as avoidance. Goldberg, Harel, and Malach (2006) hypothesize that the cognitive demands of meditation may absorb our perception to the extent that self-referential thinking is crowded out of awareness, giving us an analogue of a selfless state where we are truly focused on the present.

Yet, meditation also involves an attitudinal change. In addition to providing an alternative point of focus, meditation training/teachings often emphasizes taking a non-judgmental, or non-elaborative stance. Grant, Courtemanche, and Rainville (2010) reference a classical Buddhist text that uses the example of two arrows of pain: one that comes from the initial pain, another that comes from our reaction to that pain. In theory, meditation allows us to avoid the second arrow by taking a non-reactive orientation towards all of our experience, including pain. The authors test pain sensitivity in a group of experience Zen meditators as opposed to a similar demographic control. The

experienced meditators showed decreased activity in executive, cognitive-evaluative areas of the brain in conjunction with the activation of pain receptors (Grant, Courtemante, & Rainville, 2011). The authors note that this finding aligns closely with the non-elaborative experience described in classical Buddhist texts.

Holzel et al. (2011) propose a more complex framework that accounts for several components: regulation of emotions and attention, increased somatic awareness, and changes in self-concept. The authors address each category in turn, delving further into the roles of emotion regulation as cognitive reappraisal (something akin to cognitive behavioral therapy) and exposure (reminiscent of exposure therapy, where participants become accustomed to a particular stimulus through gradual exposure). Finally, the component of sense of self involves a process of dis-identification: through the process of observing our own thoughts, we begin to see ourselves as distinct from them. The authors note that these categories are conceptually distinct but necessarily interrelated. As but one example, attention regulation is a necessary starting point for any of the more subtle components such as sense of self.

Finally, one potential mechanism comes down to faith: does spiritual/religious belief play a role in the effectiveness of meditation interventions? Meditation originates in a religious/spiritual context, and it thus behooves us to ask whether or not the context plays some role in meditation's effectiveness. Two researchers have investigated this question in a series of studies comparing secular and religious or spiritual meditation (Wachholtz & Pargament, 2005; Wachholtz & Pargament, 2008). In the first study (Wachholtz & Pargament, 2005), a spiritual meditation was compared with a secular meditation group and a relaxation training control. Participants in the spiritual meditation

condition reported less anxiety and withstood pain for longer durations than either of the other two groups. In the results, the authors admit that the chosen phrases might have played role in their results: the spiritual meditation involved externally oriented phrases beginning with *God is*, while the secular meditation group used phrases beginning with a first-person pronoun: *I am*. Thus, the comparison could also be characterized as internal as opposed to external points of focus.

Wachholtz & Pargament address this limitation in another paper (2008), which utilizes four conditions (spiritual, internal-secular, external-secular, and relaxation) in testing the hypothesis that spiritual meditation would have greater effects on migraine headaches in meditation-naïve individuals. Once more, those in the spiritual meditation group outperformed the others, with decreased frequency of migraine headaches, as well as less anxiety and higher pain tolerance.

Oman and Bormann (2015) have also investigated the effects of mantra meditation in a sample of participants dealing with post-traumatic stress disorder, finding that meditation affected participants' self-efficacy. Utilizing phrases from various spiritual traditions, the study did not utilize an active control such as a secular mantra. Still, these studies suggest that meditation can serve as a valuable practice within one's larger religious/spiritual practice, though the large body of research on meditation involving secular models suggests that religion is not a necessary element to gain benefits from meditation practice.

Criticism of Research on Meditation

Methodological Concerns

In meta-analyses on meditation research, a number of criticisms emerge that end up eliminating most of the potential studies. One primary methodological concern is a lack of an active control group. Many studies use a wait-list control, where participants on a wait-list don't complete a comparable intervention, which fails to account for potential effects from participants interacting as a class and with an instructor. In response, some studies may use a neutral control, such as Mrazek et al. (2013), which used of a nutrition class as a comparison for a mindfulness intervention. Yet, without a control that might have similar benefits (such as yoga or physical activity in general), we fail to isolate positive effects that may be unique to meditation.

Many of these concerns are addressed in multiple meta-analyses of research on meditation. In their analysis of 10 studies (which they characterize as lacking in quality), Chiesa and Serretti (2009) point out a number of limitations in their sample, ranging from a lack of randomization and self-selection bias to a wait-list control that fails to account for possible effects of the class dynamic and teacher interaction. They also point to the use of self-rated scales as problematic and prone to social desirability bias. Finally, the variety of study length and assessment measures makes it more difficult to compare effectiveness over multiple studies. The aforementioned meta-analysis by Goyal et al. (2014) put it quite succinctly in stating: "Stronger study designs are needed to determine

the effects of meditation programs in improving the positive dimensions of mental health and stress-related behavior” (p. 357).

One potential limitation of any meditation intervention is that it is simply too short of a period of time to show substantial psychological results. In its original context, meditation is a path to developing skill through practice over time, not developing mindfulness in 8 weeks (or less). By this short-term measure, exercise does just as well, if not better (Goyal et al., 2014). The results of this analysis show the small effects of meditation when compared with a nonspecific active control, while results are inconclusive when compared with a specific control like exercise or cognitive behavioral therapy.

At least some of the benefits of MBSR may be related to the non-meditation elements. Even a standardized intervention like Mindfulness-Based Stress Reduction ends up complicating the body of meditation research, in spite of its use of controlled trials. In addition to seated meditations, Mindfulness-Based Stress Reduction also includes psycho-education, yoga movements, and a secular perspective. Eberth & Sedlmeier (2012) point out that meditation and MBSR are not identical: meditation alone has a strong effect on mindfulness, while MBSR has more effect on psychological well-being. Finally, if different kinds of meditation have different effects (Eberth & Sedlmeier, 2012), it becomes potentially problematic to discuss the effects of meditation, writ large, rather than Transcendental Meditation or loving-kindness meditation. While it complicates the narrative of meditation research, this move to specialization may allow us to isolate specific mechanisms of each form of meditation

Measuring Mindfulness as a State/Trait, Difficulties Therein

Underneath the methodological difficulties in studying meditation is the problem of a lack of a consensus operational definition. While studying the effects of meditation is somewhat direct, measuring, defining, and classifying mindfulness as a concept or construct for research purposes has proven more problematic (Bishop et al., 2004; Grossman & Van Dam, 2011). Definitions exist in teachings on meditation, and Jon-Kabat Zinn is famous for defining mindfulness as "...paying attention in a particular way: on purpose, in the present moment, and non-judgmentally" (Kabat-Zinn, 1994, p. 4). Educator and meditation practitioner Rick Repetti defines contemplative practice more broadly as "metacognitive exercises in which attention is focused on any element of conscious experience" (Repetti, 2010, p. 87). Yet, these definitions work on a generic level, and writings on meditation are filled with anecdotal, metaphorical descriptions of meditation that do not necessarily lend themselves to scientific scrutiny.

The struggles of finding an operational definition have led to the development of mindfulness scales used to measure pertinent experiences of various populations (Feldman, Hayes, Kumar, Greeson, & Laurenceau, 2007; Lau et al., 2006; Walach, Buchheld, Büttenmüller, Kleinknecht, & Schmidt, 2006). Though multiple mindfulness scales exist, their implementation is not without controversy. Grossman's (2011) review of various existing scales presents a number of concerning experimental issues, including a lack of inter-rater reliability, individual scale items being phrased in the negative, and a

failure of some scales to distinguish between highly experienced (and presumably highly mindful) meditators and novices (Grossman, 2011). Likert scales, for instance, have been used to assess habits that represent a lack of mindfulness in daily life, such as driving on automatic pilot, snacking without awareness, and worrying (Brown & Ryan, 2003). Yet, meditation and mindfulness are complex states of cognition. Thus, the lack of a multi-dimensional measure fails to take factors such as decentering into account, according to the authors of one analysis (Shapiro et al., 2008).

In addition to difficulties in defining and measuring a construct like mindfulness, there also exist concerns about attempting to operationalize and measure the benefits of mindfulness in the first place. Kabat-Zinn (2003) implores us to approach the study of *consciousness disciplines* as anthropologists encountering a new culture or as philosophers approaching a new epistemology, as the language and concepts will not be of our own making. To adapt the disciplines individually is not to ignore their original contexts, but to embrace what is different while applying it to our modern lives. For instance, the word ‘practice’ has different connotations in the context of meditation as opposed to its commonplace function in music learning. In music, practice is an activity aimed at the ultimate goal of successful performance. For many, the idea of meditation is to experience the present moment, so a future orientation is a moot point.

Finally, there is some question as to whether or not measuring mindfulness in a vacuum is the right approach. In a critique of Kabat-Zinn’s treatment of MBSR as “Buddhist meditation without the Buddhism” (Kabat-Zinn, 1998, p. 481), Hickey (2010) challenges two assumptions in Kabat-Zinn’s approach to and treatment of Buddhism. First, Hickey challenges the perceived assumption that meditation is the primary element

of Buddhism. Other elements, he argues, include generating karma through positive acts of generosity and kindness. The author's concern is "that MBSR separates meditation and yoga not just from their doctrinal contexts, but from their moral frameworks" (Hickey, 2010, p. 173). The author quotes Buddhist scholar Robert Sharf, who takes issue with the idea "that the only thing that matters is meditation and that everything else is just excess baggage" (Hickey, 2010, p. 173). While mindfulness is one possible measure of the effectiveness of meditation, so are pro-social behaviors (Condon, Desbordes, Miller, & DeSteno, 2013) and equanimity (Desbordes et al., 2015). Expanding the scope of meditation research to touch on results that affect the individual's relationship with society at large would help to draw meditation out of a moral vacuum and into a modern day, secular humanist orientation.

Meditation in Education Settings

Primary and Secondary Education

For some, mindfulness and meditation, with their focus on the development of attention, offer promise as a way to help students succeed academically. In an educational context, meditation would be practiced for its potential benefits on attention and emotional regulation. Rosaen and Benn (2006) report that middle school students who had practiced transcendental meditation for at least one year self-reported an increased ability to focus and increased emotional awareness, both of which can be especially important in adolescence. So & Orme-Johnson (2001) conducted three longitudinal

studies involving Taiwanese students practicing transcendental meditation for durations of 15-20 minutes, twice a day, for 6 to 12 months. Compared with students who napped for equivalent durations/frequency, those who meditated showed cognitive improvements related to academic achievement.

The role of meditation in education settings can extend beyond academic benefits. Linden (1973) assessed the effects of meditation on 3rd graders, finding less anxiety in testing situations though not necessarily improved academic performance. Wisner, Jones, & Gwin (2010) make the case that a variety of meditation techniques show promise in helping students regulate their own emotions. In a pilot study, Broderick and Metz (2009) tested a program, Learning 2 Breathe, developed specifically for adolescents. Regarding measures of stress and well-being, individuals participating in the program reported more positive affect and lower levels of self-perceived stress. These same adolescents made note of the emotional regulation skills they learned in the program, suggesting the importance, according to the authors, of including emotional-regulation/attention-management skills into secondary school curricula. In a follow-up study (Metz et al., 2013), the Learning to BREATHE protocol was tested in a public-school setting with participants from both genders. Results showed lower levels of perceived stress and higher levels of efficacy in emotion regulation.

Though there is some extant research, there is obviously room for expansion. In a review of meditation programs in K-12 education settings, Burke (2010) reports that of the 15 feasibility studies he includes, none showed adverse reactions on the part of the students involved. Burke notes that research into the role of meditation in K-12 settings is “in its infancy” (Burke, 2010, p. 1). All of the studies she cites rely on self-reports and a

lack of assessment blindness. In addition to adapting current treatments into developmentally appropriate interventions for children of all ages, she calls on future researchers to help build a body of research together: standardized interventions that lend themselves to replication, sound methodologies that provide more reliable, empirical measures that can assess the effects of meditation/mindfulness on the social, emotional, and academic lives of the children involved.

Post-Secondary Education

As mental health has become a more present concern on college campuses, student counseling centers have struggled to keep up with rising enrollments and a corresponding rise in demand for their services (CCHM, 2016). In a report published by the Center for College Mental Health, researchers found that the demand for on-campus mental health services has outpaced their growth fivefold. In this gap, meditation offers itself as a non-invasive and less resource-intensive complement to existing psychological services, and researchers have begun to assess the effects of meditation as it relates to mental health in higher education. Medin and Lindberg (2013) show that a 5-week course in mindfulness and compassion exercises can result in lower levels of self-perceived stress and higher reports of well-being.

With a larger sample of approximately 200 participants in both the experimental and the control group, Raes, Griffith, Van der Gucht, & Williams (2014) utilized an 8-week intervention that involved weekly classes as well as homework (practice, readings, etc.). Even at a 6-month follow-up, those in the experimental group showed what the

authors deemed clinically-significant reductions in depression symptoms as compared to a control group who did not take part in the meditation intervention. The authors also found that the experimental group showed less recidivism at the 6-month follow-up as compared to control group, leading the authors to hypothesize both a curative/reductive effect as well as a preventive effect. The authors do list limitations on the methodology due to the logistics of a 400-person study: in lieu of clinical screenings, reports of depression symptoms were collected through surveys.

Yet, for some scholars, meditation is not only a means for maintaining sound mental health. In a review originally prepared for The Association for Contemplative Mind in Higher Education (ACMHE), Shapiro, Brown, & Astin (2011) extend the argument for meditation beyond cognitive and emotional benefits to the idea of developing what they term *the whole person*. Elsewhere, Barbezat and Pingree (2012) make a case for what some call *contemplative pedagogy*, citing learning benefits for students that include increased reflection on course material as well as how that material might relate to their lives outside of the college classroom. Furthermore, they argue that helping students explore concepts of purpose and meaning through contemplative practices is a worthy goal of education.

One such application of this idea is a degree program at the University of Michigan: the Bachelor of Music and Contemplative Practice. The program involves both musical training and training in a contemplative practice. Sarath (2003) offers context for the inclusion of contemplative practice, as the author points to the 1997 establishment of the Contemplative Fellowship program, which has resulted in a number of universities establishing elective courses in contemplative practice. Students in the program would

take classes on the history and philosophy of religions involving contemplative practices as well as participating in a two semesters of contemplative practice, with students taking classes at local meditation centers. The program is still in existence today and offers a unique example of integrating contemplative practice into a long-term music education, while acknowledging the university's relation to the surrounding community at-large.

Meditation and Music

To date, little research exists to address the topic of meditation as related to musicians. Findings, although limited, have begun to provide insight into the varied influences of other mindfulness awareness practices on this specific population. Diaz et al. (2013) discuss the connection between mindfulness and 'flow' (a state of absorbed engagement, coined by researcher Mihaly Csikszentmihalyi) and report that individuals who participated in mindfulness training were more engaged and less distracted during music listening than individuals without mindfulness training. Lin, Chang, Zemon, and Midlarsky (2008) found that participation in an 8-week mindfulness meditation program correlated with reduced incidence and severity of performance anxiety in musicians.

Other mind-body interventions have been studied in musician populations, such as Alexander Technique, guided imagery, and Acceptance and Commitment Therapy, demonstrating consistent, positive effects on performance anxiety. For example, after a course of 15 lessons in Alexander Technique, a mind-body intervention that emphasizes present moment awareness and inhibition of conscious effort, participants noted a more positive attitude towards their performance as well as less anxiety (corroborated by physical traits like less heart rate variability) (Valentine et al., 1995). Esplen and Hodnett

(1999) found similar results using guided imagery. Though participants reported lower levels of anxiety, this finding were not associated with any improvement in participants' attitudes towards performance. Exposure to yoga practices both with and without formal meditation correlated with lower rates of performance anxiety in a population of music students (Stern, Khalsa, & Hoffman, 2012; Khalsa et al., 2009),

While developing a healthy relationship with performance is beneficial for any musician, a study that focuses on practice also addresses the issue of awareness in an arena where students and professionals often spend the bulk of their time. Every hour of performance is usually the result of tens, if not hundreds, of hours of practice. As it relates to well-being, the experience of practice offers us an opportunity to improve our daily lives. While some can and do regularly find music practice an absorbing and engaging activity, others all too often fail at attempts to focus and participate wholly in what can undoubtedly be a complex and time consuming task.

The unique physical and psychological stressors affecting college music students, in particular, warrant more in-depth study. Music students face stresses in day-to-day life (Sternbach, 2008). As a simple, non-invasive, and evidence-based intervention, meditation may hold promise as a contribution to mental and physical health for musicians. Moreover, the inclusion of meditation has the potential to be transformative to music making as well. Steinfeld and Brewer (2015) make a strong argument for conceiving of music making itself as a form of meditative activity. In the western conception, practice is a goal-oriented activity. Meditation is conceived as a life-long practice, a *noun*. The authors point out how this conception can help students conceive of

their abilities and experiences as fluid, much like experienced meditators see their thoughts and mental states as ephemeral.

A qualitative study of the experiences (both musical and non-musical) of students in a meditation course would serve to increase our current understanding of the benefits of meditation practice on musicians. Data may reveal more specific research topics that can then be expanded upon in future research. Open-ended, face-to-face interviews in the present study are meant to encourage participants to respond spontaneously with language that accurately reflects their experiences throughout the experimental period. Survey data and follow-up forms are meant to assess the results over time. The participant comments may be useful in justifying the inclusion of such programs into a music school initiative towards musicians' well-being.

The purpose of this study is to examine the experiences of a small cohort of music students in an 8-week meditation class. This study will address the following research questions:

1. Does engaging in a mindfulness class affect participants' perceived levels of well-being?
2. How does mindfulness training affect musicians' experience of both practice and performance?
3. What are the differences in how learners with varying levels of musical expertise respond to the practice of meditation and its effects?
4. Based on the analysis of participant responses, what themes emerge that could serve as catalysts for further study?

The questions are meant to address participant experiences, assess meditation's effects on their musical lives beyond performance anxiety, assess how age and experience might

mediate these effects, and finally, to uncover potential areas of future research relating meditation and musicianship.

CHAPTER 3:

Method

This study was designed to emphasize first-person accounts of meditation and its effects on university music students. Written surveys and a one-on-one interview with study participants were utilized to elicit unique feedback from participants in multiple formats. Analysis sought to make narrative sense of each participant's experience while also addressing common themes emerging from across participant data. This study was approved by the Institutional Review Board at Texas Tech University.

Participants

University music students with little to no meditation experience were chosen as potential participants for this study. Prospective participants were undergraduate and graduate music students at Texas Tech University. Students were solicited via emails sent out by the graduate and undergraduate advisors in the School of Music. The study was presented as an opportunity to learn meditation and other mindfulness skills that could be used to relieve stress, increase awareness, and boost mood. Potential participants were also informed that they would be compensated for their participation. Interested students contacted me directly by email. After receiving 9 responses, I sent out a Doodle scheduling calendar to check for mutual availability. Given the restrictions of the meditation instructor's schedule, only 7 of the 9 respondents were available for a common time.

Seven (7) participants agreed to take part in the study. As I was interested in the effects of meditation on musicians with varying levels of musical experience, both undergraduate and graduate students were included in the study. Each degree level in the school of music was represented: 2 participants were undergraduate students, 2 were master's students, and 3 were enrolled as doctoral students. The participants represented a range of sub-disciplines within music: conducting, theory, musicology, performance, pedagogy, and K-12 music education. 3 participants identified as male, while the other 4 identified as female. Age ranged from 20 to 56. 6 out of the 7 participants were native speakers of English, while one participant, a native speaker of Spanish, spoke English as a second language. Each of the participants received \$80.00 compensation upon completion of the study. Funding was made possible by the Don and Kay Cash Graduate Research Fellowship, provided by the Texas Tech University College of Visual and Performing Arts.

I recruited a teacher for the meditation class from the Lubbock community, contacting local yoga teachers for recommendations. The chosen instructor was a certified yoga teacher and licensed teacher of a meditation technique called iRest. This person had no formal musical experience. The instructor was compensated through funding made available by the Don and Kay Cash Graduate Research Fellowship.

Setting

Participants met as a class with the instructor in a conference room at the Texas Tech University School of Music. I observed all of the class periods and was the only other person in the room, taking notes about the class proceedings. At each class,

participants convened around a conference room table or, on some days, sat on the floor. The instructor utilized a timer for meditation; the only other instructional technology was the whiteboard in the conference room, used for writing out key words for the day. Participants were instructed to turn off cellular phones and other potential distractions, as the meditation exercises were done in silence.

Tasks and Procedures

Prior to the first meditation meeting, all participants signed a consent form (see Appendix A) and filled out an introductory form (see Appendix A) containing questions about how they dealt with stress, what medical conditions they were seeking treatment for, what medications they used at the time of the experiment, and whether or not they used drugs and/or alcohol to relax. Due to the private nature of some questions, participants were free to not answer any of the questions on the introductory form.

The meditation classes were held on Tuesday afternoons for eight weeks, beginning on February 2, 2016 and running through March 29, 2016. Class did not meet for one week due to spring break. The class maintained a consistent format: the instructor inquired about the students' previous week of practice, asked for any comments on their practice or last week's class, and introduced a concept or term related to the day's meditation. Following this brief discussion, the class engaged in a meditation of 15 to 20 minutes and concluded with voluntary, shared reflections. Participants then filled out a weekly survey (see Appendix A) after which the class was dismissed. Following the final

class, participants received a final review form (see Appendix A) to be turned in at their individual post-interview.

Meditation techniques and durations changed from week to week. This allowed the participations to gain exposure to a wider range of meditative practices (see Table A below for summary). For the first three weeks, participants did a focused-attention meditation on the breath. Later, participants experienced walking meditation, a body scan, mantra meditation, Loving Kindness (also known as *metta*) meditation, and, finally, a meditation that consisted of listening to a piece of music (see Figure 1, below, for further descriptions). One goal of the program was to help participants find a practice they might connect with and continue after the class, so the instructor utilized a variety of practices throughout the 8-week class. In interviews and surveys, each of the participants commented on some of the meditation practices being easier or more difficult and more or less enjoyable.

Figure 1. Summary of meditation techniques covered in 8-week class.

Type of meditation	Instructions	Relevant Citations
Focused attention – breath (Weeks 1 – 3)	Participants were instructed to follow the in and out of their breath.	Lutz, Slagter, Dunne, & Davidson, 2008.
Body scan (W4)	Participants were guided to notice physical sensations throughout the body while not elaborating on/reacting to them consciously.	Mirams, Poliakoff, Brown, & Lloyd, 2013.
Walking meditation (W5)	Participants instructed to walk and notice sounds and sights while still paying attention to their thoughts.	Prakhinkit, Suppavitiporn, Tanaka, & Suksom, 2014.
Mantra meditation (W6)	Matched with the in and out breaths, participants a meaningful phrase of their own choosing.	Engström, Pihlsgård, Lundberg, & Söderfeldt, 2010.
Loving-kindness meditation (W7)	Participants instructed to repeat phrases (May I be well, May be happy, May I be peaceful), and then they were to direct them to other people: someone they love, someone neutral, and lastly someone with whom they had difficult relations.	Hutcherson, Seppala, & Gross, 2008. Hofmann, Grossman, & Hinton, 2011. Johnson et al., 2011.
Meditation on music (W8)	Listening to a 20-minute piece of minimalist music that none of them had heard before, participants were instructed to pay attention to the music like they had been paying attention to the breath: noticing it without analysis, and noticing when their thoughts went astray.	Diaz, 2013.

The decision to implement an 8-week experimental period, along with consistent home practice, was based on examples in the research literature with such protocols as mindfulness-based stress reduction (MBSR). Unlike MBSR, with home practice requirements of close to an hour of meditation per day, the daily practice requirements of 20 minutes, three to four times a week, seemed less unwieldy while still significant enough to expect results over an eight-week testing period (for example: Mrazek, et. al, 2013; Zeidan et. al., 2010). At the start of the experiment, participants were asked to download a mobile application called Headspace, chosen because it offers a free introductory series called Take 10, which provides beginning meditators guided sessions for home use. Individual practice was tracked via self-reports for the first 3 weeks using Take 10. After the initial three weeks, participants were asked to download the mobile app Insight Timer, which tracks the number and duration of home sessions. Additionally, the Insight Timer app allowed users to connect through the app and automatically share statistics, which allowed me to track their home practice without self-reports.

In the weeks following the last meditation class, I conducted interviews with each of the seven participants. Interviews were audio recorded in full and later transcribed (for full transcripts, see Appendix B). Questions were adapted from exit interview and focus group questions from Cohen-Katz et al., 2005, modified to be more relevant to music students. The interview questions (see Appendix B) were intended to leave participants the freedom to respond open-endedly. Specifically, the questions focused on how participants had adapted their training to their daily lives and musical activities, in addition to questions that asked them to reflect on their normal practice, performance, and how they evaluated each.

Data Analysis

Weekly writings and post-training transcribed interviews served as qualitative data to be used to interpret and summarize participants' experiences relating to the meditation training and its perceived applicability to their lives in general and to their musical activities, particularly practice and performance. Another party verified transcripts for accuracy. In order to address questions of individual experience, responses for each participant were organized into an individual profile. Transcripts were evaluated for significant, clear, and pertinent statements that addressed questions related to what effects, if any, undertaking the meditation training had had on their music making and daily lives.

In order to balance questions of individual experiences with potential themes for future research, an interpretative phenomenological approach (Smith, 2004; see section below) was utilized to assess for lived experiences of music making and meditation. In coding for themes, content and context were used to determine the common themes and ideas that relate a group of comments. These codes align with existing research on meditation (see Morone et al., 2008). Taken together, individual profiles and themes present a text-rich portrait of participants' individual and common experiences.

Qualitative Analysis: Interpretative Phenomenological Analysis

As stated previously, an open-ended, semi-structured interview format (where the interviewer can follow-up and ask interviewees to expand on a comment) was utilized to explore participants' experiences of music making, meditation, and any potential

relationships they saw between the two activities. This was intended to give participants flexibility to share their experiences freely, resulting in interviews rich with observational data (see Appendix B). Given the depth of each interview as well as the common themes, the study utilized a theoretical orientation and analysis that balanced the analysis of individual transcripts with the overlap of common ideas. One such methodology, based in the broader epistemological orientation of phenomenology, is Interpretative Phenomenological Analysis (Smith, 2004). In Interpretative Phenomenological Analysis (IPA), the researcher looks to the participants' experiences as a starting point of analysis:

IPA aims to explore in detail participants' personal lived experience and how participants make sense of the personal experience. It is phenomenological (Giorgi & Giorgi, 2003) in its concern with individuals' perceptions of objects and events, but IPA also recognises [sic] the central role for the analyst in making sense of that personal experience... (p. 40)

In his article on the development of IPA, Jonathan Smith (2004) lists three characteristic features of IPA. First, it is *idiographic*:

... starting with the detailed examination of one case until some degree of closure... has been achieved, then moving on to a detailed analysis of the second case, and so on through the corpus of cases. Only when that has been achieved, is there an attempt to conduct a cross-case analysis... (p. 41).

Given the emphasis on detailed analysis of individual cases, Smith (2004) recommends a sample size of 6 to 8, noting that it is common for IPA studies to have a sample size of no more than 10 participants. Elsewhere, this number is put at around 6 – 8 (Starks & Brown Trinidad, 2007). Regardless of the specific recommendation, the impetus behind this relatively small number (compared to standards of sample size in other quantitative and qualitative research) was balancing common themes across participants with individual perspectives. Though Smith later argues that, in particularly rich cases, an individual case study is more than sufficient for IPA, presenting both individual profiles/case studies and

a set of themes fits within the scope of IPA, provided that both are presented at a level of intimate detail. Smith cites Warnock (1987), who “makes the important and profound point that delving deeper into the particular also takes us closer to the universal” (p. 42).

The second primary characteristic of IPA is that it is *inductive*. Rather than approaching the text data with a pre-existing theory (and hypothesis testing), the researcher approaches the data with as few preconceived notions as they are able. Smith (2004) highlights instances in his own research where themes have emerged that were not part of the original set of research questions. This allows for surprises that emerge out of the text data itself, leading to possibilities for future research.

Finally, IPA research is *interrogative*, seeking to engage in meaning making from the results, with Smith noting, “... the results of the analysis do not stand on their own, but rather are subsequently discussed in relation to the extant psychological literature” (p. 44), allowing researchers an attempt to make meaning out of the participants’ experiences and while contextualizing them in the larger body of related research.

That being said, Smith states that interpretation must first be grounded in the text itself. By contrast, he cites the idea of psychodynamic (i.e. Freudian, Jungian) interpretation of a text as “invoking a particular formal extant theory which is then ‘read into’ the passage” (p. 45). He argues that any use of extant theory “would be clearly marked by a difference in tone and as more speculative because of the distance between the text and interpretation” (p. 46).

Thus, the researcher begins with an accurate account of the words themselves, moving then to potential meanings/interpretations. Then, the research can consider the context of any quote in relation to its original setting, and interpretation moves beyond a

positivistic echoing of the participants' statements, we do make assessments: Are they using metaphor? Are they making social comparisons? Are they quoting their thoughts, someone else? Thus, no matter how much we ground our close reading in the text, there is still someone on the other end of that text trying to make sense of it, make meaning out of it. Smith cites the possibility of "critical engagement" with the text: "as the reader may well ask questions and posit readings which the participants would be unlikely, unable, or unwilling to see themselves" (p. 46). Still, no matter how grounded in the text we may be, "Qualitative analysis is inherently subjective because the researcher is the instrument for analysis." (Starks & Brown Trinidad, 2007, p. 1376).

Many qualitative methods utilize semi-structured interviews as a means of data collection (Starks & Brown Trinidad, 2007). In a semi-structured interview, the interviewer is free to follow-up up a participant comment or to seek clarification on any statement. While Smith acknowledges that it is possible to collect high-quality data through written means, the interview allows the researcher to make any clarifications in real-time (Smith, 2004). While Smith acknowledges the potential of focus groups for data collection, he notes that one then needs to address the group dynamics in any interpretation of the text. Interviewing alone, rather than focus grouping (see Cohen-Katz et al., 2005, for example), allows for depth and focus on personal experience. It is possible that people will disclose more freely, though Smith (2004) does note that individuals may differ in their need for more or less coaching in the interview setting.

CHAPTER 4:

Results

Introduction

In the present study, university music students participated in an 8-week meditation course and reflected on their experiences in weekly surveys, interviews, and in pre- and post-study forms. Results from these data were used to determine what effects the meditation classes may have had on the participants' first-hand experiences of music making. Moreover, results from these materials highlight the individual nature of such a learning experience. In order to provide an intimate portrait of participants' experiences, the results attempt to convey the first-hand experiences of music making, meditation, and a possible relationship between the two. After compiling the results as a series of individual case studies, it became apparent that themes existed that carried across multiple participants. Using a ground-theory qualitative analysis, I identified five (5) themes emerging from the observational evidence that were subsequently corroborated by extant research. Thus, the results are presented in two primary sections: (1) a series of individual participant profiles, highlighting each as a unique case study, and (2) an inventory of five themes that occur across multiple participants, underscoring common experiences and potential areas for future research.

Profiles of Individual Participants

As written survey data and interview transcripts were collected and analyzed for content, it became apparent that any presentation of the results needed to include an individual component. Each participant evidenced a unique response to the meditation class. Approached as a series of case studies, the results are meant to chart the response and growth (if any) of each participant. Individual participants communicated unique learning outcomes, with some focusing on surface benefits like the feeling of stress relief and others relaying more profound changes in how they related to their thoughts and feelings. What follows are profiles containing direct quotations from both written surveys and interview transcripts as well as participation data (expressed in sessions attended and minute practice for homework). Complete transcripts of written surveys and interviews appear in the Appendices (see Appendix B).

Participant 1

Participant 1 was a 34-year-old female graduate student. She attended all 8 sessions of the meditation class and accumulated 210 minutes (100 minutes on Headspace, 110 minutes tracked on Insight Timer) of home practice over the 8-week class period. When initially asked about stressors/challenges, she listed other people's opinions, noting that, "it is difficult to listen and make clear my inner voice." Her normal methods of stress relief included "thinking and drinking coffee. I spend maybe 30 minutes, or until when I feel energized again." She commented that meditation was similar to her usual methods of stress relief in that "in those moments, I am alone and... trying to observe what I am thinking... even when I share with people... I need that time alone."

Participant 1 had unclear ideas about meditation beforehand: “I really didn’t know a lot about it, because I thought meditation was to blank your mind [*sic*]... to put your mind on blank, without any thoughts, without anything in your mind, so, for me, it was impossible.” In a phrase that was reiterated throughout her transcript, Participant 1 mentioned, “now I know that you have your thoughts, your imagination, everything that is going on in your mind, and you can observe that from a different perspective.” Though she listed concentration as a weekly challenge in the class, she was able to accept the consistent difficulty of maintaining attention during meditation as part of the activity: “It is normal to find difficulty controlling ideas and thinking while meditation, but recognizing both states is a good start.” This challenge of concentration was consistent with her difficulties in music practice:

Concentration sometimes is very difficult for me. For example, when I need to get something very quickly, I can concentrate better. The stress of the time makes me ... focused ... but when I don’t feel that stress, I can be more dis-concentrated [*sic*].

In contrast, her concerns about musical performance were limited to memorization.

She articulated the global effects of meditation as follows: “The meditation course helped me to observe my thoughts with a different perspective... I’m going to observe them, like in a movie...” She later reiterated this idea in talking about meditation’s effects on her practicing: “It’s like I observe how I feel my body when I am playing, and I observe how I am listening ... like you were another person observing you.” This idea was in line with how she had learned to assess the quality of a practice session in music: “I have learned that my practice is going well when I feel well, when I feel comfortable... when my mind, my body, and my thinking are... connected.” This ability to *observe* herself (thoughts, feelings, and physical sensations) was her primary takeaway

in multiple questions. On a more general level, she said that meditation had allowed her to deal more effectively with the stresses of an increasingly demanding graduate student workload. She had an overall positive response to the course: “I think that this should be a course in every music or art program.”

Participant 2

Participant 2 was a 23-year-old male graduate student. He attended seven out of the eight class sessions and accumulated 200 minutes (100 on Headspace, 100 on Insight timer) of home practice over the same period. When asked about stressors and challenges on the initial survey, he listed managing an outside ensemble as a primary source of stress. With regard to the class itself, he listed dealing with physical pain (in his knees and lower back) associated with the prolonged sitting as the primary challenge across multiple weeks (as measured by the weekly surveys).

Whereas his initial impression of meditation was “just that you have to stop your thoughts,” he noted that “what really changed is to know that you don’t have stop them, it’s more of an observation.” This included reinterpreting physical pain as something to notice (rather than evaluate/react to): “My knee was hurting so walking was harder, but if I could think through it then it was just another distraction to overcome.”

In the interview, he related how the class helped him to see that meditation (or meditative-like activities/approaches) was already a part of his life: “Well, I think I find that I actually meditate, especially the walking meditation one, just, I’ve always kind of done that... So, I guess I just observed how much I actually meditate.” This comparison of meditation and life extended to music. He related meditation to the state of awareness

involved in performance: “If you *are* [emphasis in original] thinking forward, to some difficult passage, then you’re not really performing because you’re not thinking about what’s coming out of your instrument at that moment.” From the class, he took away the practice of breathing more consciously before performances: “I’ve started doing more meditation-like things before a performance... when it’s an actual stage performance, I still get kind of nervous ... so I’ll just focus on the breathing for that...”

With regard to musical practice, Participant 2 had a positive relationship with practice before the study: “It’s a place that you can make mistakes and it’s ok, because that’s where you’re supposed to make them. Then you can fix them, be aware of them.” He assessed practice by how it felt: “you set your goals, and then, how well did you get through those goals? If you get through every goal, but you hurt your body doing it, then, in the long run, that’s bad.” This body awareness was something he took from the meditation classes: “Did this practice hurt or help? If it did hurt, what is hurting?” He also discussed other changes related to his practicing: “... after doing some of the meditation, I find that I can ... pinpoint when I’m not practicing thoughtfully... now it’s like I know when I’m just running through something and I need to stop and think about why I actually made those mistakes.” Participant 2 also had a positive overall reaction: “This was a great experience, and I cannot wait to see what results will come from it ...”

Participant 3

Participant 3 was a 37-year-old male graduate student. When asked about stressors/challenges on the initial survey, he listed multiple factors including pressure to

perform at high level, a schedule that was full almost every day of the week, and demanding students, colleagues, and workload. Participant 3 attended 6 of the 8 meditation classes and accumulated 130 minutes (100 on Headspace and 30 on Insight Timer) of home practice over the course of the 8 weeks.

While no primary challenge emerged throughout the 8-week class, he listed “overwhelming tiredness” for one week while addressing comfort issues related to seated posture in others. He appreciated the variety of meditative exercises offered, especially those involving movement or focus on others: “I liked using meditation in a way that relates to other people, so it’s not just about me all the time.” He looked forward to the chance to apply skills and practices from the class to his ensemble rehearsals: “it’s interesting to think about breath, particularly for singers... and how the attention to breath that is there in so much of the meditative practices ... how does that relate to the kind of breathing that we do in singing?”

In addressing preconceptions he had about meditation, Participant 3 mentioned that it had a positive connotation for him. He acknowledged that he had some uncertainty about how it would fit in his life: “How does this connect with my own established spiritual practices, with my kind of in place reference for what spirituality means or ... meditation, prayer, faith?” While he acknowledged that some of the language could be a red flag for some, he ultimately noted, “...the different practices she took us through were really helpful and kind of broadened... my definition of what meditation is or can be.”

In questions about his previous musical experiences, Participant 3 related that, as the conductor of an ensemble, he paid particular attention to body language: “I think a lot

about how the students are responding... Reading their body language. Reading the attitude or the gestalt of the room..." He admits that he can sometimes take an ensemble's negative body language a bit personally, but he also feeds off of positive engagement, especially in performance: "...there's just a sense that one gets when it's going well, you can see it on the performer's faces, you can sense it in their bodies..."

This focus on engagement was present in conversation about mindfulness applied to future performances:

... Being aware, being mindful of that essence, that sensation that things are going well. You know, you might miss that if you're wrapped up... in details or stressed about the audience is thinking or stressed about whatever. Yeah, it's in the moment, because our art is bound by time. Being in the moment, which sounds kind of cliché.

As to the global effects of the meditation course, he reiterated this idea of practicing meditation to increase mindfulness and awareness:

I keep going back to the word mindful... meditation as a path for greater mindfulness would be an ultimate goal for me, and if stress relief or improved relationships or just a greater sense of thankfulness, those to me just seem like by-products.

Participant 4

Participant 4 was a 20-year-old male undergraduate student. When asked about stressors on the initial survey, he listed a 20 credit-hour class load along with constant worries about homework and practice (underline in original introductory form). He attended all 8 of the meditation classes and accumulated a total of 250 minutes (100 on Headspace and 150 on Insight Timer), though he indicated that he had difficulty finding time to practice some weeks, resulting in an inconsistent distribution of home practice.

Self-disclosed issues with ADHD were tied to his main challenge in the meditation classes: focus. Though he utilized healthy methods of stress relief like exercise, he did say that meditation was “a lot more effective. It’s a lot quicker. I feel the results pretty instantly.” He mentioned that he had utilized breathing to release tension on regular basis, both in his everyday life and in musical situations. This ability to relax had positive effects on musical practice:

... The ability to just, sort of, relax. And, you know, when you get frustrated when you practice, when I get frustrated when I’m practicing, everything sort of gets tense and my mind sort of stops working a little bit, so I guess, in a way, meditation has really helped with that, too.

Though he confessed uncertainty about the purpose of meditation (“I didn’t really know what it was for. I guess I didn’t have a full picture of why people did it or what it could be good for...”), he came to see that, for him, it was primarily about awareness. While initially interested in more specific information about how meditation might specifically applicable for musicians (per weekly surveys), he left the study with a more general evaluation: “I’m really happy to have participated in this; I learned a lot about my mind.” Overall, he emphasized the benefit of learning awareness through meditation:

...Just practicing being aware can be really helpful when I’m practicing on my instrument because, as I’m learning there are so many different things that I have to be aware of just from playing a single note. There are so many elements, like, with my embouchure, just tiny little aspects, like thinking of the distance between the reed and the back of my throat. I guess... it helps being able to be more aware.

He reiterated this awareness when talking about how meditation might apply to performance situations: “I guess just being able to be aware of like where you are, what you’re doing, and not thinking about extraneous things that don’t really matter.” He added that awareness was something of a primary skill:

... Stay aware and be focused during the performance ... and if I find my mind wandering, you know, being aware of the mind is in ways more important than being aware of my embouchure or my sound, because, if I'm aware of my mind, then ... that'll just fall into place.

Participant 5

Participant 5 was a 20-year-old female undergraduate student. She attended 7 of the 8 meditation classes, while reporting 225 minutes of home practice (100/Headspace, 125/Insight Timer), with a consistent distribution of practice across the 8 weeks of the program. On her weekly surveys, she initially listed focus as a primary challenge, whereas, in later weeks, she sensed that she was able to maintain focus more easily: “Even though I struggled to stay focused, I realized that there were moments where I could focus and notice a lot of my surroundings in a deeper level.”

On her initial survey, she noted that her stress level was much higher than it had been in the past, due to both a very busy schedule at school and stress associated with home life. She reported emotional eating as a primary coping mechanism, even though it caused her discomfort. She mentioned that meditation functioned differently as a coping strategy, “because it helps me take a step back and recover all of my ideas...” She reiterated this idea later: “I just kind of stop, step out, take a breath, and then come back.” She said that the meditation class helped her overall feeling of calm:

I'm definitely more calm [*sic*], less, like, wild and all over the place, because usually whenever I'm having, like, a really bad day... I take some time to do some meditation and breathe, and relax, and then I come back to it...

Just as focus was something she struggled with throughout the meditation classes, she listed ‘focus’ as something she could improve in her own playing:

... What comes to my mind is like is definitely focusing... how we’re focused on ... one point ... and then we just kind of left everything else out. I think that I could apply that to my playing, because I get really distracted sometimes, because I’m trying to play and start to think about other things that I need to do.

She communicated a thorough enjoyment of making music: “Performing is just something that makes me feel complete, it makes me feel like I’m doing something with my life.” Practice gave her feelings of accomplishment, though she admitted that there were days that she felt she “went backwards.” She stated a fear of mistakes as a primary stressor in performance. In performance, she articulated how meditation had helped her relax physically:

When I perform... sometimes I’m really tense. But, doing meditation, little by little, I’ve gotten a lot better about being more relaxed when I play. And (my teacher) has been helping me a lot with it, too. So, honestly, it’s been helping me relax and actually play out more

Her overall impressions of the program were positive, and, in a follow-up email, she noted that she continues to meditate somewhat regularly.

Participant 6

Participant 6 was a 56-year-old female graduate student. Participant 6 attended all 8 of the meditation class sessions, reporting over 300 minutes of total home practice (100 Headspace/210 on Insight Timer), and she made sure to practice consistently across all 8 weeks of the study (though there was variance in the time spent per week, with 10 minutes of practice one week to 90 minutes of self-reported practice in another week).

On her initial survey, she listed finishing graduate school as a challenge/stressor. She indicated issues with focus, with a diagnosis of ADHD. On her weekly surveys, she listed some struggles with focus and dealing with sensations of physical pain but also reported genuinely enjoying many of the meditative practices. She listed initial concerns with the spiritual background of meditation, but she later stated that a therapist practicing within her religious background was pleased that the participant was involved in a meditation study (the therapist wished that more people would practice meditation).

During the classes, Participant 6 mentioned a lot of small realizations throughout the eight weeks. Initially, she acknowledged restlessness: “I wanted to giggle and squirm like a child.” As she progressed, she noted, “I don’t have to manipulate the breath; I can just breathe normally...” Moreover, as time went by, she realized that “... switching the brain from thinking to sensing is relaxing.” Finally, she learned “that strong emotion can come out or surface when the mind is still.”

She reported significant learning in terms of dealing with emotions, saying that meditation “allows me to ... feel my feelings, and that way I can work through them in therapy and in life instead of ... Shoving it under the rug.” She reiterated this idea on her final review survey: “I have always swept uncomfortable feelings under the rug. Now I am learning to acknowledge them as the first step in order to process them.” She reflected this idea during the classes as well, reporting on one of her weekly surveys: “...we can learn to notice discomfort without judgment. Just to acknowledge it and be done.”

She also mentioned global effects that she attributed to the meditation classes and practice: “I think that the benefits of meditation are in every area of my life, and so I may not be able to articulate it exactly. But I feel it has, if nothing else, calmed me down.” She

appreciated the positive effect of even a small ‘dose’ of meditation: “The fact that you can just meditate for brief moment and feel refreshed afterwards is very helpful, you can just literally check out, or check in with yourself rather is a more accurate way to say it.” Elsewhere, she summarized: “How does something that simple have that much of an effect? It’s amazing...”

Participant 7

Participant 7 was a 26-year-old female graduate student. She attended all 8 of the meditation class sessions, accumulating 170 minutes of home practice (100 Headspace/70 on Insight Timer). On her weekly surveys, she listed various challenges through the 8-week course: physical pain/tension (becoming more intense with focus from meditation), feeling anxiety when the mind had calmed down (feeling vulnerable). Though she mentioned being away from family for the first time as a challenge/stressor, she also noted that her stress levels overall were much lower than they had been in previous years. Her previous modes of stress relief included coffee and socializing: “it’s based on personalities and all of that, so I tend to do more of talking to people.” Later, she was able to articulate the difference between her normal methods of stress relief and the mindset she adopted with meditation:

I suppose, in some ways, both the way that I feel after coffee or the way I feel after talking to people, help me to fix the problem, where meditation just helps me to be ok with the fact that the problem is there and that I may not be able to fix it.

She had positive reactions to the very first session (“I felt more calm after only 10 minutes of meditation.”), and she had significant learning to share on the final week’s survey: “I have learned to be and be more ok with distractions/things outside of my control.” She also shared reservations about the spiritual background of meditation:

I didn't want to do something that was going to be very Buddhist or eastern focused, but, at the same time, even in the Christian community, there's meditation, and I think that we put all of these parameters around until we think, 'well, it's ok...'

Her perceptions had clearly changed, as she reflected elsewhere:

I tried to go into it with an open attitude, but now I think it's a very healthy thing. I realize actually that it's very prevalent in our culture, now, it's like a new thing coming out and it's being phrased as mindfulness.

On the life benefits of meditation, she was clear that meditation had provided some new perspective: "I think realizing that life isn't just about planning the next thing, it's experiencing it now... is important." This message of acceptance was extended to music, where, rather than criticizing herself for not being able to achieve a certain technical goal, she could be more accepting: "I don't have to pretend to be something I'm not, and then we can work from where we are." Specifically, she mentioned that she had used a breathing meditation to calm anxiety before a performance. Musically, she had learned through meditation and other experiences to be more accepting of her current circumstances. Having dealt with a repetitive stress injury, she had questioned her identity as a musician. Still, processing these experiences has resulted in a healthier relationship to music. While before she admitted that she would have assessed practice based on sensations of physical exertion, she now says:

... A good practice session is when I'm able to fix little things that I can keep, that solve problems for the long run... a good practice session would be making sure that whatever little section I'm working on is more solid than when I left it.

Themes Across Participants

As individual profiles were compiled, it became apparent that, in spite of many individual differences, some common experiences applied across multiple participants. Five main themes were identified from participants' written survey responses and interview responses: awareness, acceptance of thoughts/feelings, ability to release physical tension, subjective experience of stress relief, and religion and/or spirituality as mediators. Each theme is treated in full with definitions, references to their discussion in the existing literature, and example quotations from study participants. The surfacing of these themes are not surprising given their discussion in the existing literature but their appearance in the observational data of this study is confirming, especially given the open ended, unguided nature of the individual interviews.

Awareness

Awareness may be defined as conscious recognition of physical sensations, emotions, and thoughts through intentionally directing one's attention in either a focused manner or panoramically:

Definitions of mindfulness highlight two key constructs: **(i) the behavior that is conducted (i.e. acknowledging thoughts and feelings), which can be conceptualized as awareness** and (ii) the manner in which this behavior is conducted (i.e. openly accepting and approving of one's thoughts and feelings), which can be conceptualized as acceptance (Cardaciotto *et al.*, 2008).

Though assessing mindfulness through awareness has been perceived as somewhat problematic (Grossman, 2011), there is research to suggest that people can grow to be more aware of emotional (Nielsen & Kaszniak, 2006) and physical (Kerr et

al., 2013) sensations. In addition, there is evidence that meditation training can tap into a specific, non-narrative frame of reference that can be described as present-tense awareness (Farb et al., 2007). Most of the participants in this study made note of how they gained a level of general awareness from the study. Some mentioned it in terms of being aware of their mind: “I think that, for me, the most important was learning how to observe yourself” (Participant 1).” Participant 4 noted that “being aware of the mind is in ways more important than being aware of my embouchure or my sound, because, if I’m aware of my mind, then... that’ll just fall into place.” Others brought the concept of awareness into more of a performance setting: “being mindful of ... that sensation that things are going well... you might miss that if you’re wrapped up... in details or stressed about the audience is thinking...(Participant 3)”. Participant 2 went as far as to make a direct analogy between performance and meditation: “if you are thinking forward to some difficult passage, then you’re not really performing because you’re not thinking about what’s coming out of your instrument at that moment.”

Acceptance of thoughts and feelings

Separate from awareness of stimuli, acceptance implies both an attitude towards and an acknowledgement of that stimuli, be it thoughts, emotions, other physical sensations, etc.:

Definitions of mindfulness highlight two key constructs: (i) the behavior that is conducted (i.e. acknowledging thoughts and feelings), which can be conceptualized as awareness and **(ii) the manner in which this behavior is conducted (i.e. openly accepting and approving of one’s thoughts and feelings), which can be conceptualized as acceptance** (Cardaciotto *et al.*, 2008).

Multiple participants in the present study noted experiences of acceptance towards experience. Some research suggests that this attitude of acceptance may mediate the effects that meditation has on executive control (Teper & Inzlicht, 2012). Acceptance may be defined as both acknowledging and welcoming (or remaining neutral towards) any stimuli, emotional or otherwise. Participant 6 noted that she had “grown up showing thoughts and emotions under the rug”, yet, in an uncomfortable situation, she “simply acknowledged how [she] really felt about it, which made it much less dangerous.”

Participants also noted their ability to accept their ability level. Participant 1: “... maybe I need more time to comprehend and to assimilate, but I am not putting pressure on me,” and Participant 7 said, “meditation has helped me realize, just being ok with where I am, rather than trying to be something I’m not yet.” The same participant noted elsewhere: “Meditation just helps me to be ok with the fact that the problem is there and that I may not be able to fix it.” Finally, Participant 2 expressed acceptance towards thoughts that occur in performance or practice: “I think I have the ability now to be like ‘that’s just a thought.’”

Ability to release physical tension

Comparisons between meditation and relaxation have been the subject of research for decades (Dillbeck & Orme-Johnson, 1987; Jain et al., 2007). Though meditation and relaxation are both shown to induce similar effects, such as a lowered heart rate, for instance, meditation’s ability to interrupt ruminative thinking (Broderick, 2005) may give it an edge, especially when it comes to performance anxiety. This ability to recognize and

release physical tension, particularly in performance settings, was mentioned by a few of the participants. As an example, Participant 5 explained:

When I perform, I tend... sometimes I'm really tense. But, doing meditation, little by little, I've gotten a lot better about being more relaxed when I play ... honestly, it's been helping me relax and actually play out more, because I'm not as 'oh my god, I'm going to mess up.' [*sic*]

The same participant (5) put it even more simply: “The more relaxed [I am], the more better thoughts come to my mind.”

Two participants (2, 7) worried that focusing on or being aware of physical discomfort would make it worse. Participant 7 addressed this experience directly:

I'd usually have a headache or just be exhausted or something, and so I thought that going into meditation and focusing on my body would make it hurt worse. Like, ok, my head hurts, and now it really hurts because I'm stopping to focus on it, but it actually helped a lot, which was interesting.

She also noted that, being able to focus and calm herself down, she could “respond more rationally instead of just fight or flight.” This category overlaps with awareness in some ways, as the awareness of physical tension (or, more generally, somatic awareness of bodily sensations) may be seen as a more particular form of awareness.

Subjective Experience of Stress Relief

Though no specific measures of stress-relief (lowered blood pressure, attenuated amygdala response) was taken, stress-relief in this context can be defined as a subjective experience of calm and increased control over one's attention. Research on meditation and stress-relief shows a moderate effect (Goyal et al., 2014). In this study, multiple participants mentioned feeling more calm and less stressed as evidence of increased well-

being as a result of the meditation. Participant 4 focused on the calming effect of breathing consciously:

Something that I use every single day, pretty frequently now, is the tension release... the tension release breaths. Those instantly sort of like, any sort of tension in my body, I'm aware of it at that point. So that helps, and I use it a lot when I'm practicing, too, when I'm just in band, or anything.

Other participants mentioned a more global effect: "I think that the benefits of meditation are in every area of my life, and I so may not be able to articulate it exactly. But I feel it has, if nothing else, calmed me down (Participant 6)." Participant 5 echoed this idea: "I'm definitely more calm, less... wild and all over the place, because usually whenever I'm having ... a really bad day, I take some time to do some meditation... and then I come back to it." Though taking time for meditation didn't always solve a problem for participants, it was a break: "...having set times, when you get home you'll do this for ten minutes, to have that break, is really helpful, and it recharges it really quickly (Participant 7)."

Religion/Spirituality as Mediators

There is some debate over whether practicing mindfulness meditation in a secular practice is stripping the practice of context, and therefore denaturing it some way (Frank, 2017; Grossman, 2011). In one study (Wachholtz & Pargament, 2005), participants in a spiritual meditation group outperformed a secular control on measures of pain tolerance as well as decreased anxiety/increased positive affect. Only one of the meditative exercises explicitly allowed participants to bring their religious background into the practice (mantra meditation), and this use of mantra (both religious and non-religious)

was found to result in positive self-efficacy and reduction of PTSD symptoms in soldiers (Oman & Bormann, 2015). Participant 6 even utilized mantra meditation on a regular basis, indicating on one of her weekly surveys: “Need to let you know about the time I spend every night going over and over the Psalms in my head. This is every night for about 15-30 minutes.” Multiple participants mentioned initial or later concerns about meditation given its religious background in Buddhism. Participant 7 said, “Well... the first thing that comes up is how much religion plays into it. So, I didn’t want to do something that was going to be very Buddhist or eastern focused.” Participant 6 reiterated this idea: “I had the preconception that it was ... in the non-Christian arena.” Participant 3 was less hesitant: “What did I think about meditation? ... it has a positive connotation for me. I think it can get kind of lumped into this... far off... thing that Buddhists do.” Participant 7 also echoed this mixed sentiment: “I didn’t want to do something that was going to be very Buddhist or eastern focused, but, at the same time, even in the Christian community, there’s meditation...”

Participants who mentioned religion/spirituality as a part of their interview also questioned how they could integrate meditation into their current spirituality: “How does this connect with my own spiritual practices, with my kind of in-place reference for what spirituality means... (Participant 3).” One participant (6) mentioned getting positive feedback from a religious authority figure: “I told my Christian therapist. I told him that I had been taking this meditation course, and he went, ‘Yes...!’ He was doing handstands, ‘I wish everybody meditated,’ he said.” Participant 3 mentioned concern over the kind of language used: “I don’t know the language, and I don’t even know the origin of it. Just something about the vocabulary, you know, kind of for some might set off an alarm.”

CHAPTER 5:

Discussion and Conclusion

In the present study, I sought to examine the effects of an 8-week meditation class on a group of music students' perceptions of music practice and performance. The practice of meditation has been linked to physiological effects (Cysarz & Bussing, 2005) and psychological benefits (Brown & Ryan, 2003) in various populations. Compared to many other forms of stress relief, it is relatively non-invasive, is accessible at most moments (all you need is your breath and a place to sit or stand), and it is free. While previous research on meditation has attempted to show quantitative evidence of its effects on physiological and psychological factors, less research has been done that focuses on the first-hand experiences of meditators, let alone the experiences of musicians and music students, in particular.

Reiteration of purpose and research questions

The purpose of this study was to assess the effects of an 8-week meditation class on the musical performance, practice, and everyday lives of university music students. Though quantitative data exists on the effects of meditation, qualitative data may open avenues for future research. Self-reports of experience help us understand how people may integrate a new activity like meditation, which offers a new way of relating to internal and external stimuli, into their lives. Furthermore, I was curious as to how they would apply this new knowledge to their musical activities, if at all. The study sought to address the following questions in particular:

1. Does engaging in a mindfulness class affect participants' perceived levels of well-being?
2. How does mindfulness training affect musicians' experience of both practice and performance?
3. What are the differences in how learners with varying levels of musical expertise respond to the practice of meditation and its effects?
4. Based on the analysis of participant responses, do any themes emerge that could serve as catalysts for further study?

Summary of Results and Discussion

This summary of results will address each question individually, and answers to these questions will draw on both individual participant responses as well as themes identified across all participant data. The focus on individual responses is consistent with the phenomenological focus of this study, while the focus on themes addresses the possible commonalities underlying the surface differences in the individual responses. Combined, these two approaches aim to give a more holistic interpretation of the text data in this study.

Question 1: Does engaging in a mindfulness class affect participants' perceived levels of well-being?

While **Participant 1** didn't directly address her well-being, she did note that the skills and ideas she learned in the meditation class allowed her to deal more effectively with a stressful graduate school schedule. **Participant 2** focused more on how he applied

the class to his musical activities: assessing his practice and performance. **Participant 3** focused more on the musical applications of the classes; he particularly noted that he liked it when meditation wasn't all entirely self-focused. To him, if stress-relief was a byproduct of increased awareness, then that was bonus. **Participant 4** referred to the tension-release breathing practiced in class as a main stress-relief takeaway. He would use them to deal with frustration during music practice, and he described this is a positive outcome in itself.

Participant 5 made the most overt statement about being calmer. She said that she was definitely "less all over the place," which she attributed to her habit of using meditation to cope with stress. **Participant 6** reported a radical change in how she related to her feelings, which resulted in a greater sense of control: "I have always swept uncomfortable feelings under the rug. Now I am learning to acknowledge them as the first step in order to process them." She also made an overall statement that engaging in meditation had "... if nothing else, calmed me down." Though not mentioning a change in stress levels, **Participant 7**, like Participant 6, spoke of how she attributed changes in how she related to herself to the meditation class. Similar to the shift from pushing away uncomfortable feelings described by Participant 6, Participant 7 spoke multiple times about being more accepting of her circumstances. Though she didn't say outright that this had an effect on her well-being, research evidence on self-disclosure and emotional acceptance suggests that this is one potential mechanism where mindfulness can increase well-being (Teper & Inzlicht, 2012).

The first theme relating to well-being is the **acceptance of thoughts/emotions**. Illustrated in the comments of Participants 6 and 7, a shift in relation towards thoughts

and feelings from rejection to acceptance is one potential avenue for changes in perceived levels of well-being. Pennebaker (1987), in discussing traumatic experiences as an alternative to the inhibition of these thoughts and feelings, states that engaging in disclosure resulted in better immune function (resulting in less visits to the doctor, for instance). Some research suggests that this attitude of acceptance may mediate the effects that meditation has on executive control (Teper & Inzlicht, 2012). In a later paper, Teper & Inzlicht (2014) report possible associations between trait mindfulness and less reactivity to feedback, possibly mediated by this acceptance orientation.

The ability to be aware of and deal with physical tension was one idea that multiple participants related to their musical activities. Being able to acknowledge and release physical tension (as Participant 4 noted) allowed them to focus on the task at hand. Moreover, the ability to acknowledge and accept physical discomfort (as Participant 2 noted on more than one occasion) inhibited a tendency to react to this physical discomfort. In the words of Participant 7, it allowed them to choose a response other than fight or flight, a more rational response. This observation is particularly salient in light of statistics indicating that performance injuries are more common than pedagogues might like to admit (Guptill, Zaza, & Paul, 2000). While there are plenty of proprietary interventions (such as Feldenkrais or Alexander Technique) available that offer the promise to alleviate or even prevent injuries, meditation also offers a non-invasive way to manage awareness. Though somatic awareness is a good pedagogical goal, Participant 4 noted that being aware of our attention may be a metacognitive skill that enables awareness of physical sensation, thus serving the performer in any situation.

This aligns with research in the Review of Literature, which frames control of our attention as a prerequisite to further, more specific awareness.

Though participant comments focus on specific applications of mindfulness practice, fewer participants made clear claims that the class had a direct effect on their well-being. Multiple participants spoke of meditation as offering a more adaptive coping strategy for the inevitable stressors of daily life, such as Participant 1's stressful graduate school schedule. Participants 5 and 6 did use the word 'calm' in describing the effects of the class, but otherwise, this theme was not as pronounced across all participants than I had initially expected, given the research and popular conception of meditation a potentially effective method of stress relief. Though no specific measures of stress-relief (lowered blood pressure, attenuated amygdala response) was taken, stress-relief in this context can be defined as a subjective experience of calm and increased control over one's attention. According to at least one meta-analysis, research on meditation and well-being shows only a moderate effect on stress-relief (Goyal et al., 2014). Thus, stress-relief may not be a primary outcome of a meditation class, though, as Participant 3 noted in his interview, it may be a pleasant by-product of increased awareness.

Based on the results available, most of the changes in well-being may be related to changes in other areas. Changes in perspective toward thoughts and feelings (via acceptance), greater awareness of physical sensations, and changes in self-efficacy (through the ability to utilize an effective, adaptive coping strategy) may all contribute indirectly to increased levels of well-being, but these tentative conclusions merit further research. Moreover, as there was no control group, it is difficult to say with certainty that

any of these outcomes resulted from the meditation itself and not other variables present during this approximately 3-month period.

Question 2: How does mindfulness training affect musicians' experience of both practice and performance?

While participants were not explicitly led to make connections either in-class or in assessment materials, multiple participants still did relate the meditation practice to their experience of music practice and/or performance. Some had relevant perspective shifts, such as acceptance of their level of ability, while others experienced positive effects of releasing unnecessary/unproductive tension. One participant made a direct connection between the experience of meditation and the experience of music performance (Participant 2). On the whole, multiple individuals were able to relate or integrate their experience of meditation into their musical lives.

Participant 1 articulated the global effects of meditation as follows: “The meditation course helped me to observe my thoughts with a different perspective... I’m going to observe them, like in a movie...” She later reiterated this idea in talking about meditation’s effects on her practicing: “It’s like I observe how I feel my body when I am playing, and I observe how I am listening ... like you were another person observing you.” This idea was in line with how she had learned to assess the quality of a practice session in music: “I have learned that my practice is going well when I feel well, when I feel comfortable... when my mind, my body, and my thinking are... connected.”

Participant 2 related meditation to the state of awareness involved in performance: “If you *are* [emphasis in original] thinking forward, to some difficult passage, then you’re not really performing because you’re not thinking about what’s coming out of your instrument at that moment.” From the class, he took away the practice of breathing more consciously before performances: “I’ve started doing more meditation-like things before a performance... when it’s an actual stage performance, I still get kind of nervous ... so I’ll just focus on the breathing for that...” Body awareness was another musical application that he took away from the meditation classes: “Did this practice hurt or help? If it did hurt, what is hurting?” He also discussed other changes related to his practicing: “... after doing some of the meditation, I find that I can ... pinpoint when I’m not practicing thoughtfully... now it’s like I know when I’m just running through something and I need to stop and think about why I actually made those mistakes.”

Participant 3: Though he didn’t have an ensemble of his own at the moment, he looked forward to the chance to apply skills and practices from the class to his ensemble rehearsals: “It’s interesting to think about breath, particularly for singers... and how the attention to breath that is there in so much of the meditative practices ... how does that relate to the kind of breathing that we do in singing?” The topic of engagement was present in conversation about mindfulness applied to future performances:

Being aware, being mindful of that essence, that sensation that things are going well. You know, you might miss that if you’re wrapped up... in details or stressed about what the audience is thinking or stressed about whatever. Yeah, it’s in the moment, because our art is bound by time. Being in the moment, which sounds kind of cliché.

Participant 4 mentioned that he had utilized breathing to release tension on regular basis, both in his everyday life and in musical situations. This ability to relax had positive effects on musical practice:

The ability to just, sort of, relax. And, you know, when you get frustrated when you practice, when I get frustrated when I'm practicing, everything sort of gets tense and my mind sort of stops working a little bit, so I guess, in a way, meditation has really helped with that, too.

Overall, he emphasized the benefit of learning awareness through meditation:

Just practicing being aware can be really helpful when I'm practicing on my instrument because, as I'm learning there are so many different things that I have to be aware of just from playing a single note. There are so many elements, like, with my embouchure, just tiny little aspects, like thinking of the distance between the reed and the back of my throat. I guess... it helps being able to be more aware.

He added that awareness was something of a primary skill:

Stay aware and be focused during the performance, and if I find my mind wandering, you know... being aware of the mind is in ways more important than being aware of my embouchure or my sound, because, if I'm aware of my mind, then that'll just fall into place.

In reference to performance, **Participant 5** articulated how meditation had helped her relax (and how that relaxation helped her perform better).

When I perform... sometimes I'm really tense. But, doing meditation, little by little, I've gotten a lot better about being more relaxed when I play. And (my teacher) has been helping me a lot with it, too. So, honestly, it's been helping me relax and actually play out more.

Participant 6 didn't make any comments about how the meditation classes had any effects on her musical life, though, as covered in Question 1, although she did relate substantial changes to her behavior and outlook as a result. **Participant 7** related many of the changes experienced across the course to acceptance. This message of acceptance was extended to music, where, rather than criticizing herself for not being able to achieve a certain technical goal, she could be more accepting: "I don't have to pretend to be

something I'm not, and then we can work from where we are." Specifically, she mentioned that she had used a breathing meditation to calm anxiety before a performance. It is hard to say what was precipitated by the meditation class and what might be due to other factors, such as the passage of time, having a background in counseling, or dealing with other personal and interpersonal challenges.

Again, though participants were not led to make connections between meditation classes and their musical making, the results still suggest that participants freely related the two. 6 out of 7 participants described how meditation practice had some effect on their awareness, including the use of breathing techniques to calm the mind or release physical tension, a new perspective on their own thoughts/feelings, or awareness of physical sensations, also known as somatic awareness. Participants 1 – 4 each mentioned some kind of awareness as a tool for gauging performance/practice, while 3 participants (1, 2, 4) specifically focused on somatic awareness. Two participants (4, 5) related how releasing physical tension allowed them to play more effectively (they play instruments where the embouchure, a setting of the facial muscles for playing, is essential to produce a consistent, musical tone).

In summary, the theme of awareness was related to many of the positive musical changes cited by participants. Though assessing mindfulness through awareness has been perceived as somewhat problematic (Grossman, 2011), there is evidence to suggest that people can become aware of emotional (Nielsen & Kaszniak, 2006) and physical (Kerr et al., 2013) sensations. In fact, Kerr and colleagues (2013) argue that mindfulness 'starts with the body' and that this somatic anchor allows practitioners to be aware of when their mind focuses elsewhere. The effectiveness of somatic monitoring is complemented by

evidence that meditation training can tap into a specific, non-narrative frame of reference that can be described as present-tense awareness (Farb et al., 2007). Thus, somatic awareness, however it manifests, has potential as a significant pedagogical tool for healthy music making, bringing people into the present moment through body awareness. Moreover, this awareness can be extended to other musical elements beyond the physical sensations of music making, but somatic awareness is a healthy starting point.

Consideration: The Role of Transfer

In the present study, participants were not coached to make connections between meditation and their musical lives. Admittedly, I may have hoped that participants would actively make connections and apply their meditation practice to their music making. From an experimental perspective, this was an exploratory study that aimed to assess individuals' responses a stimulus with minimal interference from the principal investigator as to how one might apply experiences to other areas of one's life. From a pedagogical perspective, however, the argument is naïve. Decades of research into the role of transfer in education have painted a picture of people who need constant reminders that knowledge can indeed be transferred into new domains (Perkins & Salomon, 2002).

We may think that our job as educators is to expose our students to new ideas and new ways of interacting with the world. Then, our students will make connections on their own time. Experimental research shows us that, without coaching or guidance, people often do not make these connections. In one study, cited in numerous writings about the topic of transfer in teaching and learning, participants are exposed to a specific

military strategy. In a seemingly unrelated task, participants are presented with a medical problem that asks for a solution utilizing elements of the military strategy. Yet, participants failed to see any connection (Duncker, 1945). This and other similar results (Perkins & Salomon, 1992) have led a new way of thinking about transfer: transfer is not automatic. If you want transfer to happen, “transfer must be defined as the goal instruction (Duke, 2014, 156).” In the absence of cues or suggestions, there are no guarantees that students will make any of the connections we intend for them to make. Moreover, through further study, we now have an idea of what conditions will make transfer more likely, such as domain similarity, and student knowledge of the domain where we want them to transfer knowledge (Ceci & Barnett, 2002).

In this study, it should not be surprising that students made few connections between the meditation class and their musical lives. Moreover, because of a lack of a pre-interview, it is difficult to know whether or not any of the connections were pre-existing beliefs or ideas that emerged as a result of the meditation class. With all of this in mind, in a future study, I would request that a class teacher (myself or someone else) be much more explicit and directive in how to apply the skills from class to their musical activities. The goal of coaching students to make connections could take multiple forms. On the one hand, students can be directed to reflect an open-ended prompts, asking them how music making and meditation might be similar, or how they might apply the skills they’ve learned in meditation to other areas of their lives. Another possible path would be to focus on particular skills: acceptance of thoughts and feelings, awareness of physical sensations. The ability to notice thoughts and/or physical sensations without reacting to them has real pedagogical value in helping students deal with performance anxiety.

Rather than resist potentially distracting thoughts, students would have tools to accept and acknowledge these thoughts while continuing to practice/perform.

Taking this a step further, Steinfeld & Brewer (2015) make the case that music making, both practice and performance, can be conceived of as a meditation of sorts. Popular books such as *Zen and the Art of Motorcycle Maintenance*, *Zen in the Art of Archery*, and *Running with the Mind of Meditation* show that seeing an activity through a contemplative lens is nothing new. Furthermore, the recent development of contemplative pedagogy in higher education points to the potential of contemplative practices to enhance our experience of learning. Thus, a class whose goal was to help students see music making through the lens of meditation and mindfulness would need to take Steinfeld & Brewer's argument and apply it to regular meditation practices, such as the meditative listening that participants did in the last class meeting. In making this a focus throughout, students will have practice in applying these ideas to their musical activities, with opportunities to discuss and get feedback from an experienced practitioner of meditation. Even better, a leader of such a class would benefit from having extensive experience in music and meditation, as well as a contemplative philosophy of music making.

Question 3: What are the differences in how learners with varying levels of musical expertise respond to the practice of meditation and its effects?

In general, it may be fair to say that those with more musical experience took a more holistic approach to their responses: changing perspectives, emphasizing emotional intelligence, and conceiving of meditation as an analogue to musical processes. At the same time, participants at all levels of experience reported changes in well-being.

Experience was inferred through the degree program and level of study. It was assumed that doctoral students had higher levels of musical experience and expertise than undergraduate students did. This makes intuitive sense given the higher performance standards for admission to a graduate degree program. That said, expertise is not always a product of more or less experience, as the research literature on deliberate practice makes clear (Ericsson, 2006). Ericsson makes the case that expertise is more likely a product of deliberate practice than of experience, with his research suggesting that younger professionals with more deliberate practice may perform better than active professionals who merely maintain their previously achieved level of skill.

In this study, it is interesting to note the development of awareness as metacognition and its relationship to deliberate practice. Participant 2 noted that, as a result of the meditation class, he was more able to assess the effectiveness of his practicing:

... I find that I can kind of pinpoint when I'm not practicing thoughtfully. Used to, I would just run through something. Now, I know when I'm just running through something and I need to stop and think about why I actually made those mistakes and go back to it. Not just run that whole passage over.

This self-awareness is a necessary ingredient of deliberate practice, especially in the context of the self-study that takes place in the practice room on a daily basis. Though we benefit from weekly lessons with observant instructors, much of the work needs to be done away from the watchful eyes of an instructor. This metacognitive awareness was also something Participant 4 referenced when he said that it was almost more important to be aware of his mind than his embouchure, because if he were aware of his mind then the rest would take care of itself as a result of simply being aware. Yet, the two participants who conveyed this idea most strongly were among the youngest in the study.

Whereas participants 4 and 5 (both 20 years old and undergraduate music students) focused on meditation helped them be aware of tension or distress, other participants talked about more holistic results such as acceptance of thoughts and feelings. Participants 6 and 7, in particular, spoke of changes in how they related to themselves. In being able to accept their thoughts and feelings, even uncomfortable ones, they reported being better able to cope with them. Though participants 4 and 5 reported feeling calm and relaxed, relating the meditation training to their musical activities, others seemed to have a more holistic response to the meditation classes. Participant 1 also reported a shift in how they viewed themselves, noting that they were able to observe themselves like someone watching a movie. In meditation, practitioners are taught to observe their thoughts as they pass (sometimes using metaphors like watching a river flow by or traffic driving on the road in front of them). Another metaphor is that of looking out a window from inside a building. The window frames the viewing experience so that you are clearly in the position of observer, not necessarily interacting with any of what you see.

Question 4: Based on the analysis of participant responses, what ideas emerge that could serve as catalysts for further study?

One idea for further research is the role of religion/spiritual as it relates to learning meditation or other mind/body practices that originate in non-Western traditions, such as tai chi, qi gong, and even yoga. In multiple studies, a spiritual/religious mantra meditation produced more positive results when compared with a secular mantra meditation (Wachholtz. Above and beyond concerns of relative effectiveness, there are

concerns of feasibility when it comes to introducing meditation and related practices into another culture. Given that some parents have resisted the adoption of yoga or meditation programs as ‘religion in the classroom,’ it is worth considering how to present meditation in a meaningful way that will be more accessible to people of any spiritual/religious background.

One question that was used in the interviews was what cultural or spiritual preconceptions people might have about meditation. According the results of this study, even people with different religious backgrounds were able to take something from the meditation class. What’s interesting is how they navigated that transition from it being something foreign and non-Western to something they could assimilate into their own spiritual practices. Participants 3 and 7 reframed meditation as mindfulness, using the term that is most prevalent in our popular cultural discussions of meditation. Another participant reframed Psalm recitation as a meditative activity. Both of these approaches make sense, they normalize the activity by reframing it in a way that is safe or by recognizing elements of it in their own faith tradition.

There is some debate over whether practicing mindfulness meditation in a secular practice is stripping the practice of context, and therefore denaturing it some way (Frank, 2017; Grossman, 2011). Some researchers have asked whether or not religious belief is a mediating factor in the effectiveness of meditation. In one study (Wachholtz & Pargament, 2005), participants in a spiritual meditation group outperformed a secular control on measures of pain tolerance as well as decreased anxiety/increased positive affect. Only one of the meditative exercises explicitly allowed participants to bring their religious background into the practice (mantra meditation), and this use of mantra (both

religious and non-religious) was found to result in positive self-efficacy and reduction of PTSD symptoms in soldiers (Oman & Bormann, 2015). On the other hand, it is worth looking into whether or not competing religious beliefs (resistance to religious/spiritual beliefs seen as foreign to or incompatible with one's own) has any negative effect on the feasibility of meditation protocols.

Consideration: Accommodation v. Assimilation

The role of religion/spirituality in encountering meditation is easily understood through the Piagetian concepts of *accommodation* and *assimilation*. In *assimilation*, a person fits new information into their existing mental schema, whereas, in the case of *accommodation*, they adjust their mental schemas to make room for new information and new ideas. This idea is most easily illustrated in childhood learning: when a child sees a new animal he/she has never encountered, he/she may try to understand via pre-existing categories. A toddler may know a horse when she sees one, but how does she make sense of a zebra? Does she simply assimilate it as a striped horse? Or does her larger concept of animals or mammals have room to accommodate both horses and zebras as distinct if somewhat similar (hooves, four legs, mane, etc.) animals.

Similarly, while religious background is not the only consideration that relates to the concepts accommodation and assimilation, it does provide another illustration of it. In the interviews, one thing that sticks is the way in which the participants tried to make sense of meditation. A pair of questions focus on the participants' preconceived notions of meditation and how those changed throughout the course of the 8-week class. Both

Participant 3 and Participant 7 brought up questions of how meditation might fit into their spiritual worldviews, with the former asking this outright and the latter saying that she was not interested in something Buddhist, Eastern, or foreign. Both exhibited a form of assimilation, with Participant 3 asking how this would fit in with his existing spiritual beliefs, and Participant 7 reframing meditation (with its connotations for her of Buddhism and Eastern spirituality) as the secular idea of mindfulness. In both cases, it would be fair to characterize the cognitive strategy involved as *assimilation*.

What would *accommodation* of meditation look like? Participant 2 uses language that suggests he has adjusted his concept of musicality to integrate the concepts/ideas of meditation into his ideas about music. Early in his interview, he says that he realized how much meditation he did already without calling it meditation. Later, he talks about music performance as a kind of meditation and the effects it has: if we're thinking ahead in a piece of music, are we truly present and making music? Thus, his worldview of making music has been changed by concepts of meditation. This is the possibility that Steinfeld and Brewer (2015) address in the article about "re-conceptualizing" music making as a form of meditation: in short, theirs is an argument for accommodation. Yet, any discussion of *assimilation* and *accommodation* needs to take into account participants' beliefs, and an understanding of participants' religious/spiritual backgrounds may inform how we shape our curriculum and how we frame meditation. Even though the teacher in this study did her best to frame meditation in a secular context, the use of Sanskrit to illustrate concepts in meditation was potentially problematic for at least one participant: "I don't know the language, and I don't even know the origin of it. Just something about the vocabulary, you know, kind of for some might set off an alarm."

The role of religion and spirituality is only one dimension in the discussing the concepts of assimilation and accommodation. Related to the discussion of transfer above, without explicit coaching as to how we might accommodate our ideas of music making (or any other activity) to include the attitudes and philosophies that often accompany the teaching of meditation, those must become a goal of instruction and part of the curriculum.

Overall Considerations/Limitations

In this study, I aimed to avoid coaching participants to make connections between meditation and their musical activities. This was advantageous in that it allowed me to observe what skills/ideas participants thought were significant. This allowed me to observe what ideas (if any) were consistent across participants. For example, the concept of awareness is something that could be addressed in many ways (and it was addressed by nearly every participant): somatic awareness, awareness of thoughts/feelings, awareness of being in the moment (or not), and awareness of other people in the musical performance (including the audience and other performers).

In the end, though, the largest ideas for further study are related to methodological concerns (see **Specific Considerations/Limitations**). Meta-analyses of meditation research tend to limit the number of studies they include largely due a lack of a control group. Though research has focused on the differences between meditation and rest/relaxation, future research can study meditation as it compares to active controls such as physical activity, other mind/body practice such as tai chi and yoga, and other interventions such as expressive writing paradigm. In each case, testing the relative

effectiveness in dealing with stress levels (as compared to physical activity) and psychological distress (as compared to any of the options) will help point out ways in which meditation may overlap with (and even complement) other interventions to help achieve a greater positive effect on human well-being. One advantage of globalism and the awareness of other cultural practices is the opportunity to learn from each other's wisdom, to place our traditions under scientific scrutiny, and to move forward knowing that we are helping each other as best we can.

Though many standardized meditation programs in the research literature involve an 8-week class (such as Mindfulness-Based Stress Reduction) and can achieve results in that time frame (for a review, see Toneatto & Nguyen, 2007), the goal of interventions aimed at well-being should be to help people choose lifelong, sustainable behaviors that enhance their quality of life. One potential drawback of a short-term study is that many participants may not continue to practice after the study is over, and the study is not set up to help participants integrate the practice into their lives for an extended period of time. Recent research on physical activity has begun to unearth possible strategies for integrating healthy behaviors into our everyday lives (see Segar, Jayaratne, Hanlon, & Richardson, 2002). One participant in this study echoed a familiar refrain in the research of positive health habits, noting that there were times when fitting in meditation stressed him out, as it was one more thing that he needed to do. Future research could focus on how to help participants integrate this new behavior into their lives in a sustainable way.

In addition to promoting long-term behavior, a longitudinal study would also eliminate one persistent problem in studies that focus on relative short spans of time. Given that developing a new habit involves a change in behavior, setting aside time,

changing daily habits, etc., Baumeister & author (2009) have argued that some of the benefits we see from meditation might just as well be due to forming a new habit. Baumeister conceives of mindfulness as form of self-control training. Thus, any benefits we see are just the result of consistently practicing discipline/a new habit. Thus, the benefits might not be dissimilar from someone who's never played an instrument practicing for 20 minutes a few times a week (as participants in this study were requested to do). By studying meditation as a long-term practice, we may be more likely to study benefits that are correlated with the activity itself (and not simply the time-period of learning a new skill).

Specific Considerations/Limitations

As was discussed in the Review of Literature, one criticism levied at research on meditation has been a lack of methodological consistency. As mindfulness is a psychological construct derived from spiritual/religious traditions, it hasn't lent itself to universal operational definitions, nor is there a clear single neurological correlate of a state of mindfulness (though, again as discussed in the Review of Literature, there are neurological markers that are associated with meditation and mindfulness). Given this diversity of definitions and approaches, studying individual responses from participants is a way to add to this picture. Self-reports on their own do not necessarily answer questions about mindfulness definitively.

Even so, as part of a larger conversation of what mindfulness is, what meditation is, and what effects they have, first-person responses, however idiosyncratic they may be, contribute to the larger project of defining these terms, delineating their effects, and

developing feasible interventions that test mindfulness and meditation in meaningful ways. Moreover, even with a small sample size, any themes/ideas that appear across multiple participants offer possibilities for future research that can be explored with the following considerations in mind:

Sample Size

The case study format of this study was meant to be exploratory in nature. As there is limited research on relationships between meditation and music making, an open-ended study allowed me to go in without preconceived notions of how people might respond to the meditation course. Though I had ideas of what people might learn, based on my own experiences, I intentionally chose people with different levels of musical experience who had no prior exposure to meditation. Rather than focus on any specific physiological/psychological effect, I was interested on how people experienced music making, meditation, and what connections they might make between the two. The lack of a control group, especially an active control, makes it difficult to say definitely that the effects participants experienced were due only to the novel element of a meditation class.

Active Control Group

Recruiting music students for a study like this proved difficult even with a single group of 7 subjects. 10 subjects expressed initial interest, but schedule conflicts quickly intervened. Even with an agreed upon meeting time, people needed to miss for various conferences, performances, and illness. Thus, the lack of a control group was partially

logistical. Collecting data from a control group as well would have required additional processing time. Additionally, the open-ended nature of this study was not intended to compare the effective-ness of meditation relative to other activities. The primary intent was to gain knowledge about how music students experience music making, meditation, and what connections they might draw between the two. This exploratory study has certainly drawn out ideas for future research, including comparison testing with active controls like physical activity, and with yoga in particular.

Data Collection

Though it would have been ideal to conduct both a pre- and post- interview, the decision was made to conduct only a post-interview largely for logistical reasons. Given the amount of text in the interviews (ranging from 1,500 to 3,500 words), transcription and analysis time was a logistical concern. In order to make up for the lack of a pre-interview, participants filled out a pre-class survey listing sources of stress and potential concerns for the class. In addition, the interview questions included retrospective questions asking participants to compare their views coming into the class to those after the class. The comparisons allow for a pre- and post- comparison in lieu of an actual pre-interview. Though these elements combine to give some sense of the changes participants observed in their views and in their musical and everyday lives, it is also difficult to say with certainty what beliefs were pre-existing and what views emerged as a result of the course.

Data collection was another concern. The data collected in the form of weekly surveys and post-interviews was meant to give participants the chance to respond to open-ended prompts and give unmediated responses. The interview format consisted of a standard set of questions, yet I allowed the interviews to develop as organic conversations. If a participant ended answering multiple questions in a single answer, I did not reiterate the questions he/she answered. This made for idiosyncratic texts, but I maintain that it also allowed for more naturalistic conversations. In future studies, such naturalism could be facilitated through other means such as walking interviews (Clark & Emmel, 2010).

Another limitation involves inconsistency in home practice reporting. I utilized two different mobile applications in hopes of exposing participants to different options available to them. Use of mobile applications should have been consistent across the 8 weeks. The use of the Insight Timer app would have facilitated easier data collection, as social sharing functions allowed ‘friends’ on the app to view each other’s practice data. Whereas the participants self-reported practice data for the first three weeks, having a consistent program track their use automatically would have streamlined this process.

In addition to data collection, the low rate of home practice completion complicates the results. It is worth noting that the role of doing home practice is mixed in the existing research. A meta-analysis by Vettese et al. (2009) found that, of the 24 studies in their final analysis that assessed the impact of home practice, only 13 of them found even partial support for its role in the effectiveness of a meditation intervention. Bowen and Kurz (2012) found that between session practice was correlated with higher levels of mindfulness during the eight-week class period, but it didn’t predict participant

levels of mindfulness at 2- or 4- month follow-up. While some research demonstrates a positive effect for home practice (Carmody & Baer, 2008), there's enough mixed data to consider either eliminating the home practice requirement altogether or designing a study that assesses the impact of an 8-week meditation class with or without the home practice element.

Finally, qualitative data collection was limited to weekly surveys that participants filled out immediately after each class. Though they practiced throughout the week, their weekly survey responses often referred to material from that class day and not the previous week. Thus, it is difficult to say whether any retrospective observations they might've included are as in-depth as in the moment reactions might've been, say in the form of a journal. A future study could include asking participants to maintain a journal of their experiences throughout the 8-week class to be used as immediate, in-the-moment data to be assessed for content (see Morone et al., 2008). We may have overestimated the amount of written data participants would provide. Few participants even utilized complete sentences, instead limiting their responses to short phrases.

Longitudinal Study - Extended Time Frame

A final consideration is the time frame of the study. The entire study, from initial surveys to post-interviews, lasted less than 3 months (5 months if you include the recruitment and scheduling period). The first issue with the short time period is a standard methodological one. Some benefits could be concomitants to learning a new skill: many had never practice a mindful-awareness practice of any kind. To reiterate

Masicampo and Baumeister (2007), mindfulness may indeed be conceived of as a form of self-control training, but then the results you see may be just as attributable to developing discipline: Baumeister's 'self-control' muscle metaphor (see Baumesiter, Vohs, & Tice, 2007) would thus be developed through meditation. In this view, the results would be a result of behavior modification and not necessarily the behavior itself. Though the effects of meditation may be in part due to habit formation, longitudinal study would help delineate these effects from ones intrinsic to the activity.

The second issue is more of a philosophical one. The class lasts for 8-weeks, and one request from multiple participants was to continue the course as an official class. Research tells us that many participants do not continue to practice after the 8-week class period, and this make sense. Courses can demand an amount of home practice (up to an hour, in the case of mindfulness-based stress reduction) that can be difficult to sustain, especially without a weekly check-in with a teacher. Thus, the philosophical issue is that an 8-week class does not necessarily cultivate meditation practice as a sustainable habit that people can carry forward after the 8-week class. Though we can study the immediate effects, it is likely that, just as with exercise, discontinuing the activity can discontinue the benefits associated with that activity. Thus, to be specific, we are studying the effects of an artificial environment, a class with a teacher, rather than the cumulative benefits of a consistently practice activity. Just as music lessons might have benefits, it is long-term practice that creates lasting changes.

Diversity of practices

As was explored in the Review of Literature, one issue in meditation research is the lack of an operational definition. Mindfulness and meditation are used interchangeably at times, while meditation itself is made up of a number of practices and protocols that differ in meaningful ways. The class profiled in the present study exposed participants to multiple practices in meditation, as profiled in the methodology. Though these practices overlap in meaningful ways too, their differences are significant enough to raise concerns about the lack of consistency from week to week. To say that the meditation class had an impact on students is not to say that any of the practices they encountered was solely responsible for those effects. While utilizing multiple practices can be useful in helping participants isolate specific skills/ideas, such as somatic awareness and acceptance of thoughts, it is important to be transparent about these diverse practices as contributing to a whole class that may be more than the sum of its parts. From an experimental research perspective, isolating particular practices and comparing them to meaningful, active controls will allow us to come to more substantive conclusions about the effects of various practices within the meditation tradition.

Conclusion

The present study contributes to the growing body of research on meditation, yet it contributes the voices and perspectives of individual participants/practitioners who are encountering meditation for the first time. While studies of meditation-naïve individuals show the possibility of changes in the brain, this study contributes first-person accounts of meditation, music making, and relationship between the two practices. Moreover, the

individual accounts demonstrate the various idiosyncratic responses that a group of otherwise similar individuals (music students at a public university) can have to the exact same intervention. Based on personal experiences, temperament, and other characteristics, our responses and application of meditation (in its various forms) can be just as individual as our responses to music and music making.

As stated previously, the present study sought to assess how music students might apply meditation to their music making in practice and performance. Though connections were made by nearly everyone, future research needs to consider the role of transfer and the level of guidance needed to achieve more consistent results. Regularly guiding the participants, either through the class (suggesting potential applications) or in the assessment measures (for instance, including a question on the weekly survey about how they might apply this to their music practice and/or performance this week). Moreover, a curriculum directed towards music making might have a strong effect on participants' abilities to demonstrate learning transfer. Connecting an activity like the music listening meditation through discussion, connecting awareness of physical sensations to somatic awareness, and connecting loving-kindness towards ourselves when we're often self-critical are all examples of we might be guided to build a healthier, more mindful relationship to ourselves and to making music.

While the growing body of research on meditation demonstrates the potential benefits of both short-term and long-term meditation, it is important for us as researchers and consumers of research not to let our enthusiasm get ahead of what has (and hasn't) been validated in the scientific literature. Accounts of meditation, dating back to the Buddha's enlightenment, offer us a glimpse of meditation's potential, the project of

investigating meditation through quantitative and qualitative research is young. The willingness to explore peoples' responses to meditation through exploratory, qualitative research can offer us glimpses into the process of learning something new, if not foreign, through the eyes of the learner. These perspectives can be blended with a body of research that examines meditation in relation to active controls such as physical movement and similar practices such as yoga and tai chi. By assessing how individuals process meditation and contrasting its effects to those of other activities, we can begin to paint a clearer picture of meditation's potential for self-care, self-exploration, and self-awareness.

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APPENDIX A: FORMS

PRE-CLASS SURVEY

Introductory Form: (Note: While all information is confidential, and you may refuse to answer questions for any reason).

1. Tell us about any challenges or stressors that you face related to your family and your work. A brief summary is fine.
2. In general, how do you relax?
3. Do you use alcohol and/or drugs to relax?
Yes____ No_____
4. Please list any medical problems you may have.
5. Are you currently receiving any medical treatment?
Yes____ No_____
6. Please list the medications you take.
7. Please list any physical limitations that we should know about.
8. Are you currently experiencing behavioral, emotional, or mental condition?
Yes____ No_____
 - a. If yes, are you receiving treatment?
Yes____ No_____
9. Have you experienced any physical, sexual, or emotional abuse in the past year? If yes, how has it affected your stress levels and/or how you relax?
Yes____ No_____

Participant:

POST-CLASS SURVEY

Final evaluation form – Due at final Interview Participant Number _____

1. Did you get something of lasting value and/or importance from mindfulness training?

Yes____ No____

a. If yes, please explain how mindfulness training is a lasting value and/or important.

2. Have you made any lifestyle changes as a result of mindfulness training?

Yes____ No____

a. If yes, please state what the lifestyle changes are:

3. Has your responsiveness to your thoughts, feelings, and reactions changed due to the greater awareness developed through meditation?

Yes____ No____

a. If yes, please state how:

4. On a scale of 1 to 5 with 1 being very unimportant and 5 being very important, how would you rate mindfulness training? Please circle one:

Very Unimportant	Unimportant	Somewhat Important	Important	Very Important
1	2	3	4	5

5. Are there any other general comments you would like to make?

CONSENT FORM

Principal Investigator: Carla D. Cash
Associate Professor of Music, Piano
School of Music – Texas Tech University
carla.d.cash@ttu.edu

You are being asked to participate in a research study that is being funded by the School of Music and the Don and Kay Cash Graduate Research Grant at Texas Tech University. Please read the information below and ask questions about anything you do not understand before you decide whether or not to take part.

Research purpose. I am studying human subjective experience as it relates to awareness. The purpose of this research is to determine the effects of an 8-week meditation class on the subjective experience of music students in the contexts of practicing, performing, and everyday life.

Participant selection. I am asking you to take part in this study because you are a university student, you are a music major, and you have little or no experience in learning and practicing meditation.

Experimental procedure. After attending an information session, participants will fill out a ‘Getting to Know You’ form. Participants will attend weekly meditation classes (45 min. each), filling out a weekly evaluation/survey form after each class. In addition, participants will engage in a home meditation practice for 10-20 minutes, 3-4 times a week using a provided audio file. At the end of the 8-week course, participants will fill out a final evaluation form and take part in an individual interview about their experiences in the course.

Benefits. In addition to receiving monetary compensation, participants will benefit by contributing to what is known about the effects of meditation on subjective experience; additionally, participants will gain skills through meditation that research has shown to be beneficial both psychologically and physiologically.

Risks. I feel that the risk associated with participation in this study is no greater than with everyday life.

Compensation. Participants will receive \$80 in compensation (the total was intended to average \$10 per class).

Participation. Your participation is entirely voluntary. You may refuse to participate or withdraw at any time. You may also refrain from answering any question asked of you for any reason. These choices can be made without penalty or loss of benefits to which you are otherwise entitled and without jeopardizing your university standing. **Although**

students may withdraw at any time, payment is dependent on completion of the study.

Data confidentiality. Research data is confidential. Your data will not contain any information that will link to your identity once all your data is collected. Your data will be labeled with a participant number; at the conclusion of data collection, the principal investigator will destroy the link that connects the number with your identity. Your research records (questionnaires and audio files) will be locked in the principal investigator's office for the duration of data collection and analysis, and will be destroyed by the principal investigator by August 2016. The only people who will have access to your data are the principal investigator and his Dissertation Committee Chair. All persons listed have completed appropriate training in research with human subjects. This data may be used in publications and/or presentations but your identity will not be disclosed.

Study results. The data will be included in a dissertation to be published (anticipated completion – August 2016), so the results will be available to the public.

Please contact me at: adam.smith@ttu.edu or Carla.d.cash@ttu.edu

You may also choose to contact me (information on the top of p.1) in or after August 2016 to obtain the results of this study.

Printed Name of Participant

Signature of Participant

Printed Name of Person Obtaining Consent

Signature of Person Obtaining Consent

You may keep an additional copy of this consent form to keep for your own records.

APPENDIX B: INTERVIEW TRANSCRIPTS

INTERVIEW QUESTIONS

Everyday Life

1. What do you normally do to relieve stress?
2. How does meditation practice compare to your usual methods of stress relief?
3. Have you noticed any changes in your everyday life due to the meditation?
4. What did you think about during the meditation sessions?
5. How has meditation practice affected your quality of listening?
6. What were your thoughts and opinions about meditation before you started the program? How have those thoughts and opinions changed since attending these classes?

Practice

7. How do you begin a practice session?
8. What challenges do you face when you practice?
9. What do you like about practicing?
10. How do you assess the quality of a practice session?
11. What effect has the meditation classes had on your practice sessions?
12. What do you notice when you practice?
13. What did you think about when you practice?

14. What tools have you learned from meditation classes that you can apply to your own practicing?

Performance

15. What challenges do you face when you perform?

16. If you experience performance anxiety, how do you normally deal with it?

17. How have the meditation classes changed your reaction to performance anxiety?

18. What do you like about performing?

19. What tools have you learned from meditation classes that you can apply to your own performance?

20. What do you notice while performing?

21. What do you think about while you perform?

22. How do you assess the quality of your own performance?

23. What effect has meditation had on your performance?

24. How have meditation classes affected the way you respond to your own thoughts while performing?

PARTICIPANT 1 TRANSCRIPT

This transcript has been lightly edited for clarity.

Q: I might move around, depending on what you talk about.

Q: [The] first question has to do with what do you normally do when you're stressed out. How do you normally relieve stress?

A: Hmm... during the day, I try to ... there are... different ways. So, for example, I like to take a coffee and sit down and try to look at my cellphone, play with my cellphone some times. Or not anything, only thinking and drink the coffee. I spend maybe 30 minutes or until when I am feel energized again. Other way, I walk, for example, I walk for 10 minutes or 15 minutes, thinking, trying to calm my thoughts, and, yeah...

Q: How does meditation compare to how you normally relieve stress?

A: It's very similar, I think. It's very similar, because in those moments I am alone and I am trying to relax like I'm trying to observe what I am thinking, or, if I am worried, observe why I am worried. Sometimes I share with people, but even when I share with people in order to relieve stress, I need that time alone. I need that moment alone, too.

Q: So what changes have you noticed in everyday life since you took the meditation course?

A: The meditation course helped me to observe my thoughts with a different perspective... like, I'm not going to be affected by my thoughts. So, I'm going to observe them, like in a movie in front of me, but I'm not going to get involved with that worry: with worries, with sad thinking, with stress. It's observing and knowing that everything is going on; it is moving forward.

Q: What were your thoughts about meditation before you took the class?

A: I really didn't know a lot about it, because I that meditation was to blank your mind... to put you mind on blank, without any thoughts, without anything in your mind, so, for me, it was impossible. It is impossible. But, now I know that you have your thoughts, your imagination, everything that is going on in your mind, and you can observe that from a different perspective.

Q: That kind of answers the question, how have your thoughts changed about meditation.

A: For example, this semester has been very hard for me, but I haven't felt very, very stressed. I have felt very stressed, yes, but I know that everything is happening, everything is moving, is going forward and I am in this process. If I don't think a lot of everything, I can move with everything in a more fluid way.

Q: That sounds very healthy

A: Yes

Q: As musicians we listen a lot, has meditation affected the quality of your listening, either to people or to music?

A: Umm, I don't know... I think that, for example, in those days and this weekend I was thinking it was easy for me to become very stressed. I don't know. I know I should do this faster, but now it is like I am ignoring this kind of thinking. In teaching and practicing, I am accepting my times. So maybe I am slower, or maybe I am I need more time to comprehend and to assimilate, but I am not putting pressure on me.

Q: You're not beating yourself up

A: Yes

Q: Also very healthy. Moving into a series of questions about practicing. When you practice, like solo, how do you begin a practice session?

A: I try to, first, to see what I need for the practice session. What I need, what I need to get. What are my goals? And then, I try to practice to obtain that.

Q: Ok, so there's a moment of taking stock, what needs to be done in this time that I have. Is there anything else?

A: No, not really. But, this preparation for the practice I do not when I begin. It's when, for example, I am walking. For example, from the last day, I think 'tomorrow I need to do this and this and this...'

Q: Ok, so even during the course of the day, there's this thinking 'ok, when I sit down to practice, I need to sit down work on this.' So, it's not just sitting in the room thinking about it. It's just having those thoughts.

What is challenging about practice to you? What challenges do you have?

A: Sometimes concentration. Concentration sometimes is very difficult for me. For example, when I need to get something very quickly, I can concentrate better. The stress of the time makes me to be focused on that, but when I don't feel that stress, I can be more dis-concentrated, yes...

Q: Yeah, it's maybe not as pressing; it may not be clearly structured. What do you like about practicing?

A: At this moment, in this semester or year, I find practicing very relaxed. I find a moment with myself (Q: Alone time). Yes, alone time. It's very nice, because you are moving, you are exploring the keyboard, you are learning the music. Yes, always there's the feeling of stress about 'ok, I need to do this faster,' 'I need to have results faster.' But, normally, it's a very good time. It's a very nice time.

Q: Now, how do you assess the quality of a practice session? How do you decide if it's gone well? How do you judge a practice session?

A: During this year, I have learned that my practice is going well when I feel well, when I feel comfortable... when my mind, my body, and my thinking are connected.

Q: Ok, so there's an element of "When I'm practicing well, I experience it positively."

A: Yes

Q: So, you want to get done what you need to get done, but you want to have a positive experience.

A: Yes

Q: So, what do you think about or notice while you practice? What do you find you think about or notice when you practice... piano?

A: Yes, what I focus my attention on, that is the question?

Q: Do you find that you have thoughts that cross your mind, or do you feel like you're able to focus on the music you're dealing with? What are you thinking about?

A: It's a combination of everything. Like, for example, I feel pretty well when I feel very relaxed, when I feel my movement's relaxed, and when I feel very well playing. Comfortable, like I can put a lot of energy: when I can get the sound that I want, and when I feel that I am learning. It's like a combination of everything emotionally, physically, and dominating the situation.

Q: What effect have the meditation classes had on your music practice?

A: I think that, in many ways... I can be more conscious about my body. It's like I observe how I feel my body when I am playing, and I observe how I am listening, the sound that I am producing. So, it's like put your mind from other perspective, like you were another person observing you. It's something like that.

Q: Ok, so you feel like you're able to get an observing perspective...

A: Yes, but at the same time, experiencing all of these feelings.

Q: Yeah, it sounds like what you said earlier about meditation itself, this idea that you can have a space to sort of observe your own thoughts, but you're not trying to shut everything down (A: Uh huh).

Q: Now, are there any tools from the meditation that you think you could use in the future in your music practice?

A: Yes, I think that, for me, the most important... was learning how to observe yourself. I like that I think it will be present forever. (LAUGHS)

Q: Victory. Now, just the last questions that deal more specifically with performing situations: What do you like about performing?

A: One of the things that I like is... when I can play, even when I'm stressed, in a very confident way... I can feel myself playing the piano in front of the other people. For me, that is sometimes very difficult because I get anxious very easily in front of the public. But, when I feel very confident about the music learned I can do it.

Q: Ok, so you feel confident enough to overcome that anxiety.

A: Yes.

Q: Now, when you experience this anxiety before a performance, how do you deal with it?

A: I try to breathe. I try observe my emotions, but in those cases it's very difficult. I normally wait for the moment [to pass].

Q: So, has meditation had any effect on your ability to deal with it?

A: I think that... yes, because, in this semester, the opportunities that I've had to play in front of other people have been positive. So, I was anxious before the playing, but, when I play, I am ok. Yeah.

Q: Are there any other challenges that you face when you perform?

A: Memorization, for example. Memory... Memory... Overcome lapse of memory. What else? ...

Q: Well, that's a big one, especially for solo pianists, with all of that information. Similar to the questions about practice, what kinds of things do you think about or notice... what kinds of thoughts do you have when you perform? What do you notice?

A: When I am confident, when I am very, very strong to play, I only think of the music. I only think of the sound production. When I am insecure, and I know that I'm not good, many thoughts come to me. So, for example, what people is thinking, this passage is not good, I'm going to be lost, or many, many bad things.

Q: To put it simply: many, many bad things. There are times for me when I'm more affected by what's happening around me, and it's no fun. How do you assess the quality of your own performance?

A: When I feel that I can do what I want, I feel confident.

Q: So, after a performance, how do you assess it?

A: After a performance? No, in that way. If I played, and I could do many expressive things and the things I wanted to do, I feel good.

Q: Now, you mentioned it a little bit already, but has meditation had any effects on your performing?

A: I think... yes because it gave me the clues and tools for a better preparation. I think that, in my case, the performance is the result of the preparation. So, if I have a very positive, positive preparation for the performance, I can do well.

Q: Now, are there any tools or things from the class that you felt like you could maybe experiment with or apply to your performing?

A: Yes, because, I try to put everything in the performance: the comfortability with the body, comfortability to express myself through sound, everything. So, if, for example, I am stressed... I support my confidence in that thought: I had a good preparation [and] I am coming here through a process. So, for me, the process is my support. So, at the time of performance, I always try to say to myself, "Ok, you did everything that you could, so now you are here (laughing)...". So, in that way, I've freed myself of anxiety and stress.

Q: What other comments do you have, if any? On your experience? On the class?

A: Ok, I think that this course helped me so much because it complements a lot my process of learning this year, mostly the second semester. The second semester has been very hard. I had a lot of work, and I had a lot of stress, but it has been possible for me to deal with everything to this moment. I hope that the rest of the semester will be in the same way. That calm helped me so much, everything has been working together.

PARTICIPANT 2 TRANSCRIPT

This interview has been lightly edited for clarity.

Q: What do you normally do to relieve stress?

A: I guess normally I either play video games or just go outside with a cup of tea or coffee and sit there.

Q: How does meditation compare to the way you usually relieve stress?

A: I definitely think that, especially all of the different forms of meditation that we talked about, like the playing the video games or the just sitting outside could be one or the other. Because, playing a video game, you're definitely like in the moment. You're not thinking [about] anything else; you're just thinking what's happening right then and there. And then with the outside one, it's more like the observation meditation we did, where you're just sitting there, noticing what's happening,

Q: What I'm hearing is that they achieve the same goals in different ways.

A: Yeah

Q: Ok, what changes have you noticed in day-to-day life since doing the meditation course?

A: Well, I think I find that I actually meditate. Especially the walking meditation, I've always kind of done that, I just didn't know that it was an actual thing. Do you know what I mean? So, I guess I just observed how much I actually meditate.

Q: Ok, so becoming aware of the fact that you are aware a lot.

A: Yeah.

Q: During either the home practice or the classes themselves, what did you find you were thinking about or noticing?

A: I guess the breath was always my focus. I always focused on the breathing... just because I think that one was just easier for me. And then, the thing that I always noticed was just the time it took me to actually feel relaxed. That's kind of the thing I always noticed when we were doing meditation: how fast or how slow it take me to actually feel the state of relaxation.

Q: So, you're going from wherever you were when you started, whatever that was, to something that you noticed was different.

A: Yeah.

Q: So, what were your thoughts about meditation before you took the course?

A: I guess I was really just closed-minded and just thought that meditation was always '(you) sit down, focus on your thoughts... try to stop them. That's kind of the thing that

most people think about it, just that you have to stop your thoughts. And that's what really changed is to know that you don't have stop them... it's more of an observation.

Q: Ok, so that kind of answers the follow up question of the changes that resulted, and it sounds like you realized more of what it was. Do you feel like meditation has had any effect on, your senses: sight, listening?

A: I wouldn't really say just listening, or really just say sense. I think it would just be awareness. It's not like I think I see more, I think it's just that I'm starting to notice more things

Q: Does that include listening?

A: Yeah

Q: How so, can you expand?

A: Well, definitely. I guess that one's just hard because, as a musician... am I listening better? Or am I actually just getting better, through my practice so that I can hear more? Is it the meditation helping that, or is it what I'm doing, because you're always doing stuff to... get better at listening.

Q: And, for you, you direct an ensemble, you direct ensembles, having to listen across multiple groups. So, your listening is probably already pretty multi-tracked.

A: ... I definitely think that, when it comes to listening... I've started doing more meditation-like things before a performance. When it's an actual stage performance, I still get kind of nervous for those, and so I'll just focus on the breathing for that. I feel that maybe helps my hearing just because... I'm focusing.

Q: That's a good segue. There's a parallel series of questions, but you hinted at some performance anxiety things [already]. So, it sounds like you've been able to adapt some of what you've learned to those situations. So, if you would rewind, how would you normally deal with performance anxiety?

A: I think I'd kind of go back to what I used to think meditation was, and I would try to do that. I'd try to stop [whatever's happening].

Q: Do you mind if I asked how that worked?

A: It worked ok, and I think it also mattered how prepared I was. If I was pretty prepared, I wouldn't have to think about it as much. So I wouldn't have to try to stop those thoughts as much. But, if I wasn't prepared, then I would have to really push and try to get past that.

Q: So, two questions: You can answer relatedly or in order. What do you like about performing, and, then, what challenges do you find when you perform?

A: What I like is that you're able to express something through the music. I usually like performing with ensembles better, just because I like the teamwork 'all towards one goal' kind of thing. I like feeding off community through performance.

What I don't like? (I: or what's challenging...) I think it's honestly just the expectation for the audience. There's this thing in western music that it has to be perfect or it's not art, and I think that's why I like playing tango, because the mistakes, they're part [of it]. You don't have to play perfectly, because if you hit a wrong note, it kind of adds that humanness.

Q: So, what do you find that you notice or think about during performance (and if it's different with solo versus ensemble)?

A: ... When it comes to solo playing, what I think about is just 'am I doing enough to get the point across that I'm trying to get, and, when it's ensemble, I think "are we talking together enough to get the point across?" It's all the same thing, it's just if it's a 'me' or a 'we'.

Q: In addition to any performance anxiety strategies you have, how else do you think meditation has affected performing for you?

A: So, how it affected me? I think it's just made me aware that when you're performing, it's actually kind of like meditation because you're not really thinking... If you are thinking forward to some difficult passage, then you're not really performing because you're not thinking about what's coming out of your instrument at that moment.

Q: So, your sensory stuff is not present tense...

A: Even if you're looking two measures ahead, does that mean you're playing that measure exactly with the group... (I: "...Are you really paying attention?") Exactly. Or are you just thinking, 'oh, my gosh, that b section's coming up.'

Q: Well, it's interesting. I used the metaphor in another [interview]. There's an Indiana Jones movie where he has to cross an invisible bridge. So, he throws salt out, and he takes it one step at a time. It's like, you can't really think ahead. It's only going to go so far.

If you find that you do have thoughts during performing, do you think meditation affects the way you respond to your own thoughts?

A: Yeah... I think I have the ability now to be like 'that's just a thought.' You can't really... can you really do something with that right now? If the answer is no, you just need to forget about it.

Q: So, moving to instrumental practice or rehearsal. Either could be what you want to talk about. How do you start a practice session?

A: I haven't been really good about [practicing] just because there's been so much going on, but, if I would really have the time to sit down and be able to do it correctly... I think I would definitely start it with something more mental... just think about how I want to practice that day, instead of 'I just have to work on my solo because all I have is 15 minutes.'

Q: Ok, so, forethought. ("Yes...") Similar to performing, what do you like about it [rehearsal], and what challenges do you find with it?

A: ... I like that it's a lab. You're experimenting and doing a lot of self-discovery of your own self. Again, it's a place that you can make mistakes and it's ok, because that's where you're supposed to make them. Then you can fix them, be aware of them. Sometimes it can be a time thing, so, you do have to skip something just for the sake of getting it done.

Q: What do you find you think about or notice when you practice?

A: I definitely notice that, especially after doing some of the meditation... I find that I can kind of pinpoint when I'm not practicing thoughtfully. Used to, I would just run through something. Now, I know when I'm just running through something and I need to stop and think about why I actually made those mistakes and go back to it. Not just run that whole passage over.

Q: Are you trying to say that the answer to every problem is not 'do it again?'

A: Yeah...

Q: So, the tools you have for practice from meditation... awareness of what state of mind you're in. What other tools do you feel like you could apply to your practicing from meditation?

A: ... The body awareness segment that we did would definitely be good, especially before and after [practice]. But that's also if you have the time for it, but that would definitely be a good thing to notice: Did this practice hurt or help? If it did hurt, what is it hurting?

Q: You need to be more specific with yourself.

So, this question applies both to practice and performing, relatedly or separately, how do you assess the quality of a practice session? As a separate question, how do you assess the quality of a performance?

A: ... The quality of a practice is... you set your goals... Then, how well did you get through those goals? It's not if you get every goal. If you get through every goal, but you hurt your body doing it, then, in the long run, that's bad.

Q: Also, if you're hurting your body, you're probably not paying attention: you're pushing through something, not noticing. So, you said, initially, you said how well you get through everything.

A: And then when it comes to a performance, that's purely your personal opinion. If you think you did well, if missing one or two notes is ok with you, but as long as you get the message across that you're trying to get... Then I think that's a successful performance. If you're in a situation where people care more about the notes...

Q: ... I think that's an interesting point to bring up just because, this idea of it being your personal opinion. I think that's a pretty healthy opinion to have, you're able to assess your performance based on your own terms. So, that sounds healthy.

Let's see if I'm missing anything. What other comments do you have, if anything, about the course?

A: I just thought it was very eye opening, especially to be able to... show that there are these different kinds [of meditation], and it doesn't really matter which one you do because they're all going to the same goal.

Q: So, you feel like you're able to take a sort of open-minded view of it...

PARTICIPANT 3 TRANSCRIPT

This interview has been lightly edited for clarity.

Q: What do you normally do to relieve stress?

A: Probably just getting away from work, because stress is mainly related to work. I guess school, currently. So, trying just to close off everything related to work and school, and just try to do something different. Leave the building. Go for a walk. Hang out with my kids. Hang out with my wife. Read. I don't watch a lot of TV, that's more of a... summertime activity. There's not a lot of free-[time] to do that during the school year, so I wouldn't call that a stress reliever. It's more of a recreational thing, when I actually have time.

Q: I think a lot of people use it as an attempt to unplug, but I'm not as fond of it as a lot of other people [are]. Thus far, how does meditation, in your experience of practicing... How does that compare to normal stress relief for you?

A: In a way, it can almost be another source of stress... not always, and not consistently, but it can be just one more thing to do... If you plan your life around your to-do list or your calendar, adding ... one more thing can be stressful. And if you look at meditation as one more thing, it can compound stress.

Q: I think we can look at it as an outside activity in the schedule.

A: That might be missing the point (laughs).

Q: Yeah, but I still think that is... I hope that, during the class, there was not any sense of it being inherently worth-[y] and needing to be carved out of your schedule. I think that's actually a really fair point to bring up, that it's a trade-off of time. You know, with some of the comments I got back, some people, not necessarily seeing it as navel gazing, maybe not a selfish activity, but because it's something you do on your own, it naturally shuts you off from social outlets... I could understand it not having the same appeal to everyone or it seem[ing] like one more thing when there are other forms of stress relief available, like being with your family. **So, what changes, if any, have you noticed for yourself, just in everyday life, as a result of being in these classes?**

A: ... I keep going back to the word mindful, and I think that's something I thought about before... and why when the email came out and you were promoting this thing, it kind of piqued my interest. I think that's a really interesting way of thinking about life and one's interaction with the world or with other people or with music... just so many things. Being mindful, meditation as a way of becoming mindful was initially really interesting, and... I've seen through the class and the different things, and the different activities we've done, how one can you use meditation to promote mindfulness... I think, in that way, it's been really helpful. Stress relief? I don't know if that's been the ultimate goal. I would like to be free from stress. Is there like medicine for that?

Q: I think there is in novels like *Brave New World*, where they have soma and everything just goes away...

A: Yeah, the reality is much more complicated. So, meditation as a path for greater mindfulness would be an ultimate goal for me, and if stress relief or improved relationships or just a greater sense of thankfulness, those to me just seem like by-products.

Q: So... what were your thoughts about meditation when you saw the ad, or when you signed up for the class?

A: What did I think about meditation? I don't know... it has a positive connotation for me. I think it can get kind of lumped into this... far off... thing that Buddhists do.

Q: I think it sort of gets packaged in eastern spirituality.

A: Right. Which is not a tradition that I grew up in or am very familiar with on a personal or practical level. So... going into it I was open because I have, in general, just a... positive thought about the whole thing. You know, how does this connect with my own established spiritual practices, with my kind of in place reference for what spirituality means or ... meditation, prayer, faith, all that?

Q: You know, I'd say that multiple participants made mention of that as something they were attempting to reconcile, wondering how that would sort of jive with each other. Because, I think when it does get lumped in with the spirituality package, it can have more meaning for some people. Then again, I think that... if we want something like this to flourish, we need to keep in mind that it's taking roots in peoples' very different backgrounds, and different beliefs... and if one can accommodate that. I thought, by and large, Rachelle did a very good job of being outwardly respectful and comforting of everybody.

A: I can see for some... one barrier would just be the language. Some of the terms that she would use... I don't know...

Q: Using the Sanskrit words?

A: I don't know the language, and I don't even know the origin of it. Just something about the vocabulary, you know, kind of for some might set off an alarm.

Q: Also, I think some people have reactions to white westerners using a language that is native to a different place, a different culture, a different time. Bringing it back in addition to the language itself being foreign, because I know that I sometimes have a reaction to that. So, how have your thoughts about meditation changed as a result of being in this class?

A: I thought the different practices she took us through were really helpful and kind of broadened... my definition of what meditation is or can be. The walking activity that we did... the picturing the 3 or 4 different people, and going through the mantras with those people in mind. At first, when we were doing just a lot of breathing and focusing on that... it seems like we did a couple weeks of that... just kind of getting into that. I thought to myself, “gosh... if we do this the entire time...it might get a little boring.” Or, “Is this all there is?” So, it was cool to see...

Q: Diversity? (yes). It’s interesting to me, because I have to admit to my own bias... For my personality, my temperament, that whole sitting by myself and being quiet thing is really soothing... Realizing that there are different ways and different paths and seeing people respond to different things was healthy for me. It was kind of nice to see the positive response to the variety of things that she brought into class. People had very strong reactions to different weeks, and it was interesting to sort of track that as the class went along.

Now, this question might seem a little random... but, how has meditation and being in this class affected your quality of listening? I think, as musicians, we use our ears a lot, but...

A: I think, going back to the idea of mindfulness, my field is in choral music and conducting. So it’s... ensemble-based, with people, all of the time, working with music that is thick... dense textures. So, listening not only for error detection, which is what we’re doing all the time (what we’re trained to do...), going for those things, of course, but also listening for kind of the underlying things that are in the music, or in the room with the people that you’re in the room with. What they’re bringing to rehearsal that day, or an attitude that they’re bringing to the music at hand. So, I guess just promoting listening on deeper levels, different levels, beyond what could just be a surface interaction, which is just listening for pitch and rhythm.

Q: SHMRG¹-ing it.

A: Doing the SHMRG thing, but there’s more to it [than that].

Q: I think the SHMRG thing gives us a tool to talk about and articulate our thoughts... At the same time, as jarring as it might have been in that last class, a difficult experience for many musicians to do, just to sit there and not SHMRG, for lack of a better word... It was interesting to see the reactions to that... I know, for myself, just from being at work all day... my head was swimming, and I remember thinking “I don’t really listen like this that often...” It was kind of a wake-up call for me. So, the next series of questions has to do with practice, and I guess, because of being an ensemble director, maybe even

¹ SHMRG refers to a music analysis framework originated by scholar Jan LaRue. It’s an acronym for sound, harmony, melody, rhythm and growth (form).

rehearsal... So, the first question: how do you like to begin a practice session for yourself or a rehearsal for an ensemble?

A: If it's in the ensemble, it starts with energy and positive thoughts. Positive words, "so glad to see you today... isn't today a great day? Yesterday's rehearsal, you did so well on this, let's look at this again..." You know, it just starts with this energy, which requires reading the room, knowing where people are, in that day, in that moment, but also knowing the trends of this particular group. You know, maybe it's the last rehearsal of the week: how are they typically on this last rehearsal of the week? Or this piece... what's the kind of attitude about this piece, and is it helping with the music or is it a detriment?

Q: Resistance or excitement. That's interesting, you're having to consciously, or maybe subconsciously, read a lot of body language and what's going on... when I just stare at black and white keys.

A: Yeah, and that might be different in an instrumental ensemble, but I just think there's something about singers that they're inherently social, and choir especially so, because there are... 50 people in the room. No instruments, nothing, there's no stand in front of you, you're not going to stick [an instrument] in your mouth; you just open your mouth.

Q: You can't be buried in your stand... A few of you [participants] are vocalists, and another person talked about the nature of performing as a vocalist, just how presentational that is, how emotionally integrated that all is... I think those are all good considerations.

What challenges do you find when you have a rehearsal? In terms of either what you're aware of or what you need to manage during a rehearsal?

A: I think the most challenging thing about rehearsal is that we are working with people. People are just complicated. Everyone is coming into the rehearsal with a different agenda or a different attitude... Life is just different, and everyone's just bringing different things... into that ensemble. That pulse of the individual gets morphed into this ensemble pulse... that's a really significant thing... I think. I just think it affects the success of the rehearsal, the success of the piece, and so just being aware of that human element... and there may be nothing you can do about it... but just being aware of it... knowing that it's there in the room, and being sensitive to what your students or what your choir, where they are on any given day.

Q: Wow, that sounds like good teaching

A: And there are some days when... as the director or teacher, you don't really care a whole lot. There's a lot to do: concert's next week, we've got to get things done, get through the checklist (Q: business mode?)... Yeah. Business mode. And there may be some conductors who operate in that mode the whole time, and I know they do, I know

that those people exist, but that's not necessarily the way I look at it. There are those days, but that has to be balanced with... being aware of the human element.

Q: Or else you just have business choir... On the flip side, what do you like about rehearsal? The reason all of these questions focus on the practice element is to treat them as distinct spheres?

A: I think what I like about rehearsals stems from the comments about the last question, and that is ... rehearsal, I think, is inherently spontaneous, even when we plan very carefully... which we do... But, in the moment... you never know, there's always this element of surprise and spontaneity. That's the exciting part of it. As the conductor, I'm going to go through my plan, and something really weird happens that I didn't think was going to come up... 'Ok, let's address that'. Or, something fantastic, wonderful, exciting happens, and, 'oh my gosh, let's celebrate that and then move on to the next thing'. It's spontaneous because we're working with humans, and that creativity, that surprise, that we walk into every day... is super exciting.

Q: I mean, I think that's very encouraging to hear, in the sense that you do know people who operate in a business mode... I guess the way that I would conceive of it is that there are people who make music for its own sake, but... especially for ensemble directors, if you don't realize that you're trying to help humans cooperate together and do something, you know, you're essentially treating humans as keys on a keyboard that you're going to program and push.

A: Yeah, we either use people to make music, or we use music to make people.

Q: So, with all of that in mind, how do you, either retrospectively or in the moment, sort of assess the quality of a rehearsal?

A: Well... it starts with the error detection, pitch and rhythm, balance and blend, and musical line. All of those SHMRG elements, and then, beyond that, is the music alive? Spontaneous? Coming from a genuine place? So, we work on those details of pitch, and rhythm, and dynamic, vocal technique, and we work on those daily, all of the time. That's the stuff this all made of, but, ultimately it has to be about more than those things. (Q: You have to assess whether it flies or not)... Yeah, and you rehearse those things so much that we ultimately forget about them and we just sing: make music, are creative and spontaneous and the music flies. So, ultimately, yeah, we[ve] got to check off the list and get all of the SHMRG things perfect, but then again, it's never going to be perfect. So, there's just this constant give and take.

Q: The flipside of that is, you say, "Just sing..." What would happen then?

A: It'd be a royal mess.

Q: These are kind of related... what do you find that you notice, or what do you find that you think about during rehearsal?

A: ... The details, for sure. I think a lot about how the students are responding, you know? Reading their body language. Reading the attitude or the gestalt of the room.

Q: Sorry, I'm laughing because I just have memories of ensemble directors who ask for more time, and you see the whole ensemble just do this... (slumps, head down).

A: Yeah, I don't know, we all get into those ruts, and sometimes you kind of just have to plow through and get your to-do list done. Yeah, if the room is asleep, or angry, or upset, or resistant in some way, there's not a lot of opportunity for music making. Learning, making music; I just don't think it's going to happen... in an ultimately... healthy, integrated way, [an] organic way. So, I may spend too much time thinking about it, but I do read the room. Sometimes I'll internalize it too much, like it's my fault... Did I do something to make this happen? If the attitude in the room is down, is that my fault? Gosh, what can I do to fix this? So, there's this internal monologue going on that's totally unrelated, that's totally different from the monologue that's coming out just about the details in rehearsal.

Q: There's that sort of moment-to-moment assessment of ... 'Is this going well?' or 'this isn't going well,' but couched in terms of 'Why is this not happening?' or 'Why are they reacting this way?'

A: ...And there are probably some conductors who don't care.

Q: They may exist, and I'm not recommending that as an attitude. I understand that you might worry that it might hijack your teaching, with that word hijack you think 'do I worry too much about it?' I hope that it's not the case that it would ever totally be gone. My day job is that I observe teachers. I observe graduate assistants here on campus, and you see ... the resistant teachers, and... ain't nobody having fun in those [classes]. Even if they're brilliant, ain't nobody having fun... and I've experienced that as a student, and, it's like you said.

The last rehearsal questions is whether or not there's anything you got from the classes or your own practice of meditation that might apply to rehearsal.

A: Well, it's interesting to think about breath, particularly for singers, and how the attention to breath that is there in so much of the meditative practices. How does that relate to the kind of breathing that we do in singing? Is it just, when we take a breath, is it just a utilitarian thing? Are we just taking this breath to get through this line or to sing that high note, or to sing this low note or whatever? Or, is there something about the breath that prepares you, prepares the singer in a way that goes just beyond the technique?

Q: Am I just filling the tank-o-meter... “I am now 85% full of air so that I can get through this number of notes... “

A: And we use those kinds of analogies, and they’re useful on some level. But yeah, filling the tank up with gas. Air is this analogy of: air is to singing as gas is to making the car go, but, you know, there’s got to be more to it than that, just the utilitarian part of it. So, yeah, it’s made me think about that a lot; how I would implement that in my rehearsals. I’m not teaching a lot right now. I’m not in front of my own choir. So, a lot of this year has been about learning all of these new things and kind holding onto them, so I’m kind of in this holding pattern until I can get back to my choir and try it out. So, this meditation thing has been really good, you know, how does that apply to my teaching, to choir?

Q: That’s interesting, because I’ve taken a small number of voice lessons, and one of the things that I responded to immediately, when it came to meditation, was that I was instructed not to manipulate my breath. You’re observing your breath, and normally I observe it gradually growing deeper over the course of sitting down and meditating, but this idea of consciously manipulating breath and doing physical things... I’m sure there are different schools of thought. That’s what stuck out to me about these lessons immediately, and I’m wondering to what extent that idea of encouraging people, at least at some time, maybe not all of the time, to simply observe their breath, and not necessarily attempt to manipulate it. So that it has a chance to natural... I don’t want to say ‘naturalize,’ but, um, you become aware of what your everyday breath is like, that is something that I always kind of thought about, whether it’s relevant or not for you.

Now, we move to the performance side of things. Two related questions, and you can answer them one at a time: What do you like about performance and, conversely, what challenges do you find in performance?

A: I think the challenging thing is the pressure that’s on that moment: to perform, to make this thing perfect. It can be a real barrier, and so, when inevitably things go wrong, even in performance, even on a piece that is well-rehearsed, things happen in performance... Live performance is not perfect, and being ok with that im-perfection, and more than ok with it, but embracing (it and still making music)... That’s hard. I think it’s hard as someone who has some years of experience and maturity and all of that. I think it’s really hard for 18-year-olds. I taught high school for a long time, and I’m not sure if they’re as aware of it. I think undergraduates, because many of them, especially in Texas, have grown up in a really competitive music environment, whether it’s the All-State process, or UIL, or there’s these events we do...

Q: I think the comment you make that there’s a difference between someone who has experience as opposed to an 18-year-old undergraduate. I can speak as one of those who ... your identity is wrapped up in what you’re doing, and I think that that can help play a role in that pressure in performance.

A: So, getting a balance of striving for perfection, and that being always the goal, but being ok when things go wrong. That's hard.

Q: It still takes some conscious effort, maybe not effort in the 'I'm sprinting until my muscles burn' sense... but moment-to-moment aware to stay attentive to what you need to attend to and to keep your mind where you want it to be. It's tiring, and I can relate, for you, listening to an ensemble, and being aware of the lines and textures that are happening, for me, sitting there at a piano. My doctoral experience was solo recitals, where the score's all in your head. You're by yourself. It's nice to have all of the control, but that's a lot of stuff.

What do you like about performance?

A: I look at performance as communication, and so having that opportunity to communicate with an audience, to share this music that we've prepared, whether that's a small audience or a huge, packed house... The communication between the singers and myself, the singers and the instrumentalists ... just that whole thing that goes on onstage, between individuals, between sections. There's so many different levels of this, micro and macro levels of this... instrumentalists and myself, and then, ultimately, the audience, and then maybe even a step beyond that in more of a spiritual way. So, I'm looking at every performance as an opportunity to share, tell a story, say something that's beautiful, or, you know, even life changing, potentially life changing for someone in the audience.

Q: ... Now, if you either as a performer or as a conductor, if you experience performance anxiety, you know, either on the level of where you'd label it clinically, like "I have performance anxiety," or butterflies, nerves, however you want to characterize it: how do you deal with it?

A: Honestly, I don't get nervous. Yeah, it's a weird thing. It's not a bad thing. I mean, I think, I don't know, I mean this is probably going to answer the question, but I just tend to ... by the time I get to performance time, I just tend to have a "well... here it is... Can't change it now," or we're about to walk out on the stage. I know that there are things that are not quite right or could be better, like that transition could use 10 more minutes of rehearsal, that transition, this... whatever. We walk out on stage, it's just go time, right? And no amount of worrying of being nervous is going to change that.

Q: And... and I guess this is more of a curiosity question, so as an undergraduate or master's students, did you have to do any solo recitals?

A: Yes, I did a senior as an undergrad, a senior vocal recital.

Q: Would you say that, for you, there was any difference between that experience in being a solo performer and in being an ensemble director.

A: T could be a thing, because turning you back to the audience as a conductor... for someone who gets nervous about audiences, that could be a really substantial, being able to turn your back and not to have to look at all of the people out there.

Q: That's not to say that conducting is not performing, but it's a different kind of performing, a different kind of activity. I think some explanation of anxiety might have to do with that social isolation: I'm out here on my own. Whereas, I've noticed for me with groups, and as a conductor with a group that you've rehearsed, you might be nervous about how it will go, but it's a different experience. That was just more of a curiosity [question].

A: If I had to do it again, if I had to perform, I don't particularly enjoy singing solo, and that could be related to some anxiety. I'm not sure. If I had to do it now, I think it would be a kind of different anxiety producing thing, but that's hard to define now because I've worked on this particular craft for so long. I haven't worked on the solo singing skills as much. and so having to step into that role would be just a really different thing.

Q: Maybe, at this time, because of the time you've invested, it may not be the fairest comparison.

A: It's a good question, though.

Q: It's also possible that different soloists experience it differently, and I think that issue we brought up earlier, about a certain perspective that comes from, not necessarily age, but maturity... I mean, I want a performance to go well, and I get upset if I don't think that I've performed the way that I'm capable of, but I also know that I'm going to go home and eat dinner and not die: just life perspective. Similar to what you notice in practice, what kinds of things do you find that you think about or notice during performances?

A: I am aware of the audience. Even though I can't see them, I know they're back there. So, my attention is not just here, forward, or lateral across this stage, but also behind me. So, in that way, it's almost kind of like an out-of-body experience, because I'm just aware of this thing that's behind me, that I can't see with my eyes: not just the audience, but the room, the space, the acoustic. What's going on back there? I know it's there. I'm listening to it. I can feel its presence, and then encompassing the stage and all of the musicians on the stage as well. I think ... looking for things that I look for in rehearsal; engaged faces, the body is engaged, involved in the performance. I don't listen for errors as much, I either turn that off somehow or I'm just trying to be in the moment, and so I don't get stuck on the little things that come up along the way, and so there might be things that I don't hear in the performance.

Q: I think that's why, when people talk about recording that, you know, and I tell this to teachers I work with on a regular basis. "Well, you're teaching, so of course you don't notice that. Your attention is doing 99 things already, and... that's just the limits of

human attention. Also, for some people, there's the being in an elevated state that can change what you notice. I'll say that for myself for sure, because I have a huge rush of blood

A: I think performance is a normal everyday experience, but it's also an elevated, heightened [state]: all senses are at 110%.

Q: ... Which for some people is disabling, because it overwhelms them. But, for some people, it's just a fact.

A: So, I do think I try to pull back and try to see, hear and sense... the big picture of what's happening.

Q: And this may be a moot question, then, what criteria or how do you assess the quality of a performance?

A: Audience feedback, of course. In the moment, or afterwards, the comments about the performance. I really value those. I value that kind of feedback. There's just a sense that one gets when it's going well. You can see it on the performer's faces, you can sense it in their bodies: it's flowing. There's that flow thing happening. It's just something you can sense.

Q: I like that. For me, one of the things that happen is, I'm sitting there by myself, [and] I experience an uncertainty about how it's going. I like performance to be its own thing. I'm uncertain, but it's also kind of freeing, because I kind of go and go. I had that realization at one point, and I've had a lot of fun with it. When it works.

Similar to the questions with rehearsal, do you feel like there are things that you've encountered in the meditation course that again, might apply to performing situations (or if you've had the chance to perform while you've been in the class)?

A: I just think the mindfulness thing: being aware, being mindful of the people that I'm on the stage with. Not letting individuals get lost in the crowd, but honoring each individual that's there and what they're bringing to the performance. Being aware, being mindful of that essence, that sensation that things are going well. You might miss that if you're wrapped up in details or stressed about the audience is thinking or stressed about whatever... it's in the moment, because our art is bound by time. Being in the moment, which sounds kind of cliché.

Q: ... but it's hard.

A: It's very, very hard. So, in that way, if mindfulness, if that is a part of mindfulness, being in the moment, I think musicians have a lot to offer the world because we get that. We do that.

Q: I think that music alters your perception of time. I think of even playing a 3-minute solo piece: your perception of time is altered because everything is so thick. For me, that was one of the obvious connections about putting a class together like this is that... they're both ephemeral activities. One has different emotive qualities, and one has different cognitive qualities, but [both are] bound by time, for sure. I think that recognition behooves us, whether it's simple awareness, or whatever, to realize that you can't change that.

PARTICIPANT 4 TRANSCRIPT

This interview has been lightly edited for clarity.

Q: First question, what are your normal stress relievers?

A: Eating. It's weird to think about, but that's probably not good for me. Sometimes, I'll go the gym. I'll go for a run or take a walk. Those are always really good for me, or I'll just play some games. I feel like I haven't had a lot of time, but, sometimes, I'll pull out Grand Theft Auto, and that usually does the trick.

Q: How does meditation compare to your normal stress relievers, or your normal ways of relieving stress?

A: I feel like it's a lot more effective. It's a lot quicker. I feel the result pretty instantly.

Q: I feel like it's a de-compression. What changes do you notice in your day-to-day life, if any, since being in the class?

A: Something that I use every single day, pretty frequently now, is the tension release breath. Any sort of tension in my body, I'm aware of it at that point. So that helps, and I use it a lot when I'm practicing, too, when I'm just in band, or anything.

Q: Especially with an embouchure, everything has to be working just right.

A: Yeah, there's [sic] so many different things that can surprisingly get in the way of practice.

Q: If you're using your breath, especially. If you can remember, what were your impressions about meditation before you took the course?

A: I didn't really know what it was for. I guess I didn't have a full picture of why people did it or what it could be good for.

Q: Ok, did you have an image of it at all?

A: Sitting cross-legged.

Q: What's changed about that?

A: I realized that it was for being aware. It was about awareness, that was the main thing, and it's something that I wasn't aware of: just the idea of being aware.

Q: ... During the meditation session themselves, what did you find that you thought about: what did you notice or think about? Or practicing at home...

A: Something a little obvious, I don't know if this is what you're getting at... but that I have a lot of tension in my spine, and just the different places where it's especially painful... I guess...

Q: Just noticing physical tension...

A: ... and that my mind really wanders a lot. I still deal with pretty severe ADHD, so my mind is everywhere, and it's really hard for me to focus or read, or anything like that.

Q: Does being aware of it help?

A: I think it helped a lot. I wish that I could remember more day to day, like when I'm in class. I wish I could remember to be aware.

Q: That's the trick. It's all well and good when it happens, but we just get caught up (in what we're doing...) I'll be the first to admit that. Do you feel like meditation has affected the way you listen at all... or what effects has it had?

A: It may have affected that. When we had the music meditation class, it sort of made me think. So now, when I'll be listening to a piece or something, listening to my peers especially, I don't know if this is related to meditation, maybe this is just my development in general, but I'll be really picky, and I'll be critical of everything that's happening.

Q: Do you feel like you notice more?

A: I think so. I feel like... music sort of focuses me a little bit more now. Like I was saying, I'm really unfocused in general, but I guess nowadays when I'm listening to music, I'm really listening. I'm not just sort of letting it happen.

Q: Cool. Going into a session of practice questions. Maybe not in rehearsal, but in solo practice: When you sit down to practice, how do you usually begin?

A: Usually I'll play a few notes just to make sure that my reed's working. I'll put the metronome on like 60 or 70, do long tones all the way up the full range of my instrument, and do some scales, and then I'll just get right into it.

Q: You're just checking to make sure everything's working. (Yeah.) Yeah. So what challenges do you face when you practice?

A: I'm just thinking about it now... It's kind of interesting, the idea of being aware that we explore through meditation. Just practicing being aware can be really helpful when I'm practicing on my instrument because, as I'm learning, there are so many different things that I have to be aware of just from playing a single note. There are so many elements with my embouchure, just tiny little aspects, like thinking of the distance

between the reed and the back of my throat. It helps being able to be more aware, because then I try to focus on all of those aspects at once.

Q: You're managing your awareness of a lot of small things...

A: ... and there's so many things I'm realizing I have to be aware of, whereas, two years ago, I may have been like, "I'm just going to sit down and play... that's my practice..."

Q: "I'm going to go through it, and then I'm done practicing..." What do you like about practicing?

A: Whenever I really see the progress, you know, whenever I feel the progress. It was kind of interesting. I don't think I took a single day's break from practicing from the first day of last semester all the way up until maybe just before spring break. I think I took like one day off... and then I didn't practice at all over Spring Break. There was a whole week when I just didn't touch my instrument, and then when I came back to it everything I had practiced was like perfect. It was like everything had settled, and it's times like that that I really feel good because I feel like everything I've been working on I could finally feel and see it, and I just took a break. (inaudible)... because it kind of gets to the point where you're driving yourself crazy.

Q: Well, then that's a long-term assessment, but when you're finished for that session when you sit down to practice or for that day, how do you assess the quality of it?

A: I guess, just, by how prepared I feel with whatever I'm practicing.

Q: So, 'do I feel nervous?' or 'do I feel good?'

A: Yeah, 'was that terrible? Do I need to do that again, or did that feel pretty good?'

Q: So, just kind of an intuitive, 'does that feel good? Do I feel ready?'

A: ...and sometimes I'll walk away just completely frustrated, and I think that's another thing I've kind of gotten out of meditation: trying to take a step back and just let it go ... in a way, [that's what I] took that away from meditation. ... the ability to not think about it.

Q: [in other words] ... you can't practice while you're not practicing

A: That'll even happen when I can't find a good reed. There are so many things that just... aggravate the hell out of me ... in practicing...

Q: You kind of already led into the next question, but, what other effects do you feel like the meditation classes and practice have had on musical practice?

A: Right, and that's just the awareness... the ability to be more aware, and to focus... and then the ability to just... relax. When you get frustrated when you practice, when I get frustrated when I'm practicing, everything sort of gets tense and my mind sort of stops working a little bit. So in a way, meditation has really helped with that, too.

Q: In some way, [you] steady the ship so you can keep being effective. (Exactly). When you get worked up, it's hard to feel if you're effective. Ok, so when you're practicing, what do you find that you notice or think about while you practice?

A: ... when it's a good day and I'm actually able to stay focused, I just think about keeping my lungs really open and just all of things that I need to [do] just to make sure that everything is flowing really organically through my instrument, both with the air, the embouchure, the tension-less aspect of everything. When I'm really focused, that's exactly what I'm focusing on, everything that needs to be right to make it sound the best.

Q: Do you mind if ask ... on a not so good day... is it just a negative loop?

A: Yeah, ... it is. I'll just be playing scales or long tones, and completely not thinking about what I'm doing. And that's sort of reinforcing bad habits.

Q: ...I find that it's easiest for me for a negative day become more negative... everything's great when it's going well, but it takes a lot to settle yourself down when you're having a crappy day, trying to figure out why it's happening. Or, when I moved here, I had a difficult sort of sleeping transition, one night a week I would hardly sleep, and I just had to realize that it was fine, I just had to not practice that day. To realize when you're just so out of it, that it's probably better not to, not to reinforce the bad habits.

A: Sometimes I just walk away from it; I just can't practice.

Q: With performance, [I have] all the same questions as practice just with performance aspects. I'll actually just start with these two: what do you like and what challenges... do you face in performing?

A: Umm... I guess I don't usually think of myself as being a nervous person, I don't feel like I deal with nerves, but ... my performance says otherwise, because sometimes I'll get up on stage and be like, alright, "I'm just going to go out there and do it." ... you know, it'll just happen. And then I find that, lately in my performances, there's a lot of tension within the performance, and the whole time it's like, now, I go into survival mode because I'm like, "ok, this isn't going how I wanted it to go. I'm getting really tense in my chest." Having trouble breathing ... like sometimes when I'm playing I get too much air and I have to release that air in order to feel normal." But it feels like I don't have any air, even though I have too much...

Q: Well, it's a pretty wacked up state to be in, because you're full of chemicals (yeah...) I always liken it to the force, it's like there's a light side and a dark side to the force, and I've had many encounters with the dark side of the force.

A: Yeah, so that's one thing that sort of bothers me about performance now is that I feel like I get unnecessarily tense and I just end up thinking like "(well) why didn't that happen when I was practicing then?" Then, on the flipside, sometimes I'll go into a performance... and I'll tell my friends this, I'll advise my friends like "just have fun with it... you'd done all of the work, you know, just enjoy the music... if you really love music, then that should just be easy for you..." and sometimes it's easy for me, too, and, I remember a few performances where I had a blast, and the whole thing was just like really fun to play, and it could be hard music, it could be ensemble music, it could be whatever. I think part of it's mindset, for sure, just being in the right mindset, it helps a lot.

Q: Well... what do you like about performing?

A: I like when nothing goes wrong... I just like sharing the product with my peers or teachers or anybody... it's just usually I try performing things that I want to perform. I've never had my professor just wait to give me work. I always have stuff that I want to play. I'll bring more things to my lessons than I'll have *time* to play, and I think it really works. Too often I see my peers just being assigned things, and it doesn't seem like they enjoy it.

Q: Well, they're saddled with it; they're just like, "it's something I have to do" (exactly).

A: Exactly, it seems like a chore at that point. So, that's another thing that I like to be to do, just to share that aspect. I am performing this because I want to perform it, and because I genuinely enjoy the music, and that's the best part. I just performed a movement of a concerto that is very seldom performed anywhere, and I think it's only been performed here maybe once, and I enjoyed playing that because the music was great but also because ... I got to [introduce it...]

Q: ... So, and you kind of said you don't really see yourself as a nervous person, but, if you ever [have] nerves, or if you feel like you have performance anxiety or whatever you might label that, how do you normally deal with it?

A: Sure, I guess that's kind of a hard question... I don't really know. Sometimes I just try to be aware of it, and I maybe try to take some deep breaths... and that's how I deal with it, sometimes you just can't...

Q: I mean you mentioned the tension release breaths, do you think there's anything you could apply from the meditation classes to those types of situations, if you have them?

A: Umm, outside of the tension release breaths, which I do find help ... I'm trying to think... I guess just being able to be aware of where you are, what you're doing, and not

thinking about extraneous things that don't really matter, even like the opinions of the people you're performing for... of your audience. Sometimes, that can be a bit overbearing, or you're thinking about some sort of rivalry or competition, like "If I don't play better than this person, then no one's going to respect me."

Q: Like, "I think I deserve top chair..."

A: Exactly, I guess part of what I got out of meditation in that case is just being able to ... to not worry about things that don't matter, being aware of why I'm tense,

Q: Putting your focus on it... the mind gets distracted; we're human. You already hinted it, what do you think about or notice when you perform? What kinds of thing cross your awareness?

A: Umm... sometimes, when I'm like in a performance in front of an audience I catch myself not... focusing on what I'm doing: not focusing on my sound, or any of my technique... or, the music itself. Sometimes, I find myself not focused on staying a few notes ahead of where I am, because that's a game changer. If I'm just... playing, then I'm going to start slipping up and things are sort of going to go badly. So, sometimes during a performance I'll catch myself not focusing, and then... I'll zoom back in and then it'll be better.

Q: How do you ... assess your performance?

A: Lately, I've been assessing my performances on... if I feel like I got across what I wanted to get across musically. Again, on that concerto, I think I squeaked like 3 or 4 times, and, initially, it really bothered me, and I was like "uhh... that sounds terrible." But, when I went back and listened to it, and the more I thought about it, I realized that a lot of things I did were really good, and I was able to deliver some of the characters in the music. I would say that that was a successful performance.

Q; well, it's interesting that you say that, because I accompany a lot, and I've had experiences where, another person I interviewed and I were joking that they had almost like a tick where they had a counter in their head and it's like "that note, that measure, that measure, that note..." (laughs) and they could almost tell you the exact number of notes that were out of place in a performance, which for a pianist would be brutal. Yet, at the same time, I remember, after that performance, people coming up and complimenting aspects that I hadn't thought about during the performance and realizing that I was the only person, hopefully, counting those notes. And, the metaphor I always use is that, you look at yourself in the mirror every single day, and so you get used to the generic features of your face, so you notice if, you know, you look tired that day, you notice if your skin's more red today. When someone meeting you has no freaking clue, they just have the whole picture. It's a great metaphor, if only I remembered that when I screwed up and got angry at myself.

So, are there any ideas or tools that you think you could take from the meditation class and put them in place in a performance, either before, or during, or after?

A: I feel like I'm only touching on the awareness, but really I feel like that was the silver lining, that was the main thing I did get out of thus was just being able to be aware... So, I guess, that would be it, to just dial myself in and focus on what's really important, why I'm here. And then, just being [able to] stay aware and be focused during the performance. If I find my mind wandering, being aware of the mind is in [some] ways more important than being aware of my embouchure or my sound, because, if I'm aware of my mind, then... that'll just fall into place

Q: and some of the stuff that I'm citing in my literature review: there are people who research attention, and there are people who research willpower, and they use the metaphor that, on some level, your willpower and your attention can be strengthened. if [you] think about it; if you run, after a break and you realize that you've lost some of your fitness, you have to get some of your cardiovascular fitness (back), your legs just feel heavy... umm, and for people [who] have a lot of practice in meditation, one of the things they report experiencing is that... attention doesn't feel as effortful... it feels natural just to move your attention around and bring your awareness back... one of the reasons I sort of put all of this together was that... so many teachers just sent their students off to the practice room for hours at a time, with no idea that... people have short attention spans. Of this can give somebody a tool to work with, then that's definitely a positive thing to take away from it.

A: yeah, I think that's a good point.

Q What questions or comments do you have?

A: I really enjoyed the classes, and I wish they were still going, because I really thought they brought us back to what we were supposed to be focusing on ... I don't want to make it sound like a chore, because it wasn't. It was very helpful, and it was a great tool.

Q: Depending on what you want, it's a starting point.

A: I feel like I have one more thing... something that I guess is not necessarily unique to me. I'm sure other people in the study struggled with this, [but] something that I had difficulty with... I didn't have a consistent time to meditate. Like you probably noticed, my times were really all over the board. If I had 15 minutes, I would utilize it. Like I couldn't get up in the morning, I already have class at 8 am every single day, and I go crazy hours, like I'm sure you do. I'm taking more hours, and classes, and rehearsals, and ensemble than ever. So it was just like my timing could be a little bit erratic. So, I wonder how that would effect me if I *had* a set time to meditate every day.

Q: Well, I ... that's a good question. I think people say similar things about sleep, your body gets used to those signals and those times, and so, for some people... having a spot,

and even having a meditation cushion, for some people, having a setting, and this is where I sit, this is the time, and it ... at least for me I find, that the same time, the same space, that becomes sort of safe space, or that ritual of it, not even the meditation, just the sitting down does something for me.

That would be my initial answer... at the same time, as graduate students, I think one of the things I'm surprised by in looking at undergraduates is how overscheduled y'all are. You have so many tiny classes that fill up your day: ensembles, and then you're supposed to be individually productive while addressing all of your ensemble stuff. Depending on how many ensembles or extra things graduate students do, graduate students can have a lot of freedom. They have expectations to deliver their recitals and the expectation to deliver... larger assignments in their coursework, but... how many hours do you sit in rehearsal every day, like 2 or 3?

A: Thursday... just this last Thursday, I was in rehearsal without my individual practice for slightly over 7 hours. It was terrible.

Q: Were you in opera rehearsal?

A: No, I wasn't. it was 3 of my regular ensembles, 2 of which are full bands, and then one of them was for Dr. Smith's *Nosferatu*, and we went through a whole run of that, which takes a long time...

Q: And how do you have the chops to practice after that?

A: Which I did, I had to, because I was performing in clarinet studio performance class just the next day, so I knew that I had to go practice, because I'd only had the piece for maybe a little over a week.

Q: All of that's to say that I can sympathize.

PARTICIPANT 5 TRANSCRIPT

This interview has been lightly edited for clarity.

Q: What do you normally do for stress relief?

A: Normally, I eat ice cream. For some reason, that helps me, but it also doesn't, because I'm lactose-intolerant, so it's not (really) a good idea. I'm trying to find different ways, and I think that meditation has really helped with that, because it helps me take a step back and recover all of my ideas...

Q: And, as someone who's lactose-intolerant, you probably get fewer stomach cramps...

A: Yeah

Q: So you kind of went into the second [question]: how does meditation compare to how you usually relieve stress, be it ice cream or otherwise?

A: It's easier for me to actually recover from the stress than by eating ice cream. With ice cream, I think of my feelings, and I just keep eating. After a while, it does make me feel better, and that's what I've usually done. With meditation, I don't think of my feelings or everything that's going on in my life. I just kind of stop, step out, take a breath, and then come back. So...

Q: ON some level, it sounds like taking a break. (Mmm hmm...) So what changes have you noticed in your every day life as a result of the classes and all of the practice?

A: I'm definitely more calm, less wild and all over the place, because usually whenever I'm having a really bad day, I take some time to do some meditation and breathe, and relax, and then I come back to it...

Q: Good. What were your thoughts about meditation before you took the class?

A: I actually thought about doing it before I took your class. I thought about taking some kind of yoga class or something similar ... because of how busy I am with everything in school, it just didn't seem like it would actually fit in my schedule. Then I heard about your study, and I said, 'you know, I should actually really make time of this, because I need some kind of de-stressor.' Because, for me, it'd be a constant thing, every day I was stressed about something. And it was...

Q: You know, and I told another participant this. As graduate students, we look at undergrads and, on some level, realize y'all are a little overscheduled: multiple ensembles, aural skills classes, written theory classes, everything. So your day-to-day schedule is piled up, and so there is always something to be stressed about. So... how did being in the course, did it change your thoughts about meditation at all?

A: I wouldn't say it changed my thoughts, it just kind of helped with what I thought it was. When she explained all of the stuff, and we did the exercises, and then it helped me understand better what it was...

Q: Well, I mean... some people have said "Oh I thought meditation was just about stopping your thoughts or clearing your head..." Whereas, after they'd be like, "well, I realize that maybe it's not necessarily about stopping everything as much as it is like it's all *there*, process it" So, I didn't know if you had a similar experience.

A: Yeah, I guess, but I didn't necessarily think that meditation was like "STOP." I did think that meditation was going to help me release all of the stress that I had, and, I mean, it did help me release a lot of it. But, before I got into it, I wasn't 100% sure what it actually was. I had this idea of a stress-reliever. Meditation could help... but then when she explains the stuff, I'm like "I'm getting a deeper understanding of what it actually is..." Does that make sense?

Q: Yes, umm... What did you think about or notice during the meditation classes, if you can remember?

A: What do you mean?

Q: Either during the classes or during the meditation, what kinds of things did you notice or think about?

A: During the meditation, when we were all in silence? (Yeah.) I thought a lot about all of the things I had... I mean, I tried not to think about those things because I was trying to do all of the meditations. At the beginning, it didn't really work, because I was really, really overwhelmed, but, then, little by little, it started getting a lot better, and I started thinking less. By the end, I didn't even know when the last day was... The teacher was like, "Today's the last day," and I was like, "What? That's horrible! I don't want it to end..." That was what I looked forward to in the end, because it helped me relax a lot.

Q: To be honest, the first day we had class, I had kind of a weird situation at work, and my head was spinning the entire time, I could feel a huge headache. But yeah, I can relate, for me it feels like I'm decompressing. There's all of this junk going on in my head, thinking about the day. You just sort of stop, and you can feel the pressure release.

Now, we're going to move into a series of questions about... you can think of it like rehearsal or individual practice, especially. How do you start a practice session, for you?

A: Well, I put my instrument together. I just start playing, but I do a series of warm-ups. I do long-tones, and then I move into scales, triads. And then after I've warmed up well, then I move into pieces and repertoire that I'm working on ...

Q: Does having that routine, where you sit down, is that relaxing? Like, being able to sort of do the same thing?

A: For me, sometimes it's stressful, but there are times when I need to have certain things prepared. If I have too much with certain rehearsals, because I have to rehearse with different people during the day, [then] I don't get to practice the stuff I'm supposed to do for studio... that kind of stresses me out, because I don't want to be unprepared.

Q: That's a lot of time on your chops, and having to sit down and work your own stuff. I work a lot with singers as a pianist accompanying, and they're very, very... in a good way... careful about how much they use their voice. They'll be in choir [so much]... and it's the same thing... (Yeah.)

A: The routine... I don't know if it relaxes me or not, but I feel really good about my practice if I make sure I get a good warm-up, and the warm-up is the steps that I usually like taking. I usually have certain steps. If I have a day where I don't do the right warm up, it doesn't feel right... do you know what I mean? It's a feeling...

Q: Well, you want to know that everything's working, when you get into what you want to get finished... What's challenging about practicing? And then, what do you like about it?

A: I think, for me, is making sure I have a productive practice. I mean, most days I have a productive practice, but there's just some days where I feel like I've wasted time, I don't know what I'm doing. That's only because there are certain things that I want to make sure I try to play right, and I've just been kind of bad about setting goals... and what I want each practice to be like, and that's something that I honestly want to improve and make better. What I'm doing now is effective, but I don't think it's effective enough, so I think I need to improve that.

Q: Do you feel like that's something your teacher can help you with?

A: No, honest I think that's just something I need to figure out on my own. My teacher can only do so much, and they do give me the tools that I need to be successful. He does help me out a lot, and he gives me a lot of help. But, when it comes to individual things, I think I have to figure it out on my own. Something like that, I'd have to figure it out and be more disciplined with myself to see what I really want to get out of practice...

Q: Well, what do you like about practicing?

A: I just really like to practice my clarinet. I don't know. A lot of people hate practice, but I just don't understand why... because you practice, then you get better at your instrument, and that's why I think I like it. I get a good solid warm-up, and then I feel really good about myself and my playing ability. Then, if I can get like really good, solid

runs on my pieces and my repertoire, keep working towards getting everything a lot better than it was before, and then it honestly makes me feel really good.

Q: So on some level, there's a sense of accomplishment that you have, even on that day, having addressed all of the stuff that you had planned to...

A: I mean, sometimes. It's not always like that, but whenever I do have practices that are like that, it's like, "yes." (It reinforces). It really does.

Q: Umm... and you can kind of answered another question. How do you assess the quality of a practice session?

A: Like if it's good or bad? (yeah). If it's good practice, for me, I get through everything that I need to get through ... I look at it and I have good, solid runs. I don't know how to say it. Whenever I practice a passage, I want to make sure that it's solid and it comes out well, and everything's well: my intonation, my fingers, all of my technique is working well. For me, that's good practice, because it like helps me move forward. But, if I have practices where I feel like I can't get something and I sound bad... then I feel like I just took a giant leap back, so I have to like work again to get to where I was the day before... but it's really strange, because it's kind of contradicting...

Q: I mean, there are such things as bad days; we just try to minimize them. I like to hear about that, because, a couple of the other questions have to with what you think about or what you notice during practice. It sounds like a lot of your attention is geared towards intonation, how your technique feels, how your sound is coming out... are those the kinds of things you think about? (Yes.) Well, what else?

A: When I practice, I make sure that everything sounds even; everything sounds the way I want it to sound. Because sometimes I do a different thing with my embouchure, so, some notes when I play, are different than other notes in order to get the sound that I'm looking for on the clarinet (even up and down?). Yeah, so I pay like a lot of attention to it, so that every note sounds and is consistent throughout all of the passages that I play. I pay attention to that a lot, and that helps my tone a lot. I do that a lot whenever I play long tones, too, so it can help me.

Q: IN singing they call it registration, do they call it that in clarinet playing, too? In the voice, both for men and for women, there are real breaks in the voice. So, the ideal is that you shape each register so you do have that smooth sound up and down the scale.

A: Honestly, there could be. With the clarinet, whenever you play c at the break and b, those notes are really hard to get when you've gone from an open position to all fingers down; you'd have to use your air really well.

Q: I definitely don't play a wind instrument. I was only able to make a sound on the trombone, and it was a bad sound. That's why I play percussion, and then I played piano.

A: I feel like people really underestimate clarinet, because it takes a lot to play clarinet. There's a lot of things to it, to every instrument. Everyone has their own little things to work on.

Q: I don't imagine that I could make a sound on the clarinet, I mean, I could learn. So, are there tools ... have meditation classes had any effect on practicing so far?

A: I don't think... directly, but I guess they have indirectly.

Q: In the sense that if you're less stressed, you're able to be more productive?

A: Yes, that's given, because every time I'm stressed, I close up, I lock up, I start playing wrong notes (and your air's not moving properly...) yeah. And it's just really frustrating when I try to play stressed. There's been a lot of instances when I put my clarinet down, I get a drink of water, I walk around for a little bit, I regroup and then I go back to practicing and it's a lot better. I mean, the meditation classes did help a lot, too, with that.

Q: Giving you a fresh mind... (yeah, that did help a lot). Now, are there any tools or strategies or exercises from the class that you think you could apply to your practicing?

A: I'm not really sure, but what comes to my mind is definitely focusing. During the meditation, how we're like focused on one point and then we just kind of left everything else out. I think that I could apply that to my playing, because I get really distracted sometimes, because I'm trying to play and start to think about other things that I need to do and ... so it's like, that would actually be something like good to apply, so I could actually have more focus when I play.

Q: Well, that's interesting because, some people have actually done research on it. They had pianists focus on either the hand movements, how the keys felt, everything but the sound, and then, the last one was to try to make your point of focus the sound coming out of the instrument. They get some pretty interesting results experimenting with different points of focus. Because, you can focus on "I need my hand to this" or you can focus on the sound that comes out, or the musical line that's supposed to be there. That's interesting for me to experiment with at least.

So, do you feel like in practice or performance, do you feel like the meditation courses have had an impact on how you listen?

A: I'm not really sure. Well, I don't really know.

Q: I remember you had a really positive reaction to the last class, with the music, so what was that experience like?

A: It really just made me forget about everything, and I just sunk my mind into the world

of the music and it was just this image and I literally didn't think of anything else but the music. It was really... it was really good.

Q: And did it help not to know what it was?

A: Yeah. It really did. I guess it did help with listening, because now that I'm actually thinking about it, I listen to what we play a lot better.

Q: I like the last class too a lot for that reason, and I hadn't even listened to the whole thing myself. I just knew the genre. Now, the last set of questions is basically the same one as the practice ones, just with performance. So, I'll start with these two: What challenges do you face when you perform, and what do you like about it?

A: I used to suffer a lot from nervousness when I performed, but I think that the nervousness has definitely turned into more fear of messing up and not doing well when I perform.

Q: Ok, so say you're backstage and you experience this kind of worry, how do you deal with it?

A: I drink water, and I just kind of sit and not listen to anything or anyone. I can't listen to somebody else practice while I'm nervous.

Q: So, if someone tried to talk to you before a performance, you'd be just like... "I need a moment..."

A: Yeah, because I just feel like it's going to distract me. I just have this fear of messing up. I feel like I have to be super focused, but it's been getting a lot better. I've been getting a lot of opportunities to perform, so I've been doing a lot better with that. Before I perform, I just need to make sure that I'm focused and that I feel good about it.

Q: What do you like about performing?

A: Performing is just something that makes me feel complete. It makes me feel like I'm doing something with my life. Especially when you come off from a really good performance and feel really good about it. (So, you feel whole?) Yeah.

Q: So, is that how you sort of assess whether a performance was good or not, that feeling you have?

A: Yes, I mean, because I go through the piece. I try not to stick with mistakes if I make any, and then I'm not [looking] forward and I make mistakes in the rest of the piece. People are always like "you didn't do as bad as you think you did," but I'm also a really hard critic on myself, because my standards for my performance and playing are, for me, they're really high. I don't really accept anything that's below that. It's kind of hard,

because I'm really hard on myself, and people tell me all of the time "you need to calm down and not be so hard on yourself..." and I say, "No, I need to do better."

Q: I can relate. I have to sort of check my emotions when I get off stage, because I get riled up just from playing, but also if I get riled because I feel it didn't go well and I'm frustrated. What's difficult is that when you're all worked up, that changes what you think about.

Hopefully, with the meditation classes you may have noticed that you thought differently if you were, you know, in a calmer state of mind, than if you were all worked up. Your mind is spitting thoughts much more quickly. You kind of answered it, I mean you did: how do you assess the quality of a performance? Do you feel that it is both that feeling you have and whether or not you met your standards?

A: I know that there's a lot of instances where I don't meet the standards that I want to, but, at the same time, if everything goes right, with my technique and my tone, and everything else feels right, I know that it wasn't garbage. I can still make it better and improve it... but then there's those performances where you mess up all over the place, and your mind shuts down, and you just kind of have a panic attack in the middle of playing because you're like "I just messed everything up..."

Q: Because it's not going well, and you're telling yourself that it's not going well...

A: ...and you just lose focus. I lose complete focus if I start falling apart like that. There was performance when I got off the stage and almost started crying, I was like, "that was so bad and I don't know how people listened to me..." There's a piece I'm playing for a concerto competition this summer, and I've been trying to play it for people a lot, for my teacher, and, every time I play it, it gets better, better, and better. So, I mean that actually encourages me as well because I now that I can get to the standards that I want it to be at.

Q: It can improve, so it can get even better... (mmm hmm...) Ok. You're kind of answering some of the other questions. So, when you're performing, what are you thinking about normally? What are you noticing?

A: I don't think I think about much when I'm performing. I try not to, because if I think and get distracted, then I miss the next thing. But, people can do it all the time, but I can't. I can't think of something and perform at the same time. I just I guess I just can't do that.

Q: It sort of requires that focus for you, so you're just focused on whatever's happening right then (Yeah.)

A: But, I mean, I'm not like "what's the next note? What's the next note?" I don't know how to explain it... It's kind of like... going.

Q: Have you ever... I've used this metaphor a few times, so I'll try it. Have you ever seen Indiana Jones movies? So there's one where they have to, they're at this big cliff, and he has to walk across, and he sprinkles sand, and there's an invisible bridge floating, and so he sort of takes it one step, one step, one step... and he knows it's there, but he can't think ahead, and if he looks down, he's going to freak out.

But it's a metaphor that people respond to, I mean, I don't know if I'm saying 'what's the next note,' but I just put my foot and I step, and that's the next step. I just keep going.

Similar to, if meditation has had any impact on practicing, what impact has the class and meditation had on performing?

A: When I perform, sometimes I'm really tense. But, doing meditation, little by little, I've gotten a lot better about being more relaxed when I play. And Dr. (XXXX) has been helping me a lot with it, too. So, honestly, it's been helping me relax and actually play out more, because I'm not as "oh my god, I'm going to mess up."

Q: What tools from the meditation course to you think you could experiment with in performance?

A: Definitely the focus. That one's super important for me, and it's definitely something that I have to do before I perform or else I'm just going to butcher everything.

Q: So you just have to get your focus in place. Have the meditation classes had any effect on either having performance anxiety or how you respond to it?

A: Definitely how I've responded to it, because, like I've said, it's helped me a little. It hasn't like completely gone away, but it has helped me relax more as I go. The more I perform, the better I feel about it. The more relaxed, and the more, better thoughts come to my mind.

Q: You're in a better state of mind; you're not beating yourself up.

A: I just wish the class were longer. I really do.

PARTICIPANT 6 TRANSCRIPT

This interview has been lightly edited for clarity.

Q: So, first question: What do you normally do to relieve stress?

A: Take deep breaths. Walks. Of course, you can't do that before a performance, you can't just leave. "Yeah, I'm gonna take a sunset stroll before I play." I go outside. Nature seems to be relaxing.

Q: I've always wanted to compare walking outside as a condition compared to people meditating.

A: So, you're speaking about practice and performance. I tend to be quiet backstage, and, kind of, find a little place to myself, maybe look over my music.

Q: Looking over it is really good anxiety management, I find. Hopefully it's more than that. After being in a meditation class for 8 weeks, how does that compare to how you normally relieve stress?

A: I'm going to make much more use of it in the future, definitely, because I find it to be very effective, and not just around practice and performance, but for just everything, for everyday life.

Q: For sure. Would you care to elaborate at all, just as to its usefulness everyday life-wise?

A: Everyday life-wise? Yes. I have ADHD, but I did not know it for sure until last semester, and, so, I've had life experiences that kind of blew up in my face. I didn't know why I was having the problems I was having. So, I've been on medication for a while; I've had antidepressants for the last 5 years because of just the stress and anxiety of not knowing why I was different.

Q: You're just trying to cope. (Yeah).

A: So, I got off the antidepressants, and I got on medication for ADHD. I've been wondering whether or not I should start the antidepressant again, but the meditation seems to help with that tremendously.

Q: I find that, a big lesson for me, is that moods, be they high or low, would eventually pass. It's not to say that you tolerate an all-encompassing low mood at all times, but just recognizing that you have at least that tool to stop and notice, for sure.

A: Well, it is going to be helpful because it allows me to feel my feelings, and that way I can work through them in therapy and in life instead of just being doped up, [or] shoving it under the rug.

Q: It's not to say that it's comfortable (it's manageable). Meditation is not always a comfortable thing, but I always think of it as sort of like exposure therapy. (What is that?) If you're terrified of [a snake], you get in the same room as a snake in a cage, you get really close to the cage, you tickle it, and, at some point, you pick up the snake. But I don't actually want to do that (I don't want to either). It's good in theory, and it allows [us] to have exposure what's going on, for sure. If you feel like it's useful, what changes have you noticed?

A: Just the ability to function without antidepressants is huge. The fact that you can just meditate for brief moment and feel refreshed afterwards is very helpful. You can just literally check out, or check in with yourself rather is a more accurate way to say it. I like what xxxxxxx said, it allows you to get out of the fight or flight side of your brain and get into the other side.

Q: Well, who was it, I don't know if you know (xxxxxxx), she's a professor and she teaches yoga. She would always joke that if you notice a lot of saliva pooling in your mouth, that's your parasympathetic nervous system coming back, because that's your digestion and you're producing saliva and you're relaxed. (How interesting) And she would go like, "just notice it." It's kind of gross, but...

A: Well, along those same lines, whenever I go for a full body massage, and they have you lay down with that circle, I worry that I'm going to drool. I get pretty relaxed.

Q: So, it sounds like it's a reliable source of even a small amount of refreshment. And accessible. That's one of the arguments I attempt to make: it's non-invasive, it's low-cost, [and] it's accessible.

A: Healthier, because, you know, away from (this gets into everyday life) performance or practice, I would drink a lot. I hardly do that anymore.

Q: Again, it's [about] what tools do you have to feel your feelings or distract yourself from them. Ok, I'm curious, what did you think during the classes or session themselves? What kind of thoughts do you remember having?

A: Just that xxxxxxxxxx was such a bright light (yeah), and she could walk in the room and you'd feel better because she just kind of brings that bright presence with her, and it's contagious. (Yes, for sure). I remember being curious, "How is this going to work?" Another thought is, "Is that all there is to it?" ... "Why didn't I start this years ago?"

Q: I always think of the differentiation easy versus simple: it's simple to meditate, but it's not necessarily easy. I could understand the reaction, like, "That's it?!" (Uh huh). When you sit down to experience it...

A: How does something that simple have that much of an effect? It's amazing...

Q: Well, I appreciate that. Actually, I think that leads better into the 6th question. You had questions about “how is this going to work?” What thoughts or opinions did you have going into the program ... about meditation, before you started the class?

A: Well, I had the preconception that it was sort of in the non-Christian arena, and I told my Christian therapist. I told him that I had been taking this meditation course, and he went, “Yes...!” He was doing handstands, “I wish everybody meditated,” he said. It’s, and he pretty much repeated what xxxxxxxx said about it; it gives your brain a break from the fight or flight.

Q: I think and this goes a little more into the theory. What you’re hearing when you first sit down is just your ego chitchat, all of the stuff that’s localized and happening today that you’re still freaked out about. So, I think that from a religious perspective, there’s that idea of, if we really want to hear what else is there, that’s the first step, is to let all of that chitchat dissipate. There are other things to think about. I appreciate the honesty, and, given the cultural background, I wondered how people respond to that. I think that xxxxxxxx did a great job of inviting that, not just with her presence, but also in how she presented material. So, I couldn’t have been happier with the person I had to lead the course.

This is kind of a fun question, and it can be about music or not: how do you think has affected the quality of your listening?

A: (pauses). I hadn’t really noticed it in regard to music, but I’ve noticed it with regard to nature sounds because I very frequently sit in the back yard to meditate. The music meditation that we did the last class was so powerful. I had emotions well up for seemingly no reason, but I suppose it’s because my mind was still enough to hear that. It was regret, and pain, and loss over lost relationships, and I didn’t realize until then how strongly I felt about it, because it’s been awhile.

Q: For me, I always had conception that in doing something like meditation, I was trying to calm everything, [and] somehow that was antithetical to having those kinds of emotions. When, really, sometimes for me performing or just listening, I find that if I’m able to ... I don’t want to say relax, just allow myself to respond, I find that... (It’s there, and you didn’t really realize it). That’s the beautiful thing: hopefully that’s one of the things that people love about music is that we have to be vulnerable to it.

A: And that happens in church, sometimes. That happens in the practice session, sometimes. That happens during the performance, sometimes. It’s not all the time, but sometimes it kind of sneaks up on you and you go, “Oh, my god...” You know?

Q: I think that having that focus, having that point of attention, having your mind geared towards something. I don’t think that how we listened to music last Tuesday is how I normally listen to music. Though, I might try it more often. I’ve had things surprise [me], but I get used to them. I know how they sound, so it becomes more predictable.

A: I was so pleased with the piece that you picked out, because when said we were going to listen to music I was like, “Oh no! I’m going to sit here and analyze!” But, after a while, there’s nothing really to grasp.

Q: You just had sound. My intention paid off, so I’m happy to hear that. Now, to a series of questions about practicing. So, when do sit down to do individual practice, or maybe even in the context of a rehearsal, how do you personally sit down to begin a practice session?

A: Well, I take a deep breath, and I vocalize. I’ve often likened the practice of vocalization to yoga. We call it warm-ups; yoga calls it warm-ups. I’ve joked even about having yoga voice lessons, because it’s something you can kind of turn off your brain for a sec and just go through motions. Once I feel flexible, then I get into the music, and I usually sit at a piano: play through it, just the voice part, a couple of times, sing along. I can get lost. I can spend a lot more time than seems. I can lose track of time very easily in a practice session, because there’s never really a place to stop. There’s always something you can work on. Sometimes, if it’s within an octave, I’ll get my recorder and go outside and drive my neighbors crazy. I have been known to find a recording I like and sing along with it until it becomes more internalized.

Q: I like that. I don’t want to go to far afield, but I’m a fan of, especially for instrumentalists who are raised on reading music, to base some of your playing off of aural..

A: That has been the biggest turn on with me getting involved in early music and chant. Dr. xxxxxxxx does everything by ear, everything, we rarely ever use a piano or an instrument to learn a line. For some reason, it’s so freeing, it’s like you access the music from a different place.

Q: I would say there’s probably some truth to that. (Uh huh...)... even neurologically, I just feel like you’re using different processing.

A: Exactly. The Anonymous IV, those four women who sing early music, came a couple years ago. They performed on a Friday night, and they had a chant workshop Saturday morning in the band hall, and that was revolutionary for me. I mean, I’m a good sight-reader, but it was so nice to use my ear instead of my eye. It was refreshing. It kind of takes you back to childhood, that’s how you originally learned music.

Q: I’m working there [myself]. I’m working on it. On the flipside, what challenges do you face when you practice? What challenges do you find?

A: I learned to sing back, well... [I] started singing at Wayland in the ‘70’s. [In] that little culture there, chest voice was a dirty word. I never really learned to use my chest, so I just drug my head voice down, and after about 40 or 42, that quit working. I sounded like

an adolescent boy, with that little passagio blip. I have spent years trying to work through that, years and years. It's smoothing out. xxxxxx xxxxx spent two semesters with me just on vocalises, we didn't do any music. He lined up my e vowel, then the a vowel, some of the brighter vowels. Then, I worked with Dr. xxxxxx, and she helped that mix develop between the registers, and it's been very helpful. I've learned some new tricks.

Q: Ok, so challenges mostly in the realm of production, and registration, and ... (technique). Getting your voice back to where you remember it.

A: Oh, it's never going to be that, but at least it's usable.

Q: Ok, and you alluded to it earlier, the next question: What do you like about practicing? If I'm hearing you right, it sounds like the idea that there's really not a super clear stopping point. Sounds like a positive for you, sounds like an experience you can just get into and keep working. What else?

A: As far as practice goes? I'm not a very good pianist, but I love to play. I can play the left hand, and I can play the right hand. Putting them together is so hard for me, but I can get lost in it for hours. Part of the ADHD is, one side of the coin is that you can't focus, the other side of the coin is that you can get hyper-focused. And you can get hyper-focused in practice. I can wood-shed something to death, it's imminently interesting and compelling for me.

Q: Well, if that immediate experience is engaging, then who's to say anything of it? (That's right.) This may be a moot question, when you finish or in the middle of a session, how do you assess the quality of a practice session, either personally or...?

A: If I achieve facility with what I was working on...

Q: An immediate, "Does it feel more natural?"

A: Exactly. If I can get away from the music right there, like walk into a room, sit down, and just do it.

Q: But, both sides, does it feel right and can I do it? (Agrees). Awesome.

Q: What effect, if any has been in this course and practicing meditation had on your music practice?

A: Sometimes, it's difficult to keep my emotions under control when I'm having difficulty in an ensemble. I don't feel like I'm up to par with the ensemble, and I believe that just focusing on breathing for a minute calms me down enough to be able to proceed. I think that the benefits of meditation are in every area of my life, and so I may not be able to articulate it exactly. But I feel it has, if nothing else, calmed me down.

Q: What do you notice or think about when you practice? What kinds of things do you think about?

A: Well, I think about tone quality, and being on the center of the pitch: is it exactly in tune? I think about vowel sounds: should it be brighter? Should it be darker? Should it be in a different place? Is my breathing supportive enough? I just kind of tick through the list of things that go into making a vocal sound and make sure I'm paying attention to all of those areas.

Q: So, it actually sounds really positive. I think of times when, not so much now, there are times when I was prone to negative self-chatter if something wasn't happening.

A: My mother has drilled that out of me. Although it creeps in, we all do it.

Q: I'm happy to hear that it's not a prevalent thing.

A: Mom is big a believer in 'what you think is what you get,' and that has been drilled into me my whole life. Yeah...

Q: That's a really good influence to have. Are there any other tools or ideas that you think you want to or could apply to your music practice? If there's nothing that's coming to mind right that's fine. (No). You've already articulated it, and some of the questions are reinforcing, no requirement to have an answer.

A: Just remember to stop and breathe. Stop and breathe. I put a sign on the wall that says breathe. Sometimes that's breathe in, sometimes it's breathe out. Breathe in and breathe out. I have literally said those to myself, like the mantra. "*breathe in... breathe out...*"

Q: Sometimes we need a reminder.

A: There was one time when I was practicing piano. It was a Beethoven thing, where I was trying to get my hands to work together. I was so focused that I forgot to breathe at all and almost passed out. Have you ever done that?

Q: I can't say I remember, because it's been so long that I've been doing piano that I've become... aware of when I'm maybe not breathing naturally or when I have to sort of do a manual override. I have to manually override my breathing patterns because they're not working.

A: I was so focused that I almost fell off the stool, and I went (gasps).

Q: Well, we're glad you're still here.

A: I was like, "silly woman, BREATHE..."

Q: That was your reminder, your experience of nearly dying. Alright, last round. So, these are all more related being on stage and performing. So, what challenges do you face when you perform?

A: Well, if I'm not prepared, I'm scared, so I always try to be prepared. I like to get on stage and have fun, or, if it's church, I like to sing and mean it. So, for me, once the performance starts, the work is over and the play starts. And so, I don't think. There may be places, like last night we had a Balkan concert, and those are always ... 9/8 or 11/8, they're always funny meters. And there was this one place where I was adding an extra 8th note on all of the phrases. And that came out in rehearsal performance with the band, and they were all like, "No, that's just two..." I was adding an extra 16th note I guess. That's just two sixteenth notes there, not three. So I circled all of them, and last night in the performance I made sure [to] shorten that little syllable. So, I'm still focused on, "Ok, remember to do this..." But it was not anxious.

Q: It doesn't sound like your ego's wrapped up in it, and I mean this is a compliment. I think for me, I think if you're 18, 20, 25, and you're an undergrad or graduate student in music, and you're trying to make your way, and your ego is one and [the same] with what happens on stage. To me, I think that's a large part of the explanation where things like that come into play, is that...

A: ... and I have been there, and I still go there. That's what I meant when I said that I don't feel up to par in the ensemble. Part of that is also finding the right ensemble, and the Balkan ensemble is, it's a safe place really, to go for it. What happens, happens...

Q: In any instance, if you do have performance anxiety, or if you remember an episode you had had performance anxiety, how did you deal with it?

A: Breath... breathing, walking, practicing, vocalizing, umm...

Q: Giving your mind something healthy to focus on besides the, "I'm gonna die!"

A: Exactly, giving yourself something else to do.

Q: You alluded to it, as in the play part, how would you describe what you like about performing?

A: Connecting with an audience. I just love being a singer. I can just look out at them. I don't have to keep my eyes glued to the music.

Q: and you're not physically bound to your instrument ...

A: Right... I can perform, I can smile at them, and hope they enjoy it. Try to make them feel like I know they're there and I care that they're there.

Q: So that interactive acknowledgment.

A: Playing to them.

Q: Yeah, I like that.

A: It's fun.

Q: I work with a lot of singers, and ones who I really enjoy working with I have the sense that they're very natural in front of their audience, very authentic, and so...

A: I feel like that may be one of my most authentic selves (Great!), because I feel like that's who I am. It's fun, and I want them to enjoy it. So there.

Q: You want that to be a part of both of your lives. Are there any elements of meditation that you think you could apply to performing ... What do you think you learned in meditation classes that could apply to performing?

A: Well, I don't know how it is for other musicians, but, for a vocalist, tension is the enemy because this all has to be relaxed, and your whole body has to be relaxed, but in a certain form. You can't be holding that form rigidly, it needs to be fluid. Breathing is fluid. Yesterday, I was meditating in the back yard, and it was just a little bit breezy, it wasn't really windy, and I felt like the air that was coming into my body was part of this air that was blowing around. I felt very much a part of the world I was inhabiting.

Q: A breathing organism... (uh huh...)

A: That feeling of doing what you're supposed to do, and being a part of where you are has ... it's got to translate to an audience.

Q: That it's an expansiveness; that everything around you is happening. Yeah, there's no intended correct answer. I know what I've benefitted from personally, and so part of my interest in this project was a curiosity into other peoples' experiences of it. And, it's interesting to hear people have different physical experiences of their musicality, either because of what instrument they play, what genre they play. For the classical pianists, who push a lot of buttons from memory... (it's got to be a different experience)... that idea of expansiveness, being aware of more than the small universe under your fingers, I've had moments like that where what I'm doing is internalized where my attention can be beyond the setting or the room. That awareness, I don't know, it's freeing.

A: It does feel freeing... I apologize, I feel like I'm reiterating the same thing over and over and over...

Q: I bring it out consciously because I feel like your experience of music is largely healthy, it's not inundated by negativity.

A: Well, I have been in negative situations, but, after a while, I finally figured that out and go away...

Q: Try to find something else to do, somewhere else to put your attention

A: Some place that makes me feel happy to perform instead of under the whiplash...

Q: That ... under the whip... or... what's the right word

A: Never good enough

Q: It's as simple as that, and I think that's one of the things that has sometimes exhausted me about being in performances

A: That was my biggest fear about going into music in the first place, that it would become a job...

Q: It's taken being out of lessons for a while to integrate some of the things we've talked about, but... I have less ego invested. So, what kinds of thoughts do you have while performing? What do you notice while performing? You've alluded to it, as a singer, you seem to have a real consciousness of your audience... is that fair?

A: I remember one time I was singing "O, thou that tellest..." from *Messiah*, and there was a part that I had worked especially hard on, and there was a point when that was coming up in the song, and I felt like, "Ok, girl, go for it..." and that was fun. And that 'go for it' attitude, I enjoy being able to do that on stage, just being able to get it out there...

Q: Well, congratulations, I mean that sincerely (it's fun). It seems nice. I mean, I need to try that.

A: I enjoy it. You know, for the last , when did I start this?, I was singing professionally in Santa Fe and Dallas when this passagio thing happened, and that has been the hardest... that was about 15, 16 years ago... because my ego was tied up in that. That was who I was, and when I couldn't physically do it or know how anymore, there were some dark times there where I didn't know who I was. Now the technicality of it is working out, and now I can use my own voice. It's been a long process, and I think that meditation has been a part of that, and I think that it's going to be a part of my life.

Q: Lastly, because you've really addressed a lot of these. I guess this is a more open ended question than I realized. How do you assess the quality of your own performance?

A: Heartfelt.

Q: Ok, so it's an emotional barometer? How do I really feel about this?

A: I hope every performance is heartfelt. It may not be perfect, but it's meant, well-meant.

Q: I like what you said earlier about being in church: singing it and meaning it. Being authentic in expression, not a performance in that sense of the word that you're putting it on. There's just one more question: if it's had any effect, has meditation any effect on how you respond to your thoughts either in practicing or performing? I guess it could extend to everyday life. Some people respond to their thoughts by shutting them down, or reacting to them, or trying to counter them. So, has meditation had any effect on how you respond to your thoughts?

A: Yes, it's made me notice them, because I grew up shoving thoughts and emotions under the rug. The rug got full. So, now when I have uncomfortable emotions, it occurred yesterday in a performance setting, in a rehearsal setting, not with the Balkan ensemble, but with another. There was an uncomfortable situation, and instead of just trying to bluff it out, or moan and gripe about it, I simply acknowledged how I really felt about it... which made it much less dangerous.

Q: Well, it's on the table and you can deal with it.

A: Thank you. I'm so glad you did this. You have really directed my life in another direction, in a good direction.

PARTICIPANT 7 TRANSCRIPT

This interview has been lightly edited for clarity.

Q: What do you normally do to relieve stress?

A: Depends on the level of stress. My first thought is, "I should go get coffee..." which is the opposite of... I realize that it's counterproductive to put caffeine in my system...

Q: ...but, if it's warm and comforting... (Exactly)

A: Usually I'll talk to people, and that helps a lot. I'll pray.

Q: So, reach out or reflect, depending on what the mood is. (Yeah).

A: My sister had very traumatic health problems, so the brothers in the family would respond by [watching] movies with lots of explosions and things. I would always go and call people. So, it's very different reactions... and I know that that's based on personalities and all of that. So, I tend to do more of the talking to people.

Q: Well, that's good. Some people have the opposite reaction to stress, where they don't reach out. So, that sounds like a very healthy reaction. How would you compare meditation to those methods of stress relief, either coffee or socializing?

A: I suppose, in some ways, both the way that I feel after coffee or the way I feel after talking to people, help me to fix the problem, where meditation just helps me to be ok with the fact that the problem is there and that I may not be able to fix it.

Q: Ok, so you're not consciously attempting to solve anything. For some people, they find either it's less of a problem than they thought, or maybe they're in a better state of mind to start processing.

A: Some of it is that I realize that even if this person is really annoying to me, or there's a lot of tension, it may not be on me to try to fix that. I can just be ok with that.

Q: You alluded to it, but what changes have you noticed either in the course of being in these classes or as a result of them?

A: One thing that's been really nice is that I am learning how to turn off my brain, which has been a big issue throughout my life because I have thoughts that just keep running all the time. I'm always trying to solve things, especially being in academic, it doesn't stop. I'm always thinking, and so, especially this semester, my brain will just get exhausted from working and shut off, like in class, bad times. So having set times when you get home [and] you'll do this for ten minutes, to have that break, is really helpful, and it recharges it really quickly.

Q: Decompression (yeah). I've heard interesting things about it. I think the difference you said between your brothers and you may be at least partially gender-based, because, and this may be an apocryphal statistic, even at rest, women's brains are usually more active (in different areas), whereas men can sit down and just switch off.

A: One of the reasons I signed up for the program was to see if I could learn how to turn off my brain at certain times, because 3 out of my 4 grandparents were alcoholics. At least, my grandmother on one side, her personality and the way she handled things, I didn't know her very well, but I think it was very similar to me in that she was always thinking all of the things.

Q: And that was one of her solutions.

A: ... and I was looking for more healthy ways, and this sounded like a healthy way.

Q: So, either initially or more generally, what did you find that you thought about during meditation sessions?

A: It kind of changed as the course went on. At first, it was like, "How long is this gonna be?" Towards the middle, I struggled in the middle of the [class]. I forget what week it was, probably week 4, because I would get to this point where I could really relax and just be ok with everything. I could feel my guard coming down, but then that made me nervous because in times I've done that in the past, not with meditation, but just *with* people, it's resulted in me trusting people that weren't that safe and things. In the middle of meditation, there was this struggle: is this safe enough or not...

Q: Well, it's pretty interesting, because what I hear in your describing your not being able to turn your brain down, or off, is that fight or flight v parasympathetic. For some people, keeping busy or mentally active can be adaptive, but, as most people can attest, it can also be exhausting. So, I think that one of the things for me... I find that if I get really busy and I forget to practice for a few days, when I sit down I find that my brain is going about 70 miles an hour, slowly runs out of steam while it goes along, and it's just like, "Wow... that's what I was working with..."

A: Piano practice, when I was young, I would get so frustrated. I would just be up and up and up, and I would have all of these thoughts to share, and she'd be like, "just sit down and practice..."

Q: Well, to be fair, if someone ever videotaped me practicing at home, they'd wonder how I ever got anything done (ha, me too), because it's like 5 or 6 minutes where I sit down and focus, and then I get up and get a drink, and do something like put on a kettle for tea. So, what were your thoughts about meditation before the course started, what kind of image did you have, or idea?

A: Well, I mean, I think, the first thing comes up is how much religion plays into it. So, I didn't want to do something that was going to be very Buddhist or eastern focused, but, at the same time, even in the Christian community, there's meditation, and I think that we put all of these parameters around until we think, 'well, it's ok...' I think that there's different types of meditation, there's a kind where you focus on something specific, like a mantra, and there's kinds where you're trying not to think at all. And I was thinking about that, if I would have any qualms with that. And also, since I do research on music consciousness, I was interested in how meditation is...

Q: To be honest, that was a big interest for me, because, to me, both of the activities are very ephemeral, they take place in the moment and they exist moment to moment (yeah). They're really experiential. When they're working, the brain has a wonderful way of getting in the way of that...

To be honest, I wondered about the spiritual baggage a term like meditation had for some people, and so ... xxxxxxxx used some vocabulary, but I also thought she did a great job of acknowledging and welcoming everybody's different perspectives and experiences of what was happening. And she's from here, so I think that's something she understands that we don't live in India. To be perfectly honest, I don't pretend to think I'm an eastern philosopher because I practice meditation. I grew up in America and so I have to reconcile it with my own experiences. That was something I kind of anticipated.

So, how have your thoughts about meditation changed as a result of the course, and again, you may have alluded to this earlier, but...

A: Going into it, I was aware that a lot of the way Americans picture those things is bizarre and 'out there,' but I realized there were a lot of healthy benefits to it, great things Just because it's not necessarily our cultural norm doesn't make it weird. I tried to go into it with an open attitude, but now I think it's a very healthy thing. I realize actually that it's very prevalent in our culture, now, it's a new thing coming out and it's being phrased as mindfulness.

Q: I think that's a really important point, realizing that it's being assimilated into our culture. While people may not appreciate that it loses its bearings, it also becomes more accessible. I think that, ultimately, and I've read a few articles that echo this idea, ultimately, if people are embracing this process and embracing this idea of acknowledging what's happening right now, whatever term you want to use, that's ultimately healthy: it's not about the spread of any particular philosophy.

A: I think that's especially helpful for Americans that have the work ethic that we do. I mean, compared to other cultures, depending on your career, your hours may not be all that different from a person in a similar career in a different country. But we have a harder time turning off for vacations and to just step away from that. I think realizing that life isn't just about planning the next thing: it's experiencing it now [that] is important.

Q: I also think it widens the repertoire that people have for disengaging, and I think that you bring up a really good point that I think our culture can largely breed a work hard, play hard [mindset]. We're going overwork, then how do we shut if off? Through various distractions... be they chemical or otherwise. So, some people worry that it causes disengagement with life, but I think it's kind of the opposite as I experience. It's like, when you slow down, you actually feel more things.

A: Yeah, I've come across that. I don't know what you would call it, [it's] different in philosophy, too. That's what I've heard, meditation makes you feel like you're not there, but I don't think ... and maybe in that moment, but afterwards I'm more aware.

Q: That was one of the reasons with music that it really settled. I worried that it would interfere with my emotional engagement with music. What I found is that when, for lack of a better phrase, I was able to get out of my own head, I found that emotion was able to happen spontaneously. I wasn't trying to control it.

Now, the last regular question is, how has meditation affected sensory qualities in general? As musicians, and as people who use their ears, or hearing, or their quality of listening, how has meditation affected your ability to listen, if at all?

A: I hadn't really thought about that. I think one thing that I do consciously, is to be aware of, if I'm doing walking meditation, is to be aware of the sounds and the different visual stimuli rather than just thinking. But, sound-wise, I'm trying to think, I don't know that I've noticed...

Q: Shifting into music practice, either instrumental or ensemble-based, depending on what you have the most experience with, how do you normally begin a practice session?

A: So, I have to give some background. I'm not currently performing very much because of the injury that I have. It's a hand injury, and it's much better now. So I'm hoping to start lessons next semester, which is a really big step in healing that came out of this. Taking away some of my fear responses, like choosing to get distracted so I didn't have to deal with it. I am performing regularly by accompanying vocal students. So, usually when I do that sort of thing, I try to just focus on what pieces need to be done. I think, in a difference from meditation, I try to focus on those qualities that might be harder to pin down, like their breath and syncing up with them a little bit more. When I start practicing more towards doing more solo things, normally I avoid it because there's so much baggage with it... Being told that no one wants to listen to you play is very difficult, and there used to be so much physical pain that practicing was difficult physically. I don't have that pain anymore, because I'm learning to be aware of my body rather than just forcing it do something that I think it should [be able to do]. So, now I'm trying to be much more aware when I practice of what my body feels like, and I also try to think a lot... not think... I think I will use the meditation strategies when I feel the anxiety coming up.

Q: Two really big things stick out. The difference between mind over matter (which is what I definitely did going through the injury. There's a lot that I can relate, because for me there's that identity piece "This is what I want to be..." (exactly)

A: Which is one reason why now it's hard to practice.

Q: Which is why it can be really damaging. Personally, my undergraduate experience, I sometimes refer to it as a buzzsaw ... I ran into the buzzsaw, in a lot of ways. It was like I was flying high, and then 'Oh, my gosh.' To be honest, you sort of answered a lot of these questions. (Sweet). In a good way.

So, what challenges do you face when you practice? You've kind of said there's the emotional piece, the physical piece, not forcing anything, is there anything that you'd want to add?

A: I guess it's all tangentially related to this, but something that was a big mental block, and is now more of an identity block... it was a repetitive stress injury. It manifested itself as trigger finger in all of my fingers, so I have to use different fingerings at times. I have to, if it's a huge chord, maybe leave out a note if it's a voice that's being doubled... it's not obvious, it doesn't affect the sound of it, but it's one of those "I want to still be considered a good musician." I want to get the identity of looking right and doing everything the correct way you're supposed to, and I don't want to cheat... I think if I did meditation before that, I think I would realize that, "Ok, well that's where it is, like, I can't change my hand structure, I tried, and that didn't work, so what can I do in this place?"

Q: That seems like a healthy place, and one of the things I think about when I choose some repertoire is realizing that, if I have to adapt it, it wasn't written for my hands. I think we tend to think, "Oh, if it's written for piano, anybody should be able to play it. And I'm thinking about playing a piece that was improvised and it's transcribed... and his hands are a lot bigger than mine, so I might have to change a lot of the voicings, or I might have to figure out as I go along that I don't have this person's hands. I think there's the idea of, especially I feel if it's something you struggled with... wanting to feel legitimate, and not wanting to feel like there's adaptation...

A: I think that's especially true in classical. I think this kind of relates to it in some ways to what you're saying ... the summer that I learned that I wasn't going to be able to... after I realized that I couldn't finish my pedagogy degree, because I couldn't play, I took another year and finished theory, because I had been taking a lot of theory also. So, I got my theory degree and graduated. That summer I graduated I went to Paris on a study abroad trip, which was awesome. They had an outside music festival, and they had all of these really cool pianos out, and anyone could come up and play them; there were 4-year-olds playing them. It took a lot of convincing from people who weren't musicians to get me to even touch piano, because I was so like, "well, I'm not a pianist."

So, it took a couple years to like fiddle around with the piano again, not a sheet music, not a conforming way, and part of it was I played church music. I would fill in chords and things, and then I played background music at a cafeteria. I'd get bored, and I'd start improvising. So, being free to experiment with it was a big healing process, instead of being like 'you have to play exactly this way with exactly these fingerings or you aren't a musician.' (That's a really small box to fit into). So, I think that if I go back to that mindset of being well "this is what it is," and experience it, that will help.

Q: That's a healthy but difficult thing, or, as I like to call it, simple but not easy. I struggle with the same thing, and I have to say that, when I finished my last doctoral recital, I personally had a bad taste in my mouth. I'd been coached to a good product, but I'd also been coached to exhaustion where I didn't want to play and I resented it. And, so slowly, taking a break and getting to a point where my natural curiosity emerged again, that's where I feel like I am now.

A: It's almost like having to go back and be a kid again with it.

Q: No, and I feel like you've answered a lot of these questions. So, tools that you've learned from meditation... so, body awareness...

A: I think that I wrote this on several of my sheets, but when I would go into meditation, it was at the end of my longest day. I'd had 3 classes and sometimes accompanying before that, so I'd been going straight for hours. So, I'd usually have a headache or just be exhausted, and so I thought that going into meditation and focusing on my body would make it hurt worse. Like, ok, my head hurts, and now it really hurts because I'm stopping to focus on it, but it actually helped a lot, which was interesting.

Q: Well, I think about, especially with the body scan that we did, and I think that these can be helpful in the sense that you start realize that the sensation and pain is something we experience. In most cases, we react to it, we either take something to alleviate it, alleviate the sensation, which is actually what's happening, or we mentally process it, "oh my gosh..." not that we shouldn't take awareness of our body seriously. But, having any experience experiencing what sensations are happening in your body, and then, moving on. Again, it's like you said earlier, with the emotional piece, it may be less of a problem than you thought, or you may be more equipped to proceed.

A: One thing that I talked with my friend ... she was also injured, and she's doing injury prevention research at that master's and then she has an acceptance to do that at the doctoral level. Her research has shown that ... we as musicians work, and maybe this is more true for instrumentalists than for vocalists, because I've noticed that vocalists are very aware of their bodies, and will text me and say "I can't practice today because my voice is not ..." As instrumentalists, sometimes we're kind of like, 'get it together'

Q: Yeah, buck up.

A: Yeah, but it's so good. As instrumentalists, we are taught to keep going. If there's pain: do you want this or not, do you want to be a musician or not?

Q: That's so like old-school athletics.

A: Yes, yes, and because the small muscles heal so much slower, and so much ... like your leg muscles, there's less blood flow. There's so much danger, and yet, as musicians, we're so used to turning off body awareness. It would be kind of weird because, when I was taking lessons with a teacher designed to help with injury prevention, I would play something and she would say, "Well, that looked really awkward, did it hurt?" I'd say no and do it again, and actually it's been hurting for months, but I just turned it off. So, I think being aware of it and being ok that it's there, I mean, listening to what it says, seeing if you can alleviate it without judging it. It's nice.

Q: It's a tool, like you rightly pointed out. It doesn't make it go away, but it gives you a different perspective. So the last set of questions deal more with performance. Again, you can put as much context as you like. If you can put yourself in a performance situation, what kind of challenges do you find that you normally face when you perform?

A: I guess that's sort of a tricky question right now. When I accompany someone, I still have the anxiety about, "Am I a good enough musician to do this?" but it tends to be alleviated because I'm focusing so hard on them and I'm trying to be a support for them. And the students I'm accompanying are still relatively new in the solo performance, and so they tend to not have as set of a performance. There's more variation in the tempos and stuff, there's lot of being in the moment.

Q: A lot of adapting.

A: Yeah. So I listen to the recordings and think, "Well, it's never sounded like that on my part..." because I'm having to adjust on the moment, which is a different skillset than going in and doing a solo performance straight through. Like I said, I haven't performed solo in a while. My last performances that I did with it were very difficult because I never knew if my hands were going to work. It was never about 'do I know the piece?' I knew that I knew the piece, but it might be that that day my fingers don't want to work, or I might get out there on the piano and then they don't work.

Q: Because you're in this, you know elevated state, and so...

A: And so... the knowing that I could get out there and not be able to play what I know I can, and then having the faculty think that, "Ok, she didn't practice, and she doesn't know it..." that created a lot of tension, which probably exacerbated a lot...

Q: So there's that head game... especially if you feel like you're in an environment where people don't even acknowledge those things.

A: Right, no, they didn't at all. And this is extremely taboo to say, but it got to the point where I got on steroids regularly just to get through. I couldn't play scales because my fingers wouldn't be lined up exactly. So, it was a cycle of the more I worked the worse it got, because it was exacerbated ...

Q: Sounds like an NFL player (Right), because it's totally rampant in professional sports. I mean, if you would take a blood sample... they worry so much about drug use in the NFL, but if you took a blood sample during game of how much pain killer and steroid is in their system, it's ...

A: But, I'm very excited, I have a meeting next week about starting lessons and starting with the program in the piano department. It was a lot of mind games. I would forget to respond to emails, because it took a lot. But after this program I feel more like, "Ok, this is where I am, and I don't have to pretend to be something I'm not, and then we can work from where we are."

Q: Hopefully you can find more sympathetic ears, metaphorically.

A: So, I think the meditation has helped me realize, just being ok with where I am, rather than trying to be something I'm not yet.

Q: So, what you said about the sort of mind games, would you say that was sort of, if you experience performance anxiety, that's the kind of stuff you'd deal with? (Yeah) So, how would you normally deal with it before?

A: Before meditation? Freak out a lot. Think about, "would I get a better grade if I don't show up at the jury?" If I get an F, is that better than getting a C with them being like, "well, that sucked..." and having to hear about it forever?

Q: Wow, that's a lot to carry. So, do you feel like, again, having alluded to it earlier, do you feel like you have different strategies after the meditation classes?

A: Yeah, specifically with the physiological symptoms. I know how to calm myself down now with it, and doing that... calms my physiology enough that I can respond more rationally instead of just fight or flight.

Q: Yeah, because you still want to be able to function...

A: The very beginnings of my injury started my senior year of high school, before my senior recital. Just like shoulder tension and stuff... The next two years I was at community college, and I had a little bit of different type of tension, it was more in the front of my shoulders... and by the time I went to my bachelor's degree, that's when it got really bad. Yet, before any of the injuries started, I loved performing, it was really fun. I mean, I never wanted to be a performer, solely because I loved teaching so much

and I didn't want to spend thousands of hours in the practice room when I could be teaching and doing other things as well, but I loved performing.

Q: Well, that's actually a really good segue. What do you like about performing?

A: Ok, I gotta go back awhile for that. I like being able to communicate really deep things to people that you can't with words, or that people might not be as receptive to hearing with words.

Q: Well, I've never heard it put that way before, but I really like that.

A: If you just went up to someone and said something very deep and moving, they might put up lots of barriers.

Q: And I think that, similar to this really fast mental culture that we live in, there are times when I worry that we live in sort of a shallow emotional culture.

A: Probably. I don't know which causes which, but I do think they're related.

Q: I think music invites people to slow down and experience some sort of emotion... hopefully with the performer. I really like that, the idea that you have this opportunity to communicate emotionally

A: Also, for me, I experience different types of emotional or consciousness experiences that I don't in other situations, and it can change depending on what type of music I'm playing also depending [on] just that day. I remember junior high. I had time where I performed a piece and I knew it so well that I could almost check out. It was kind of weird, it was like 3rd person, it was like watching yourself, but I feel like there's a way to harness that, too. And, so, when I was a kid, I would listen to CDs on repeat for hours and get so excited, and so I think music helps us to experience things that we don't normally.

Q: I don't know if you necessarily create things that we don't already feel, but music gets us to respond in ways that we don't normally... and this can be, you can elaborate positively or negatively, but what do notice of think about when you perform?

A: Umm, first reaction is "don't mess up..." That's what the trouble was ...

Q: I think that's an honest response, and I think a lot of us have that tendency.

A: As a teacher, my tendency is to focus on dynamics, or something that's a little more artistic than just notes or just counting, because I think that helps them to convey what they're artistically trying to say more, so that they're engaged with the music but not obsessed with the details... but I don't actually do that, that's my goal.

Q: One of the joys is teaching is that you give really good advice, and you're like, "wow, that's really good advice, I should do that...I might try that..." Ok, so there's this fear-based reaction of this needs to go well, don't screw up...

A: And I also attempt to think in longer phrases than I do in practicing to try to get more of a bird's eye view of it. By that time, muscle memory is good, and you don't have to think of every detail. If you think of the broader picture, it tends to communicate better I think.

Q: So you're able to zoom out...

A: And I also don't know, sometimes that's a consciousness thing. I know that different brains waves help create that, so I don't know if that's something I consciously do or if that's just a reaction to...

Q: That's fair, the question is not "What do you do?" it's "What do you notice?"...

A: When I get more anxious, when the fight flight is really strong, it's very tunnel vision... so

Q: Well, I could understand that... so how do you assess the quality of a performance? '

A: That's a good question.

Q: I'll interrupt, not how does someone else, but how do you...

A: Right, yeah. I rarely assess it based on people that come up to afterward and talk about it. I appreciate whatever they say, but they're probably not going to come up and tell me I suck, even if I did. In fact, sometimes they come up more when you suck, and they're like "you did so good..."

Q: It's like they feel the need to be a safety net...

A: Exactly. Sometimes, because I feel like my perception is off when I'm performing, because it's just in a different state, it's not analytical necessarily, I definitely trust the teachers I've been working that I trust... I've had several people that I know give me good advice and won't overly flatter me but tell me honestly.

Personally, I guess it's if I feel like I hit the right notes, and communicated the right things.

Q: Spoken like a true pianist.

A: Priorities... did you get 90% of the notes? Success. But, I'm trying to become more, especially as an accompanist, I'm trying become more flexible with that definition

because in the choir room downstairs, and maybe this is just my own ears or my particular students, there's a delay. There's like a split second delay, and so syncing up with them is really weird, and, so, because of the acoustics in there, I noticed that I have to consciously choose to skip certain chords so I can get with them and sound good. So, the ending I practiced hundreds of times might not sound that great, but then we end together, you know? And so I have to be, I'm learning to be more conscious of the overall performance, rather than, "Did I get all the notes?"

Q: I think that's one of the benefits of playing in a group, is that [there's] maybe a little less responsibility than a solo pianist, but maybe a little less guilt. I think that rings true for me. Now, do you feel like there are things from meditation class that have already happened or do you think that are tools that you might use in the future in performing situations?

A: I know that there have been times recently, and I'm trying to remember. I don't remember if it's in class with my theory class I teach, if it's when a student asks a really difficult question, or if it's when I've been at a conference presenting my research, but I know that there have been times when I've been nervous about being able to perform. I mean it was academic, not musical, but still... that I've used the breathing techniques and the mantra thing, and it's been helpful. Or, I'm trying to write something that I just have a lot of mental blocks about, that will help, so I think that as I get performing more, using those techniques more and having those available...

Q: Ok. I actually have to cycle back... similar to the questions about what you like about performing and how you assess its quality... what do you like about practicing?

A: I'm trying to figure out how to put it into words... it's tricky. I guess in some ways, the opposite of performing. I've never thought about it before until this interview. It's more detail-focused, so it's more of ...before this class I would have said meditation. I don't know if I'd use that word anymore, but it's a different type of focus, it's very detailed...

Q: Would you say at times that it may be meditative?

A: Yeah, and, I like the ability to play with different ways to phrase something and play with that, and I like seeing the progress, too. That's nice. And I know that there's times when there's always peaks and valleys in practice, but I think a lot of things that we do as musicians and as academics, there's a lot of very long-term goals that we may or may not see progress with... and it's fun when you can see progress, even in very minute details.

Q: Well, and... without getting too far afield, I like to make the comment to my students that sometimes their progress will be invisible, because you always adapt to where you are.

A: Whoa, I love that. I'm going to steal that.

Q: It's something I've thought about a lot, and I think that one of the reasons people can get discouraged is, when you make sort of immediate, day-to-day comparisons, you just get used to how things go, you adapt really quickly. It's sort of a human thing, but I guess it's a decent leap into the next question: how do you assess the quality of a practice session, either retrospectively or in the moment?

A: During the injury time, it may have been... I don't if I would have ever consciously said this, but I think, if I felt tired, physically, then I thought, I did a good job today, whether or not that was productive. As that time span got shorter and shorter, where it was like, ok, I can play for 3 minutes, and then I'm in pain. Ok, I'll push through those 3 minutes, and I'll play for 15. Ok, now I cannot physically play anymore, and I can only play 15 minutes and I'm a piano major.

Now, when I take that equation out of it, not that it's not there, but I view it differently... A good practice session is when I'm able to fix little things that I can keep, that solve problems for the long run, specifically, fingering choices. I tend to change my fingering all the time based on ... today my hand is in this position, so I'll play this fingering. It annoys my teachers like crazy. So, I've tried to find new fingerings that I know, "Ok, some of the time I can play it this way, but it will hurt... this time, this way, it'll never hurt, it's a little unconventional, but it's not gonna hurt, ok, I'll go with that way." So that gives me confidence because, every time I come to it, I know it's going to happen. So, I guess a good practice session would be making sure that whatever little section I'm working on is more solid than when I left it.

Q: Ok, so, for you, there's some element of observed progress... no matter how minute.

A: Yeah, I would like to amend that eventually, because that becomes really disappointing after awhile. ... That's how I would tend to define it right now.

Q: Well, you made a good point earlier, about realizing that there are sort of long-term processes at work, and that your brain... your brain is doing stuff when you walk away from the piano. That's one of the things I've really appreciated about learning with Dr. (xxxx) and taking classes with her is their research on how we consolidate things... There's something really comforting to me about that is this idea that ... yes, I need to do the grunt-work of getting things moving, and I need to put in my repetitions, as it were, but ... things are going to happen when I step away, and even when I don't go back to it, things are going to be happening. There's something really comforting about that.

A: ... that's one reason I'm trying to practice more focused on little things, because I realize that the time I have to practice, and also before injury, before pain comes or whatever, is relatively small, so I have to be very focused during that time so I make sure that what I do makes progress.

But, then, kind of on the global thing, kind of like you were saying, I think it looks like I crank out papers really quickly or can write super fast, but usually what happens is that I've been thinking about exactly what I want to say for like two days. It's always when I'm walking to do school, doing dishes, that happens sometimes... and it ... so then when I sit down to write it's already there. Sometimes I think that can happen with practicing, too. You're hearing your piece in your head so much, and you're thinking of different ways to phrase it, and your brain will get stuck on certain measures and things, and I think you're still practicing even if the number of hours [isn't] so impressive. I don't know how it is in older schools, but there's such an emphasis on how many hours that you're practicing.

Q: It's like how much face time you have at the office, and not about how effective you are.

A: I think that in the theory department, and they've never said this, I mean, there are benefits to being up there and seeing people... you know, the face time, but most of my work is not done visibly.

Q: Well... thank you!