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## Mindfulness for Optimal Performance for Musicians

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Thesis: Mindfulness for Optimal Performance for Musicians

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Lesley University

May 2019

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Dedication

Bowing deeply to Jonathan Foust.

Your rich teachings, easeful presence, and continuous support have nourished and inspired me.

May I be of service and may this work be a benefit to all beings.

To my loving husband, David.

I will likely never *master* mindfulness, but I sure do love trying with you by my side.

May we continue to grow, love, laugh, and serve together.

### **Abstract**

This paper is a presentation of my creative thesis for the pursuit of my Mindfulness Studies master's degree from Lesley University. To enhance focus, boost compassion, and support optimal performance states, this work focuses on the potential benefits of teaching concentration, relaxation, and compassion meditations--and other mindfulness techniques--to professional adult musicians who often suffer from stress, performance anxiety, and self-criticism. Included in this thesis is a literature review on that topic, an explanation of gaps noted in this field of research, a discussion explaining the rationale for how the literature review has informed the creation of an eight-week mindfulness course for professional adult musicians, concluding thoughts, and a list of works cited.

The findings of the literature review suggest that mindfulness practices could be valuable for enhancing optimal performance states in professional adult musicians by reducing stress and self-criticism, and enhancing concentration, relaxation, and self-compassion. Therefore, it is concluded that this topic should be studied further; the creation of the Student's Manual and Teacher's Guide for a Mindfulness for Optimal Performance for Musicians course nudges this finding towards a deliverable program.

*Keywords:* mindfulness, meditation, musicians, optimal performance, flow

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### Mindfulness for Optimal Performance for Musicians

Working as a professional musician is incredibly demanding. According to Czajkowski and Greasley (2015), there is a need for research that explores how mindfulness can support professional musicians in handling the stresses and tensions that come with the job. Musicians need help controlling their nerves, preventing and managing repetitive strain injuries, and boosting creative energy during performance (Czajkowski & Greasley, 2015). Professional musicians need support reducing challenges related to their career, while simultaneously cultivating conditions that enhance their functioning and support optimal performance.

Many studies have been conducted to explore how mindfulness can help reduce suffering and enhance quality of life. Through their broad analysis of published mindfulness research, Goleman and Davidson (2017), conclude that mindfulness can decrease anxiety, stress, and pain. Research analysis also shows that mindfulness practices can support emotional regulation, improve attention regulation, and speed up recovery time from stress (Goleman & Davidson, 2017). Mindfulness practices have also been shown to help reduce self-criticism and enhance focus, compassion, good sleep, and body awareness (Goleman & Davidson, 2017). As mindfulness practices have been beneficial for many adults, this paper examines the current academic conversation and review of the literature in the field of mindfulness for optimal performance in professional adult musicians. This research helps fill a gap in the academic landscape, as not much research has been done generally on mindfulness for optimal performance, and less research has been done specifically on mindfulness for optimal performance in professional adult musicians.

This rationale paper will include some documented challenges faced by professional adult musicians, the definition and benefits of optimal performance (i.e. flow states), and

information on the definition, popular types, and benefits of various mindfulness practices practiced in modern times. This paper will then highlight the benefits discovered during research on both adult musicians and adult non-musicians practicing mindfulness and/or yoga, provide a discussion on the findings and limitations in these studies, and provide reasoning for doing a Creative Thesis to fill the specific curriculum gap of mindfulness for optimal performance in professional adult musicians.

### **Literature Review of Mindfulness for Optimal Performance for Musicians**

Professional adult musicians face many challenges (e.g. stress, injury, travel woes, concentration, competition, etc.) which can prevent them from performing at their best. In 2018, Nedelcut, Leucuta, and Dumitrascu performed a Lifestyle and Psychosocial Factors in Musicians study, the results of which showed that musicians often suffer from sleep problems, anxiety, eating on the run, and being away from home. In 2006, Oyan noted in her Doctor of Musical Arts dissertation that music performance anxiety (MPA) can trigger physical tension, panic, fear, heart palpitations, and distracted focus. In their study of 2,536 musicians, Gembris, Heye, and Seifert (2018) discovered that in addition to stage fright, orchestral musicians commonly suffer from hearing disorders and musculoskeletal problems. The consistent pressure to perform well can trigger MPA (Gembris, Heye, & Seifert, 2018), and performance can suffer.

Gembris, Heye, and Seifert (2018) argue that it's necessary for professional musicians to maintain their health and high performance standard to keep their job, so it is important for them to have access to preventative health practices and programs. Czajkowski and Greasley (2015) report that at the time of their study, although research suggested that mindfulness techniques could be of great benefit, there was no research investigating mindfulness purely for singers. Czajkowski and Greasley also stated that as of 2015, there were "few projects researching the



effects of mindfulness on musicians' performance." Based on this information, a sustainable, safe, effective solution is needed to support professional adult musicians to feel more relaxed and fluid during practice and performance, reach their potential, and perform optimally.

This literature review includes definitions, types, and benefits of mindfulness. It also includes documented challenges faced by adult musicians (e.g. stress and self-criticism) and information on states to cultivate for enhanced performance (e.g. concentration and relaxation). Articles considered include positive effects of using mindfulness to reduce musicians' challenges, and some demonstrate how mindfulness can cultivate positive states in musicians. This review makes a connection between mindfulness and flow states for optimal performance. The literature review summarizes the current academic conversation found in published books and peer reviewed articles on the minimally-studied topic of using mindfulness practices to support optimal performance states in professional adult musicians. The rationale discussion includes an in-depth description of the creative project components, and explains how the elements of the eight-week course were chosen after considering the findings of the literature review.

### **Flow States for Optimal Performance**

Enhancing optimal performance is a common goal of adult musicians in a very competitive profession. Optimal performance state, or *flow* state, is a state of ordered consciousness, enthrallment, and a balanced ratio of skill to challenge (Csikszentmihalyi, 1990). According to Mihaly Csikszentmihalyi, creator of the flow theory and author of *Flow: The Psychology of Optimal Experience*, this state of active engagement in appropriately-challenging activity also involves the practitioner having clear goals, receiving immediate feedback on performance, having a feeling of control, sensing time has paused or lengthened, experiencing a

temporary dissolving of a sense of self, being fully aware, feeling the activity is valuable, and being incredibly focused (1990). In this state of flow, one experiences ease and effortlessness, amidst the challenge. In flow, it's as though the person is a conduit for the activity—everything seems to line up well and flow gracefully out of the practitioner (Csikszentmihayli, 1990). This precious and magical flow state is considered an optimal performing state, and may be important for the sustainable success of many professional musicians.

According to Csikszentmihalyi (1990), flow states provide not only improvement to one's job, activity, or performance, but improvement to one's overall life, as flow states help one to see life more clearly and recognize "what is important and what is not" (p. 16). Flow states help "to overcome the anxieties and depressions of contemporary life" by helping a person to "no longer respond exclusively in terms of [life's] rewards and punishments," but to "learn to provide rewards to" oneself (Csikszentmihalyi, 1990, p. 16). Getting into a flow state, or a state of optimal experience, helps create order amidst the general chaos often experienced in the mind. Csikszentmihalyi explains that instead of being swayed by the changing praise and blame provided by society (similar to the praise and blame categories of the Eight Worldly Winds described in Buddhist philosophy), one "has to develop the ability to find enjoyment and purpose regardless of external circumstances" (1990, p. 16). This trained and cultivated ability to maintain inner clarity and emotional steadiness may be incredibly valuable to professional adult musicians who are constantly faced with the fluctuating opinions of critics, reviewers, competitors, conductors, and audience members. Many professional musicians feel great stress and pressure to receive praise for their performances and are incredibly self-critical as a result. Csikszentmihalyi explains that "in flow there is no room for self-scrutiny" (1990, p. 63), and enhanced self-confidence is a precious bi-product of flow. When a musician can perform with

more ease and grace, and truly enjoy the performance for its own sake, then the opinions of others don't affect one's sense of self as much, and a great deal of pressure can be released. Flow states are states of optimal experience (which boost optimal performance) "in which attention can be freely invested to achieve a person's goals, because there is no disorder to straighten out" (1990, p. 40). Flow states can boost optimal performance by allowing musicians to simply "be" in the moment of the performance and not be worried about the potential outcomes.

In an interview with Beard (2015), Csikszentmihalyi explains that to get into a flow state with a merging of action and awareness, concentration is the most important skill to cultivate. According to Beard (2015), Csikszentmihalyi's definition of flow, is "holistic sensation that people have when they act with total involvement." It is a "positive psychological state" in which a person "perceives a balance between the challenges associated with a situation and their ability to meet the demands of the challenge and accomplish" (Beard, 2015). Flow is a state in which a person is elevated by the excitement of a challenge that meets his or her skills and talents, and requires the mind's full attention to execute the activity with control. Csikszentmihalyi actually describes flow as the "ultimate control: the freedom to determine the contents of consciousness" (1990, p. 62); it's a state in which the only thoughts in the mind are ones relevant and supportive to the task at hand. Beard (2015) further explains the nine main elements of Csikszentmihalyi's flow theory, include "challenge-skill balance, action-awareness merging, clear goals, unambiguous feedback, concentration on the task at hand, sense of control, loss of self-consciousness, transformation of time, and an autotelic experience." This flow can be compared or equated to a state of optimal performance for musicians--a state of effortlessness, fluidity, and timelessness amidst an activity demanding great skill and discipline.

Importantly, in Beard's interview of Csikszentmihalyi, concentration is praised as "the origin of becoming one with the activity...of feeling in control...of forgetting yourself...of forgetting time" (2015). According to Csikszentmihalyi (1990), "when all a person's relevant skills are needed to cope with the challenges of a situation, that person's attention is completely absorbed by the activity" and "the activity becomes spontaneous, almost automatic" (p. 53). When concentration is cultivated, and the task at hand matches the skills of the practitioner, this enjoyable, effortless state can emerge. From this explanation, concentration leads to open awareness. Much like described in the mindfulness literature, enhancing focus and concentration is one of the first steps towards ease, tranquility, balance, harmony, compassion, fulfillment, and expansion. Therefore, mindfulness techniques that cultivate focus and concentration (e.g. breath-based meditation, body scan meditation, walking meditation) could be very useful for cultivating a flow state, or optimal performance state, in professional adult musicians.

Finally, Csikszentmihalyi emphasizes that "the easiest step toward improving the quality of life consists in simply learning to control the body and its senses" (1990, p. 94). Though he provides many suggested practices to gain that control, he praises the practices of yoga for building control so effectively. In their ability to boost concentration and discipline the body, "the similarities between Yoga and flow are extremely strong" (Csikszentmihalyi, 1990, p. 105). Notably, the classic eight-limbed path of yoga (i.e. ashtanga yoga) is regarded as a discipline to enhance control of the body and its senses, and is "one of the oldest and most systematic methods of producing the flow experience" (Csikszentmihalyi, 1990, p. 106). For adult musicians interested in enhancing optimal performance via enhanced control of the body and senses, yoga's breathing and meditation techniques may be excellent practices for building discipline and concentration.

### **Optimal Performance in Adults**

The following summarizes the very limited research on mindfulness for optimal performance in adults, which emphasizes the importance of boosting concentration to enhance flow states. In the study on promoting flow states for musicians by Bloom and Skutnick-Henley (2005), the researchers were primarily interested in “making the flow experience more attainable for music students” (p. 24). Interestingly (and, perhaps, not surprisingly), they proposed that “flow states have much in common with the more established concept of mindfulness” (Bloom & Skutnick-Henley, 2005, p. 25), which focuses on restoring and maintaining presence in a relaxed manner. Their survey of professional adult musicians highlighted the importance of maintaining concentration and performing without self-criticism in order to facilitate flow states (Bloom & Skutnick-Henley, 2005, p. 25), findings in alignment with Csikzentmihalyi’s teachings in *Flow: The Psychology of Optimal Experience* (1990). As mindfulness has been proven to boost concentration and help reduce self-criticism, it may be very valuable for enhancing flow states for optimal performance in adult musicians.

According to Moore (2013) in his survey of 105 undergraduates on propensity towards flow states, “both theoretical and empirical literature imply that the self-regulation of attention is an aspect of mindfulness.” Again, concentration and focus are important skills to cultivate for attaining flow states for optimal performance. Moore (2013) explains that flow is a state often referred to as “being in the zone.” He identifies a connection here, stating “flow state and mindfulness appear to entail the self-regulation of attention” (Moore, 2013). In this regard, mindfulness practices which boost attention, concentration, and attention-regulation could be useful for professional adult musicians to reach and sustain optimal performance states more regularly.

### **Mindfulness Benefits and Styles for Adults**

Mindfulness has become popular in the United States for both removing suffering and enhancing awareness. It is being offered in a variety of ways to meet the varied tastes and temperaments of the modern practitioner. According to mindfulness teacher, Jon Kabat-Zinn (2005), mindfulness is defined as “an openhearted, moment-to-moment, non-judgmental awareness...optimally cultivated through meditation” (p. 24). Kabat-Zinn states that a deliberate practice of mindfulness is done as non-reactively as possible and is “cultivated by paying attention in a specific way...in the present moment” (2005, p. 108). Mindfulness practice helps people become more present, aware, disciplined, focused, non-judgmental, and self-regulated.

The clear quality of mind cultivated through mindfulness practices “can be refined through systematic practice” on and off the meditation cushion (Kabat-Zinn, 2005, p. 109). Kabat-Zinn (2005), creator of the secular Mindfulness Based Stress Reduction (MBSR) course, argues that mindfulness can be effective for stress reduction and pain. To remove suffering, “mindfulness gives us a chance to see beyond the emotional reactions and patterns that afflict us with misery” (Kabat-Zinn, 2005, p. 166), much like flow states heighten clarity, self-assuredness, and enjoyment of life (Csikzentmihalyi, 1990). For increasing inner harmony and nurturing inner awareness, Kabat-Zinn states that “through the practice of mindfulness, we learn to listen to the body” (2005, p. 123). Similarly, according to mindfulness teacher and author, Joseph Goldstein, “when mindfulness is present, we abide more peacefully in our lives” (2013, p. 16). Mindfulness, like flow, is praised for improving the quality and enjoyment of life. Mindfulness practices, having been proved to be effective in adults for both reducing stress, pain, and mental distraction, *and* enhancing focus, self-regulation, and clarity, may be useful for boosting flow states for optimal performance in professional adult musicians.

Generally, mindfulness practices are used to *reduce* obliviousness, ignorance, and unawareness, and *enhance* consciousness and awareness (Kabat-Zinn, 2005). The techniques help to clear away mental clutter and cloudiness and brighten mental intelligence and discernment. Specifically, mindfulness techniques can be used to increase relaxation, concentration, insight, and compassion (Kabat-Zinn, 2005). There are various types of traditional mindfulness practices used in modern times, including body scan meditation, metta meditation (loving kindness), walking meditation, breath-based meditation, meditation on sound, meditation on food, forgiveness meditation, and mantra meditation. Concentration, relaxation, and compassion meditations are three mindfulness categories popularly taught in a secular way to adults in modern mindfulness courses and are described in more detail below.

**Concentration meditation.** According to mindfulness teacher and author, Andrew Olendzki (2010), concentration meditation cultivates mental focus by consistently returning attention to a primary object (e.g. the breath). Through concentration meditations, one can gradually reign in the mind's wandering and settle into states of mental tranquility "in a way that gathers and consolidates the power of awareness" (Olendzki, 2010, p. 84). Similarly, Goldstein explains that a state of mindfulness can be cultivated by "making an effort to stay attentive" (2013, p. 18). As is important for professional musicians, "strengthening of concentration comes about thorough the continuity of mindfulness" (Goldstein, 2013, p. 22).

The breath is a very common object for meditation practice that cultivates focus in beginners and long-time practitioners alike. Typically, the breath is observed at the belly or tip of the nose—noting its natural and shifting path, movement, and sensation. Goldstein (2013) argues that the breath is used as an object of meditation "because it is always present and it is a suitable object for all personality types. It leads to both deep concentration and penetrative

insight. It is the antidote to distraction and discursive thoughts, and it is a stabilizing factor” (2013, p. 50). Likewise, Goleman and Davidson (2017) state that “the path of concentration begins with a mere focus on the breath” (p. 36), which is a simple, safe, and common way to practice mindfulness. As musicians need to enhance concentration in order to perform optimally, concentration meditations, particularly on the breath, may be very helpful for this population.

Goleman and Davidson (2017) concluded that sustained attention is boosted through meditation and that mindfulness “strengthens the brain’s ability to focus on one thing and ignore distractions” (p. 131). According to Goldstein (2013), boosting concentration “gets stronger through mental development” (p. 266). When thoughts and sensations arise, the practice is to “simply note without reactivity whatever comes to mind” (Goleman & Davidson, 2017, p. 37). This ability to keep the mind on task and resist distractions could be valuable for professional musicians who are often juggling challenging scores while surrounded by many other musicians playing different notes. It is important for musicians to maintain focus in order to properly deliver their work. As explained by Csikzentmihalyi (1990), flow is a state in which only relevant thoughts are present when absorbed in a task; this flow state may be supported by concentration meditations which train the mind to ignore distractions.

In addition to breath-based meditation to enhance concentration, walking meditation is a classic technique for boosting focus. Walking meditation can be done inside or outside, with or without counting, in a circle or back-and-forth in a line, and for a short or long duration. It is a relatively easy, safe, and accessible technique that is excellent when the body is dealing with the hindrance of restlessness or when the mind is facing the hindrance of sleepiness, as the slow, steady walking rhythm has a way of smoothing out restlessness while enhancing alertness. To enhance concentration, while walking slowly, awareness is placed at the sole of each foot—



noting the changing sensations while lifting, moving, and placing each foot with each step.

According to Kabat-Zinn (2005):

...formal walking meditation is not about getting somewhere on foot. Instead, you are being with each step, fully here, where you actually are. You are not trying to get anywhere, even to the next step. There is no arriving, other than continually arriving in the present moment. (p.268)

Although the mind has a tendency to jump into the future or linger in the past, the body and the breath are always living in the present moment. One of the beautiful and effective aspects of walking meditation is the opportunity to join the body, breath, and mind together—enhancing presence, awareness, and concentration, while inviting ease and relaxation. Kabat-Zinn further explains that the “challenge in mindful walking is to keep the mind and body together in the present moment” and to “keep the sensations associated with walking center stage in the field of awareness” (2005, p.271). As musicians typically sit for long rehearsals and performances, walking meditation may be an excellent technique to ensure they get some movement and circulation during the day, while creating the opportunity to experience the vast benefits of this concentration meditation.

Goleman and Davidson (2017) found that even a little meditation is beneficial for adults. For example, in just two weeks of breath-based meditation, participants demonstrated increased concentration and less mind-wandering (Goleman & Davidson, 2017, p. 139). Additionally, concentration can be restored after multitasking in just ten minutes of mindfulness, and in just about ten hours of mindfulness, attention and working memory can be strengthened (Goleman & Davidson, 2017, p. 145). A little can go a long way, which is important for professional adults who don't have much time to dedicate to formal mindfulness practice.

Finally, Goldstein explains that “when mindfulness is directed toward stabilizing the attention on a single object, it leads to deepening states of calm and tranquility” (2013, p. 397). When there is concentration in the mind, then there is a much greater possibility that happiness can arise, as the mind is more flexible and open (Goldstein, 2013). This enhanced mental and emotional space is much needed in the chaotic busyness of modern times. Therefore, concentration techniques are not only useful in their own way but can also support deepening relaxation practices in adults.

**Relaxation meditation.** Relaxation meditations, like seated or supine body scan meditations, can be very helpful for releasing mental and physical tension in adults. Kabat-Zinn (2005) includes body scan as a core technique in MBSR, explaining that the technique “involves systematically sweeping through the body with the mind, bringing an affectionate, openhearted, interested attention to its various regions” (p. 251). This relaxation technique can be done with broad attention or great detail, making the meditation as short or long as one wants. By scanning the various body parts in a relaxed manner (either bottom up or top down), the mind is kept in the present moment—noting physical states and sensation along the way. The body scan also teaches acceptance of reality, as the technique is not trying to change sensations in the body, but instead helping to enhance awareness of those sensations, whatever they are. Kabat-Zinn (2005) explains that through the body scan meditation:

...awareness itself, holding the sensations without judging them or reacting to them, is healing our view of the body and allowing it to come to terms, at least to some degree, with conditions as they are in the present moment in ways that no longer overwhelmingly erode our quality of life, even in the face of pain or disease. (p. 385)

This ability to be present with both the comfortable and the uncomfortable bodily sensations can help people to “hold them without triggering so much emotional reactivity and also so much inflamed thinking about them” (2005, p. 385). As many musicians experience performance-related pain and repetitive movement injuries, which can negatively affect their mood and performance, the body scan meditation may be helpful in navigating the various states of the body, while enhancing concentration, relaxation, and equanimity in the mind. Beautifully, in this regard, Kabat-Zinn encourages, “if you think of your body as a musical instrument, the body scan is a way of tuning it” (2005, p. 252). This technique helps enhance present-moment awareness while the physical body is invited to relax, recharge, and rejuvenate.

According to Goldstein (2013), we can use mindfulness to enhance calmness, ease, and relaxation by simply becoming more aware of the body in different positions. Goldstein encourages use of the simple, relaxing phrase “When walking, just walk” to remind us to settle back into the moment, no matter what position the body is in, stating that “without efforting or striving...we can just feel the simplicity of each movement, moment after moment: when walking, just walk...When standing, just stand. When seeing, just see” (2013, p. 262). Simplifying the mind’s attention in this way allows for greater relaxation. This simple instruction seems to be an easy, safe, and sustainable way to maintain relaxation through mindfulness during a busy life; relaxation meditations could be very helpful for busy, competitive professional adult musicians in this modern era.

**Compassion meditation.** Metta meditation, or loving kindness meditation, is traditionally used to help overcome fear, but may be used to help ease all sorts of emotional states (Salzberg, 1995). Salzberg, mindfulness teacher and author, explains that the word metta comes from the Pali root for “friend” and is also translated as “boundless friendliness” (1995);

much of metta practice, which includes repeating kind phrases towards self and others (e.g. “May you be healthy”), helps practitioners become more friendly with oneself, others, and all of life. The practice of metta meditation is excellent for boosting a sense of connection and interconnectedness (Salzberg, 1995). According to Salzberg, the “practice of lovingkindness is, in fact, the ground of mindfulness practice, requiring the same nonjudging, nongrasping, nonrejecting orientation toward the present moment, an orientation that invites and makes room for calmness, clarity of mind and heart, and understanding” (1995, p. ix). Metta helps enhance focus and concentration, while inviting a positive mind state in the present moment. Mindfulness teacher and colleague of Salzberg, Joseph Goldstein, praises metta meditation, further explaining that through continued practice:

...goodwill and kindness soften us, our minds and hearts become smooth, gentle, more pliable....there is a lessening of our many reactive judgments and comments, about ourselves as well as others. We become more patient and caring with difficulties and disturbances....We can then see more clearly what is truly skillful and unskillful in our lives, and so we make wiser choices. This, in turn, leads to more happiness, more joy....we feel more tolerant of ourselves and others. (2016, p.356)

Metta has wide-ranging benefits. This type of compassion meditation may be a valuable practice for adult musicians who are riddled with the stressors of professional competitiveness or performance anxiety, or who want to boost self-compassion and inner peace.

Furthermore, Salzberg explains that “the difference between misery and happiness depends on what we do with our attention” (1995, p. 12). According to Goleman and Davidson (2017), compassion and loving kindness meditation enhance empathic concern, activate circuits for good feelings, and are quick-acting, eliciting benefits in as few as eight practice hours (p.

121). The quick effects could be helpful for musicians trying to reduce self-criticism and increase self-compassion, as metta helps redirect attention from unwholesome to wholesome thoughts and intentions. Additionally, there are many classic benefits to metta practice, including, per Salzberg (1995), improved sleep and a serene mind; these are both excellent benefits for musicians, who need good sleep and a peaceful mind to get into a flow state for optimal performance.

### **Mindfulness for Reducing Suffering and Enhancing Awareness**

Mindfulness practices such as concentration, relaxation, and loving kindness meditations can be useful for supporting stress reduction, improved sleep, reduction of inflammation and injury, boosted concentration, enhanced body awareness, improved self-regulation, and increased self-compassion. Meditation on the breath and body scan meditations have been commonly used in research studies. Following will highlight some of the research trends and findings on mindfulness for adults.

Researchers have discovered many benefits to even short mindfulness programs. Tang et al. (2007), studied a five-day meditation training of 20 minutes per day to 40 Chinese undergraduates. The meditation sessions were part of an integrative body-mind training (IBMT), which included intention setting, breathing instruction, awareness of bodily sensations, relaxation of bodily tensions, and mental imagery. The first session included live instruction and discussion time. A 20-minute home practice CD was used the following four days. Researchers found statistically-significant results showing that this short training reduced the stress response to mental challenge, enhanced positive moods, reduced negative moods, and improved executive attention (Tang et al., 2007). The research team suggest that meditation can have quick results, and can be useful for stress management, overall health, self-regulation, and cognitive

performance (Tang et al., 2007). This shows promise for bringing breath-based meditation and relaxation techniques to professional adult musicians for the purpose of releasing stress and improving self-regulation to support their demanding rehearsal and performance schedule.

After studying a group of 100 undergraduates in a six-week training of focused meditation, Menezes et al. (2013) discovered that meditation on the breath helped these adults to improve emotion regulation and attention regulation. This study compared a secular focused meditation practice (six weekly sessions of 90 minutes, including discussion, question and answer time, and roughly 30 minutes of meditation) to secular relaxation (including supine tension-release techniques). The intervention also included a CD for daily home practice (15-30 minutes per day). Meditators were taught to both lengthen their exhalations and count their exhalations—counting to 10 repeatedly, or counting backwards from 100 (Menezes et al., 2013). Researchers proved that focused meditation “increased ability to control attention” and helped improve emotion regulation (Menezes et al., 2013). They highlighted that the “frequency of meditation practice predicted” the degree to which meditators could successfully regulate attention when distracted (Menezes et al., 2013). These findings are encouraging for bringing the secular practice of focused meditation on the breath to professional adult musicians in order to enhance self-regulation and create increased opportunity for flow states to enhance optimal performance.

According to the eight-week study of Mindfulness-Based Stress Reduction (MBSR) on 322 adults by Greeson et al. (2018), MBSR helped decrease sleep disturbance and stress-related symptoms, while improving mindfulness and emotion regulation. In addition to the weekly 2.5 hour classes, 20-45 minutes of daily home practice, and a 7-hour day retreat, participants were given written and audio resources to support their practice. This reduction in stress and support

in sleep are promising for the idea of using MBSR or some of its mindfulness components to support optimal performance in professional adult musicians.

Similarly, in a case study of mindfulness to treat insomnia, Ong and Sholtes (2010) discovered positive results from using mindfulness-based therapy for insomnia (MBT-I) in an eight-week program. The program included eight weekly sessions of 120 minutes each, a CD for daily home practices, and a day-long retreat. Each session included breath-based meditation, discussion, and behavior therapy. Of the eight-person program, one woman was studied, and the results showed increased sleep time and improved sleep quality (Ong & Sholtes, 2010). As being well-rested is important for overall health and well-being, and also supports optimal performance states, this case study shows promise that mindfulness could support professional adult musicians.

In their 140-participant study on mindfulness in working adults, Hulsheger, Feinholdt, and Nubold (2015) used a modified 2-week MBSR program which was self-administered to make it more accessible. Participants in the intervention practiced both guided and informal mindfulness practices, including body scan, a three-minute breathing exercise, metta meditation, and mindful movement (Hulsheger et al., 2015). The results showed that in just two weeks, the intervention improved sleep quality and duration, as well as mindfulness while at work (Hulsheger et al., 2015). These results further support the use of mindfulness practices for optimal performance in musicians.

### **Mindfulness for Optimal Performance in Musicians**

To date, there has been limited research done on the topic of mindfulness for professional adult musicians. Next is a summary of the most significant study on this topic by Czajkowski and Greasley (2015)—Mindfulness for Singers; this intervention included both concentration and

relaxation meditations, and its results show promise for using mindfulness to support enhanced flow states for optimal performance in future interventions for adult musicians.

In 2015, Czajkowski and Greasley studied the effects of mindfulness on eight university voice majors, to identify whether mindfulness would have a positive effect on their preparation for musical performance, skill development, and practice. Through a new eight-week Mindfulness for Singers (MfS) course—which is a shortened MBSR program—singers met for one hour per week to practice walking and eating meditation, mindful movement, body scan, and meditation on breath (Czajkowski & Greasley, 2015). Practices were geared towards singers (i.e. common areas of tension in singers were emphasized in movements and meditations, like the abdomen, neck, face, and back), and included a secular approach to theory on suffering related to judgment and criticism of self and others (Czajkowski & Greasley, 2015). Question and answer time was offered to students during each session, written reference materials were given for support, and a 10-minute daily practice was assigned for the eight weeks (Czajkowski & Greasley, 2015).

The Five Facet Mindfulness Questionnaires (FFMQ) was given pre- and post-intervention, and according to Czajkowski and Greasley (2015), the intervention produced an increase in all five facets of mindfulness. Results showed significant benefits from the MfS program. The results showed enhanced observation by participants of their surroundings and effects on body/mind; enhanced ability to describe their emotions, sensations, and opinions; enhanced awareness and focus during tasks; enhanced non-reaction, which included pausing before reacting to unpleasant stimuli and increased ability to accept criticism and be less upset; and enhanced non-judgement, which included less self-judgement and less self-chastisement (Czajkowski & Greasley, 2015). The MfS program results also showed enhanced body



awareness, enhanced control of breathing musculature, improved calm and focus before rehearsal and performance, improved efficiency in performance preparation, enhanced productivity and ability to practice longer, as well as enhanced awareness of tone and pitch when performing (Czajkowski & Greasley, 2015). The positive effects of mindfulness reached beyond practice and performance, as many participants shared that it helped improve sleep, release general stress, and improve relationships (Czajkowski & Greasley, 2015). Participants even shared that the mindfulness practices helped them get into “flow” state or the “zone of practicing” (Czajkowski & Greasley, 2015). These findings by Czajkowski and Greasley (2015) show significant promise for using mindfulness practices to enhance optimal performance in professional adult musicians. The structure and results of this study are encouraging for doing a Creative Thesis on this topic to add to the limited work done in this field.

**Additional comments on mindfulness for musicians.** Professor of piano and director of graduate studies in piano pedagogy, Jessica Johnson (2016), writes in her article that musicians often have a difficult time “identifying and responding to deficiencies in our performance abilities...leading to feelings of shame and unworthiness” (p. 20). According to Johnson, “extreme performance anxiety can derail a performance...self-compassion, on the other hand, can actually release feel-good hormones like oxytocin” (p. 21). Johnson (2016) argues that through mindfulness practices that boost self-awareness, self-regulation, self-compassion, and self-kindness (e.g. breath-based meditation, relaxation meditation, and practices of Right Speech through mindful self-talk), musicians can be more happy, at ease, and relaxed in the moment of performance.

Finally, in their study on orchestral performance and mindfulness, researchers Langer, Russell, and Eisenkraft (2009) found that “musicians who mindfully engage their performance

by adding subtle nuances enjoy themselves more and rate themselves and their orchestra as performing better” (p. 131). This is similar to the flow approach and philosophy, in which a person is absorbed in the activity and finds the activity enjoyable on its own merit. Musicians who practice mindfulness techniques may find increased joy and fulfillment in their work, as they more fully engage in their rehearsals and performances. As this topic identifies a gap in the current field of research on mindfulness, further studies are needed to gather data and assess the results.

### **Performance Anxiety in Adult Musicians**

Delving deeper into performance challenges for musicians, in her 2004 article on stress and musical performance anxiety, Kirchner argued that “many musicians are not able to perform their best as a result of an increased anxiety level” (p. 31). Kirchner argued that among a long list of recommended practices to reduce performance anxiety, musicians should primarily focus on the present moment, replace negative thoughts with positive ones, practice deep abdominal breathing and counting of the breath, regularly practice meditation and yoga, and practice active body scan relaxation techniques (2004, pp. 32-33). Although no official study was conducted, Kirchner’s article encourages the use of various yoga and mindfulness techniques for reducing performance anxiety in professional adult musicians.

Diaz (2018) surveyed the usage and benefit of mindfulness for music performance anxiety (MPA) in 253 college music students and found that weekly meditators tended to have less performance anxiety. Interestingly, Diaz suggests that finding ways to reduce MPA in professional adults is important for “presenting polished as well as representative performances that are reflective of preparation rather than nerves” (2018), as MPA often weakens the robustness and effectiveness of a performance. As MPA is a big challenge for professional

musicians, this study further supports the use of mindfulness to reduce performance anxiety in this community.

In addition to mindfulness practices, yoga practices have been studied to reduce music performance anxiety (MPA). Through a 9-week yoga intervention for 24 undergraduate and graduate music conservatory students, Stern, Khalsa, and Hofmann (2012) showed that music performance anxiety was reduced. The program included two 60-minute yoga classes per week for nine weeks, which included yoga postures (e.g. standing, seated, prone, and supine), slow yogic breathing techniques (including diaphragmatic breathing and alternate-nostril breathing), and relaxation techniques (e.g. supine body scan meditation and restorative yoga postures). Stern, Khalsa, and Hofmann (2012) suggest promise for using yoga (which shares some components of mindfulness, like following the breath and noting bodily sensations) as a way to reduce music performance anxiety in adult musicians.

Finally, in the study by Khalsa, Shorter, Cope, Wyshak, and Sklar (2009) of young adult musicians practicing yoga, relaxation, breathing techniques, and meditation, performance anxiety was decreased in participants over the six-week summer intervention. Similarly, in studies of yoga and meditation for young adult musicians, Butzer, Ahmed, and Khalsa (2016) found that increases in flow states and mindfulness states due to yoga practices were in direct correlation with decreased MPA. Although much more research is needed, these studies all show promise for using yoga, yogic breathing, relaxation, and mindfulness practices to reduce MPA in adult musicians.

### **Yoga for Optimal Performance in Musicians**

Limited studies have been performed on the effects of yoga on optimal performance in adult musicians. Among them, Butzer, Ahmed, and Khalsa (2016) studied the effects of yoga on

young adult musicians over three summers and demonstrated that yoga practices can “enhance the states of flow and mindful awareness, and reduce confusion.” These are important findings for musicians. Mindfulness, yoga, and flow states all share a common emphasis on being in both an absorbed state and a state of heightened focus and awareness (Butzer, Ahmed, & Khalsa, 2016), so programs and interventions which include mindfulness and yoga techniques may be valuable for enhancing flow states for optimal performance in professional adult musicians.

Interestingly, the Khalsa, Shorter, Cope, Wyshak, and Sklar (2009) study showed improved mood, reduced tension and anxiety, reduced anger and hostility, and reduced depression and dejection in young adult yoga participants (Khalsa et al., 2009). This study included yoga, yogic breathing techniques (including diaphragmatic breathing and alternate nostril breathing), and relaxation techniques to support the musicians in rehearsal, performance, and daily life. These techniques provided a wide range of mental and physical benefits for these young musicians. According to Brown and Gerbarg (2005), yogic breathing techniques (pranayama, in Sanskrit) “are forms of voluntarily controlled breathing” (p. 190) which can support concentration and relaxation; as these yogic breathing techniques support the states needed to enhance flow, they show promise for enhancing optimal performance in musicians. Although the relaxing and concentration-increasing benefits of yogic breathing are widely praised in yoga circles, unfortunately, there is very little literature on how yogic breathing techniques actually affect optimal performance in this population, and more research is needed in this field.

### **Limitations of the Research**

Overall, the above summarized studies share the theme that mindfulness practices can help reduce suffering (e.g. stress, anxiety, self-criticism) and boost enhanced states of awareness

(e.g. focus, self-regulation, attention, self-compassion). Repeatedly, concentration and relaxation meditations have proven to support adults in these regards, and several studies mentioned in this literature review have proven equally-important benefits from the practice of compassion meditation. Not surprisingly, there are a number of limitations found in the studies presented in this literature review. Although positive results have been shown in many of these studies, below is a summary of study limitations, an example from a study in which mindfulness did not produce positive results, and suggestions for further study in this arena. These limitations can result from methodology, demographic, and duration challenges, and a sample of limitations is highlighted below.

**Methodology limitations.** Several studies had methodology limitations. Although the Czajkowski and Greasley (2015) study did use both qualitative and quantitative data collection, the standardized questionnaires (e.g. FFMQ) measured only general mindfulness instead of mindfulness specifically in singers; further research is needed on the effectiveness of mindfulness in singers and the broader category of musicians. The Gembris, Heye, and Seifert (2018) study on orchestral musicians showed limitation in return rate of questionnaires, which affected results; a larger study group and increased compliance in data collection is needed. Finally, in the Greeson et al. (2018) study on MBSR for stress-related disorders, adult participants were self-selected and were offered either free tuition to the program or a small compensation; the monetary incentive could have affected the reported results, so a study should be conducted without this monetary incentive. Therefore, the methodology limitations of the studies require further research to be conducted for accurate results.

**Demographic limitations.** In addition to the methodology limitations, demographic limitations were identified in some of the studies in this literature review. For example, the

Czajkowski and Greasley (2015) study on Mindfulness for Singers only included eight adult participants, so the results, although positive, are not overwhelmingly robust; a larger participant group is needed in future studies. Similarly, in the Ong and Sholtes (2010) study on mindfulness for insomnia, only one woman was studied as a case study to record the benefits of mindfulness. Although the study showed promise of using mindfulness to help treat insomnia (Ong & Sholtes, 2010), this small study was limited in the number of participants, so the vast-reaching benefits of MBT-I need to be researched in a much larger group of participants to show much relevance.

Another type of demographic limitation was noted in the survey study by Moore (2013), in which undergraduate students from the USA were surveyed on their propensity towards flow states; this survey was limited to young adults in America. In future studies, it would be valuable to do more studies of adults over 30 years old, and from countries all across the world, to get more well-rounded and accurate results. Similarly, the Greeson et al. (2018) study had demographic limitations, as the participants were mostly employed and well-educated white women. In future studies, it would be important to have a more diverse demographic—racially, culturally, and economically—to get more well-rounded and accurate results.

Additionally, in the Bloom and Skutnick-Henley (2005) study of flow in adult musicians, one limitation was that researchers only studied flow in classical musicians; in the future, it would be important to extend the reach of the study to nonclassical musicians in wide-ranging musical genres. Finally, the music performance anxiety study by Diaz (2018) had demographic limitations because participants volunteered and may have been predisposed to meditation already. Therefore, the demographic limitations of the studies require further research to be conducted for accurate results.

**Duration limitations.** Some of the studies mentioned in the literature review were very short, which limited demonstration of the long-term and lasting benefits of mindfulness practices. For example, the Tang et al. (2007) study on meditation practices for young adult undergrads lasted only five days; although the study showed positive results for stress reduction and improved attention, it didn't show how long these benefits last and how much mindfulness practice may be needed to alter traits (not simply alter mind states temporarily). For this reason, an eight-week study on mindfulness for optimal performance in professional adult musicians would be valuable to fill the gap in this aspect of the academic conversation. Similarly, in the Hulsheger, Feinholdt, and Nubold (2015) study on a low-dose mindfulness intervention for working adults, the program only lasted two weeks; although researchers were pleased that the low dose intervention showed positive results in sleep quality and duration, with such a short duration, the results didn't show how long-lasting the effects of mindfulness were on this group. Longer studies would be valuable in the future to gather important data on how a low dose of mindfulness can support adults.

**Example of mindfulness not showing positive results.** Although many of the recent mindfulness studies have shown to be effective for reducing stress, pain, negative moods, and distraction, as well as improving attention, positive moods, and self-regulation, the results of some studies show that mindfulness practices don't always elicit positive benefits. For example, Tang et al. (2007) shared that they "expected better self-regulation of emotion" due to the five-day mindfulness intervention. This was a very short study, so it had its limitations, but it is interesting to note that researchers were expecting better results from the mindfulness intervention than they found. Additionally, Greeson et al. (2018) noted that although MBSR showed statistically-significant improvements in decreasing sleep disturbance and decreased

stress-related physical symptoms, researchers only discovered partial correlations between the MBSR program and changes in unwholesome thoughts, rumination, thought suppression, and emotion suppression. This shows that although mindfulness practices tend to be helpful and effective, they do not always prove to be *significantly* beneficial.

### **Further Study**

Research studies have shown that mindfulness can be effective for supporting flow states, as flow disposition can be influenced when one is in a mindful, present, concentrated state (Moore, 2013). According to Butzer, Ahmed, and Khalsa (2012), although there is very limited information on how yoga affects flow and mindfulness, it is promising that “yoga induces positive psychological states such as flow and mindfulness, which may, in turn, reduce MPA and enhance music performance” (p. 199). Further studies are needed to document how concentration meditation, relaxation meditation, and compassion meditation affect flow states for optimal performance in adults is needed for firm findings. Additionally, further research is needed to discover how yoga and yogic breathing techniques affect flow states for optimal performance in professional adult musicians. As there are many mindfulness and yoga techniques, researchers may have to target a small number of similar techniques in each study, to identify which techniques, and in what dosage, are most beneficial to this population.

### **Summary**

As this literature review demonstrates, professional adult musicians can be challenged by stress, distraction, pain, sleep difficulties, performance anxiety, and self-criticism, which can prevent them from performing optimally. As Gembris, Heye, and Seifert (2018) show, “competition in the job market and the demands made on orchestral musicians will only intensify in the years to come,” so it is important to find effective, safe, and sustainable remedies to their



common performance challenges. According to information gathered from studies in this arena, mindfulness practices show great promise for alleviating performance-related challenges in this population.

Also shown in this literature review, Goleman and Davidson (2017) propose that mindfulness practices can provide many benefits to adults, but “the specific benefits from one or another type get stronger the more total hours of practice you put in” (p. 10). After performing many research studies on mindfulness and reviewing the work of other mindfulness researchers, they conclude that “a short daily dose of meditation alters our biology and emotional life for the better” (2017, p. 17), which is a good reason to practice mindfulness. As the lives of professional adult musicians tend to be very busy and incredibly demanding, the use of short daily meditation practices to reduce stress and enhance creativity may prove helpful and sustainable for the purpose of enhancing flow states for optimal performance in this busy population of elite performers.

### **Discussion**

The purpose of my Creative Thesis is to design a safe, organized, thoughtful, rewarding, and effective mindfulness program to support optimal performance in professional adult musicians. Of all the studies mentioned in the above literature review, the study on Mindfulness for Singers (MfS) by Czajkowski and Greasley (2015) has strongly influenced my desire to create a program on mindfulness for optimal performance in professional adult musicians. Having explained several of the research-based benefits of Mindfulness for Singers in adults, I am optimistic that mindfulness practices will support instrumentalists, too. The small number of studies done on mindfulness for adult performers shows a gap in this field of study. As mindfulness increases in popularity and access in the West, its varying techniques may become

more prevalent in the lives of professional adult musicians; it is therefore important to examine and experiment with various types of secular meditation (to ensure the broadest reach), and identify the best techniques and durations for eliciting optimal performance for this population. This information may become helpful for professional adult performers in other fields (e.g. dancers, actors, spoken word performers, athletes, etc.), too, who are interested in using mindfulness practices to both reduce performance challenges and enhance optimal performance. In the discussion below, the reasoning and specific pedagogical approach to my Creative Thesis Project will be described; this discussion will include a description of the chosen mindfulness and yogic breathing techniques, secular philosophical teaching points, project length and structure, safety protocols, student assessment forms, and manuals to be included in the project.

The most significant findings highlighted in the literature review show that concentration, relaxation, and compassion meditations have proven to be helpful for adults. Specifically, breath-based meditation for boosting concentration, body scan meditation for enhancing relaxation, and loving kindness meditation for reducing self-criticism have repeatedly proven to be effective. As enhancing concentration is one of the most important aspects of cultivating a flow state for optimal performance (Beard, 2015), using breath-based meditation in a program for performers could be promising. Therefore, future study is needed specifically on these types of mindfulness practices for enhancing optimal performance in professional adult musicians to fill the gap in the research.

Additionally important to consider, according to Moral (2017), *guided* meditation is much easier and more sustainable than *self-led* meditation practice, and “helps people in giving hope and a sense of empowerment” (p.181). For increased participant compliance and to support participants in creating a sustained practice, it is important to offer *guided* mindfulness practices

in a program for busy adults. Keeping this small but significant information in mind, the key concepts of mindfulness to be used in my creative thesis project are *guided* concentration, relaxation, and compassion meditations in small, daily doses. Again, because there haven't been many studies done on guided meditation practices for performers, the creation of an eight-week guided mindfulness course will help fill this gap in the field.

Finally, mindfulness theory and yogic breathing techniques may prove to be particularly helpful for this population, but there has been very little research done in this arena. To fill the gap in the academic conversation, creating an eight-week course including secular mindfulness theory and gentle yogic breathing techniques may be valuable for my creative thesis project.

### **Creative Project Approach**

The information found in the literature review informed the intention and approach to the creative project for my thesis. In addition to the literature showing that creating a course on mindfulness for optimal performance in professional adult musicians would fill a gap in the mindfulness field, the literature led me to recognize which mindfulness techniques and assessments might be most valuable for this population, in what dosage, and for what duration. Synthesizing the information from the literature review has helped me structure my creative project to best meet the needs of my intended population. Below is a detailed explanation of my creative thesis project approach, including which techniques and philosophical teachings I've chosen to include, why I've structured the program schedule and safety protocols the way I have, my reasoning for including student assessment forms, and information on the Student's Manual and Teacher's Guide.

**Creative project mindfulness techniques.** As much of the research on mindfulness in adults has shown, concentration, relaxation, and compassion meditations tend to produce positive

results in adults. Informed by the effectiveness of these types of mindfulness techniques in the research studies cited in the literature review, my Mindfulness for Optimal Performance for Musicians (MOPM) course will include the following techniques, practices, and teaching points. Many of these techniques are included in modern mindfulness teacher training programs, so my intention is for teachers of the MOPM program to already be quite familiar with most of the following program components:

- Seated meditation alignment cues and prop usage
- Supine and seated body scan meditation
- Seated breath-based meditation (follow breath at belly and nose)
- Seated breath-based counting meditation
- Seated metta meditation (for self)
- Seated metta meditation (for others—classic categories)
- Walking meditation
- Mindful eating tips and practices
- Mindful communication tips and practices
- Secular philosophical mindfulness teachings
- Flow state tips for enhancing optimal performance

**Creative project yogic breathing techniques.** Though meditation was the main practice in the mindfulness and yoga interventions cited in the literature review, a few of the interventions incorporated yogic breathing techniques into the curriculum to help reduce anxiety, boost concentration, and enhance awareness. As a professional yoga teacher specializing in yogic breathing techniques, I believe many of these practices can not only reduce stress and boost peacefulness, but when practiced skillfully, can help practitioners more quickly drop into

meditative states. A few of the studies mentioned using yogic breathing for enhancing focus and concentration, which helps one reach a flow state for optimal performance. For these reasons, my Mindfulness for Optimal Performance course will include the following yogic breathing techniques. Although these are not commonly taught in mindfulness teacher training programs, they are the foundational breathing techniques in modern yoga classes and regularly taught in yoga teacher training programs. My intention is for teachers of the MOPM program to either already be familiar with these breathing techniques, or to learn them before teaching the program:

- Diaphragmatic breathing
- Counting breath (1:2)
- Alternate-nostril breathing

**Creative project philosophical mindfulness teachings.** Though most of the studies cited in the literature review did not include mindfulness philosophy, I was inspired by the few programs that did include secular philosophical discussion of classic mindfulness topics. As a long-time teacher of yogic philosophy, I have had many opportunities to teach in both secular and non-secular ways; these yoga teaching opportunities have stretched me professionally—helping me to discover varied ways to communicate philosophical teachings to different audiences.

Although I've been teaching concentration, relaxation, and compassion meditation techniques for over a dozen years, I have had very little experience teaching the philosophical teachings of Buddhism. In this creative thesis project, I have chosen to include several classic Buddhist philosophical teachings but to communicate them in a secular way. My intention is to challenge myself professionally and provide content that is rich and appropriate for the

participants of the MOPF program. Additionally, I've chosen philosophical teachings which are commonly taught in mindfulness teacher training courses, so that teachers of the MOPF program should be somewhat familiar with this curriculum. All of these philosophical topics have been written and will be taught without Sanskrit or Pali words, in order to better meet the needs of a modern, secular participant group. After much consideration, I believe the philosophical topics listed below can be shared with professional adult musicians to enhance their mindfulness practice and support their career.

- Five Hindrances
- R.A.I.N
- Four Right Efforts
- Four Noble Truths
- Noble Eightfold Path
- Second Arrow Sutta
- Eight Worldly Winds

**Creative project length and structure.** Although some of the mindfulness interventions which showed positive results lasted less than two weeks, a common intervention duration was about eight weeks. As the yoga teacher in a few research projects studying the effects of yoga on young adult musicians (some included in the above literature review), I have first-hand experience of interventions lasting between six and nine weeks, and showing positive results. This professional experience, along with information gathered in the literature review, led me to the informed decision of creating an eight-week mindfulness course.

Many of the interventions cited in the literature review included a weekly group mindfulness class, which typically lasted one or two hours. Having had personal experience

leading weekly classes of this length for research interventions, I feel bolstered by the findings in the literature review to include an 80-minute weekly class in my eight-week course (although the first class will be 90 minutes, to provide time for introductions). In my professional experience, this amount of class time is excellent for maintaining attention in adults, introducing enough new material to keep interest while not over-loading the mind with too much information, and encouraging some partner work to help strengthen the sangha (community). In addition to this being a reasonable amount of time for a professional adult to dedicate to a live class, this class length allows each weekly class to include:

- Welcome and class agenda description
- Brief partner mindful communication time
- Check-in on how home practice is going
- A few minutes of lecture on philosophy
- Workshop-like introduction to at least one mindfulness or yogic breathing technique (e.g. technique background, benefits and precautions, technique demonstration, pragmatic technique guidance, reflection on experience, question & answer time)
- Guided group mindfulness practice (lengthening as techniques are introduced each week)
- A journaling or silent contemplation opportunity to reflect upon experience and note shifts in practice

Home practices were also commonly used in the mindfulness studies cited in the above literature review. Many of the interventions provided participants with written meditation instructions to be practiced between weekly classroom sessions, and several of the interventions

provided audio recordings for participants to follow. In order to best meet the needs of both visual and auditory learning styles, my eight-week course will include both a written manual for students to use at home and weekly audio recordings (perhaps video, too) to practice at home. I will record the homework tracks, so the MOPM teachers will always use these recordings for consistency (and teachers will be required to listen to the recordings at least once before program launch in order to align their technique cues with mine). The homework assignment will be a 10-minute daily home mindfulness practice. Each week, students will be given a new 10-minute practice to follow (to practice the new technique they learned in class that week). After each home practice session, students will log their accomplishment on a spreadsheet, and make any pertinent notes, questions, challenges, or discoveries. These notes will not be collected by the teacher, but be used by the student to ask questions or share experiences during the weekly live group sessions. As discovered by a few of the researchers mentioned in the literature review, *frequency* of practice is more important than *duration* of practice. A little mindfulness every day can be very helpful for reducing stress and boosting calmness. For this reason, the intention of the short daily home practice is to help students build a relationship with each technique, solidify a personal practice, and (hopefully) experience benefits of practice more quickly.

Although many of the interventions sited in the literature review did not include a daylong retreat, the ones which did lasted between five and eight hours, and varied in when the daylong retreat landed in the program schedule. These daylong retreats can be helpful to solidify the group, deepen practice, thread techniques together for a more potent practice, and enrich the overall experience. From personal experience attending and teaching daylong group yoga and mindfulness retreats, I believe that having a retreat can be helpful for the teacher to delve more deeply into student questions, trigger engaging philosophical conversations, and provide



meaningful and transformational mindful communication opportunities. For these reasons, my Mindfulness for Optimal Performance for Musicians course will include a seven-hour retreat (9am-4pm, including a mindful group lunch and a break afterwards) at the end of the fourth week (halfway through the course). This retreat will include a philosophy discussion, walking meditation practice, a group mindful eating practice, a partner mindful communication session, group question and answer time, and group practice of the other techniques learned by this point in the weekly class curriculum. The intention for this daylong retreat is to support participants in a deeper, richer, and more empowered mindfulness experience, and to help encourage a sustainable life-long practice through enhanced experience and bolstered skillfulness.

**Creative project safety protocol and filtering.** Although mindfulness practices are generally considered to be safe, not all adults are ready or healthy enough to participate in an eight-week group program. According to Dobkin, Irving, and Amar (2011), all meditation programs should screen and filter participants before allowing them to register for the program. This pre-approval screening should include a phone (or video call) interview, which asks about medical history and current medical states. Dobkin, Irving, and Amar (2011) suggest that the following conditions are contraindicated for participation in a meditation course: active substance abuse, PTSD, recent trauma, schizophrenia, clinical depression, and other mental health conditions. Applicants with these conditions should be referred to local therapists for one-on-one support. To support the program filtering process, the Teacher's Guide includes a program interview sheet, and information from Dobkin, Irving, and Amar (2011) on how to properly screen and refer applicants.

Additionally, to ensure safety for the MOPM teacher and all participants, I have included basic information on meditation practices and how they typically affect healthy adults.

Additionally, I have included a list identifying signs of a normal or thriving mindfulness practice, and warning signs of a harmful practice. To support students who find themselves struggling with unmanageable thoughts, feelings, or emotions during the MOPM program, I have also included a list of emergency contacts and resources for meditation challenges. This information is placed in Chapter 1 of the Student's Manual and will be covered during the first group program session. Finally, before the Student's Manual is printed, the program teacher will need to update the emergency contact list in Chapter 1 with his or her local professional contacts. My intention with the program participant screening information and safety protocol is to ensure as safe and smooth a program as possible; my hope is to properly prepare all involved for the possible intensity of the program and techniques, and to supply user-friendly guidance and resources to safely navigate any challenges that arise.

**Creative project assessment forms.** Although no original data will be collected in this creative project, the forms used to collect data in some of the interventions mentioned in the literature review have informed which assessment tools might be valuable to participants in my course. The Perceived Stress Scale (PPS) and Five Facet Mindfulness Questionnaire (FFMQ) were most commonly used by researchers cited in the literature review. Having looked at both forms myself during my research and having had the experience of my students using these forms in interventions for which I taught yoga, I feel informed that these assessments can be valuable for participants. For these reasons, my Mindfulness for Optimal Performance for Musicians course will include informal intake and outtake copies of these forms for participants to use on the first and last sessions, encouraging the musicians to explore personal habits and note changes or improvements as mindfulness techniques are applied. These forms will not be

collected by the MOPM teachers, but will be kept by participants to support them in self-observation, self-study, and recognition of progress through the program.

**Creative project student's manual.** The main component of my creative thesis project is the Student's Manual for the eight-week MOPM program. This manual will be distributed to participants in the first session. Students will be instructed to bring it to each of the eight-week sessions and the daylong retreat. It includes the following six chapters filled with material to help participants successfully navigate the program:

- Chapter 1: Introduction and Course Preparation
- Chapter 2: Technique Information Sheets
- Chapter 3: Home Practice and Daylong Retreat
- Chapter 4: Mindfulness Philosophy
- Chapter 5: References
- Chapter 6: Additional Resources

**Creative project teacher's guide.** Each MOPM teacher will need a copy of the Student's Manual as well as a copy of the Teacher's Guide. The Teacher's Guide includes important pre-program participant screening information, curriculum lesson plans for the eight live class sessions and the daylong retreat, home practice instructions and script highlights, and additional program scheduling information for the teacher. It includes the following three chapters:

- Chapter 1: Introduction and Course Preparation
- Chapter 2: Teacher's Weekly Curriculum Lesson Plans
- Chapter 3: Home Practice and Daylong Retreat Curriculum

**Creative project intended teachers.** For the MOPM program to run, teachers of the program are required to be certified mindfulness or meditation teachers with at least two years of teaching experience. This creative project is not intended as a teacher training program; it is meant for skilled, trained, experienced mindfulness teachers who want to teach to professional adult musicians. With this intention, the curriculum includes mindfulness techniques and philosophical discussions which should be familiar to certified mindfulness or meditation teachers in the West.

Although I would like MOPM teachers to also be yoga practitioners or yoga teachers, this is not a requirement. I believe that the three simple yogic breathing techniques included in the curriculum can be easily learned by reading about each technique in the Student's Manual and listening to the home practice recordings. Practicing this way should prepare teachers to safely share these basic breathing techniques. If a non-yoga-practicing MOPM teacher would like more yogic breathing training, I would recommend s/he take some private yoga sessions with a yoga teacher well-trained in these breathing techniques (which are very common), or for a thorough training, attend a weekend workshop in yogic breathing.

Additionally, MOPM teachers may not already be familiar with Csikszentmihalyi's flow theories, so I would require them to read his book *Flow: The Psychology of Optimal Experience* before launching the MOPM program. My intention is to provide experienced meditation and mindfulness teachers with a bit of additional information, theory, and practice to properly support professional adult musicians through this new program curriculum. MOPM teachers are required to have a consistent personal meditation practice, which has been in effect for at least 2-1/2 years. My intention is to have experienced, knowledgeable teachers inspiring students from the radiance and integrity of their own personal meditation practice.

### **Conclusion**

The significance of my research in this field of study is that as it fills the gap in research, it can 1) help professional adult musicians reduce stress and increase self-awareness, which can bolster their careers through increased optimal performance states, 2) help more people have access to valuable mindfulness practices for overall well-being, and 3) help mindfulness teachers discover additional ways of sharing the techniques with modern day students. As a result of the above literature review and project justification, I believe it will be valuable to create an eight-week program on mindfulness for optimal performance for professional adult musicians for my Creative Thesis project.

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