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Stress and Burnout Among Undergraduate Music Education Majors:
An Examination of Trends, Influences, and Coping Mechanisms

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Introduction

Since 2007, the mental health of Americans has declined, and since the beginning of the COVID-19 pandemic, mental health in college aged students has plummeted (American Psychological Association, 2020). When stress is used as a noun, it is defined as “a physical, chemical, or emotional factor that causes bodily or mental tension and may be a factor in disease causation” (Merriam-Webster, n.d.). These physical, chemical and emotional reactions can manifest in a variety of ways. For example, physically the cardiovascular system is what reacts to stress. One’s heart rate may elevate, triggering the fight or flight response (American Psychological Association, 2018). When the body is stressed physically, a chemical reaction occurs; adrenaline and cortisol, the two chemicals that allow the body to react to danger, are released (American Institute of Stress, 2020). Emotionally, stress can trigger intense emotions that a person may not typically experience on a day to day basis, such as intensified worry, anger, fear, and sadness (Cleveland Clinic, 2021).

According to the American Psychological Association (APA) (2018), certain forms and levels of stress are considered typical; such stress is labeled as *acute*, stress that is temporary, in nature. For example, finishing a paper in a couple of hours to meet the deadline is acute. However, long-term stress -- or, chronic stress -- has more serious implications. This type of stress can have a lasting effect on the body, including an increased risk for hypertension, heart attack, or stroke (APA, 2018). These life-threatening issues typically relate to the cardiovascular system. However, other systems of the body physically affected by stress can include the musculoskeletal system, the respiratory system, the endocrine system, the gastrointestinal system, the nervous system, and the reproductive system (APA, 2018). In other words, long-term, chronic, stress can be a physical attack on the whole body. This physical attack is

fueled by a chemical reaction in the body. In fact, American Institute of Stress (2020) states that when stress occurs, the hypothalamus sends a signal to the adrenal glands which release two primary chemicals: adrenaline and cortisol. Adrenaline is the hormone that causes the body to initiate the fight-or-flight response. Along with the fight-or-flight response, adrenaline also releases glucose. Because stress itself does not pose immediate danger, a person is left with extra energy with no place to expel it, leaving that individual moody and unsettled (Endocrine Society, 2019). Moreover, these chemical imbalances can exacerbate other physical ailments. For example, high levels of adrenaline over time can cause “heart damage, insomnia, and a jittery, nervous feeling” (Endocrine Society, 2019, para. 4). The other primary hormone released due to stress is cortisol. According to the Endocrine Society (2021):

“Cortisol can help control blood sugar levels, regulate metabolism, help reduce inflammation, and assist with memory formulation. It has a controlling effect on salt and water balance and helps control blood pressure. In women, cortisol also supports the developing fetus during pregnancy” (para. 3).

Ultimately, stressful experiences release cortisol and too much can have negative effects on the body. It is suggested that high levels of cortisol over an extended period of time may contribute to anxiety and depression. It may also lead to the growth of tumors on the pituitary or adrenal glands. As one example, an excess amount of cortisol in blood can cause Cushing Syndrome, which has symptoms such as weight gain in face, arms, and chest; flushed face; high blood pressure; and changes in the skin (Endocrine Society, 2021). Beyond physical and chemical concerns,, there are even more changes a person can go through emotionally due to high levels of stress.

Emotional stress triggers feelings such as worry, fear, anger, and sadness (Cleveland Clinic, 2021). These emotions can be quite typical; a person may feel these emotions on a regular basis. However, once these feelings start to interfere with completing daily tasks, stress becomes a problem. Emotional stress can present itself in several ways. For example, it can present itself as a physical problem, manifesting as headaches, shortness of breath, sleeping more or less than normal, or an upset stomach. Emotional stress can also manifest as a mental or behavioral problem. Mental or behavioral symptoms of emotional stress can include feeling more emotional than normal, feeling overwhelmed, finding it difficult to focus on work, and finding it difficult to remember (Cleveland Clinic, 2021). When combined, emotional stress, alongside physical and chemical stress, can affect an individual's life in a range of ways. These effects can feel especially salient for collegiate students.

Freire, Ferradás, Núñez, Valle, and Vallejo (2018) state university students are faced with many different stressors, such as “adapting to a new environment, academic performance, overwork, or future employment, as well as others that are social and financial in nature” (Freire et al., 2018, p. 1). All of these factors have the potential to cause elevated levels of stress within college students. Students who are under a great amount of financial stress, feel pressured to succeed in academics, and feel overwhelmed by course work and time restraints may be more likely to withdraw from school (Bedewy & Gabriel, 2015; Joo, Durband, & Grable, 2008). Depending on the number of hours spent in class per week, the number of hours spent preparing for class per week, and the overall workload, stress levels can vary. Stress is to be expected in college students because there is a change in their sleeping habits, eating habits, academic workload, and new responsibilities they previously did not have (Bernhard, 2007). Certain academic majors are more likely to cause stress than others. Several studies from Koops and

Kuebel (2019), Bernhard (2007), and Demirbatir (2012) identify music education as one of those majors. According to Kuebel (2019), “higher levels of stress and symptoms of burnout have been found among music performance and music education undergraduate students when compared to both national averages and undergraduate students in other degree programs” (p. 53). According to Riley (2010), students’ sources of stress came from assignment overload, financial worry, family issues, lack of motivation, mental and physical health, and instructor attitude. In addition to those stressors, music education majors face specific stressors that most other majors would not. Performance anxiety, perfectionism, and career concerns are three stressors that are specific to the music education major (Kuebel, 2019; Riley, 2010).

The context in which music education students experience stress is also something to keep in mind. There are two types of music schools: conservatories and liberal arts. Conservatories are arts specific, meaning every student is an arts and or music student. Even after being admitted to a conservatory, there is a heavy emphasis on competition within the program, however, there are significantly fewer general education requirements to complete. Liberal arts schools have solid music programs, but there are more general education credits to be completed. Generally speaking, liberal arts schools can offer bigger university experiences such as Greek life and sports. Regardless of which type of school a music student attends, stress is a potential concern (Burrell, 2018).

Because of its effect on both student and teacher (Kuebel, 2019) wellness, stress is a major concern in music education. Because college aged students are already at a higher risk for mental health issues, prolonged stress may add to that risk. If new in-service music teachers are still recovering from stress experienced during their undergraduate degree, they are more likely to experience additional stress and burnout because of new stressors (Kuebel, 2019). The act of

teaching music alone can be stressful. If teachers are leaving the field because of stress, their students may feel stressed by the unknown of having a new teacher.

Given that there is evidence of high stress levels in undergraduate music education majors (Bernhard 2007, 2010; Koops & Kuebel, 2019; Payne, Lewis, & McCaskill, 2020), it is important to establish a current, comprehensive profile of their experiences with stress and burnout. It is also important to identify possible stress-related differences based on the type of school the students attend so as to better provide appropriate coping mechanisms. The study will identify different stressors and compare similar stressors among music education students at a range of institution types. . The end goal is to identify primary sources of stress for undergraduate music education majors, so as to provide these students with possible solutions and/or coping mechanisms that enable them to more effectively address these challenges.

Therefore, the guiding research questions for this study are:

- (1) What characterizes the stress levels among undergraduate music education majors?
- (2) What factors contribute to stress levels among undergraduate music education majors?
- (3) What coping mechanisms do undergraduate music education majors employ to deal with stress level?

Literature Review

In order to answer these research questions, it is important to examine extant literature in several areas. In particular, research on undergraduate sources of stress, health and wellness, burnout, and coping mechanisms are relevant to music education majors. Each of these four elements is important because of implications on the well-being of future educators.

Stress is a typical phenomenon to experience as a college student; however, as Bernhard (2007) states, music majors have to deal with the usual college student stressors in addition to stressors of their own. Music students have to combat performance anxiety, perfectionism, and career concerns. Bernhard (2010) reports music students are highly stressed by worrying about socializing. Castro (2016) found higher levels of stress in students who have an extensive and heavy workload. Similarly, Koops and Kuebel (2019) found music students to share the perspective that their major is more demanding than other majors. Participants in their study also reported overwhelming curriculum requirements such as many hours spent in rehearsal and the hours of preparation for those rehearsals, extensive workloads causing an imbalance of sleep, and taking courses that require hours of work for little to no credit.

Music majors experience more symptoms of stress and burnout, on average, than students enrolled in other university or college majors (Bernhard, 2005). Reasons for this may include, but are not limited to, academic success or failure, finances, rehearsing, performing, practicing, lack of socialization and sleep, and perfectionism. It is important to note stress may not cause mental illness, but can impact and potentially worsen anxiety and depression (Kuebel, 2019). Music education majors may feel stress in greater proportions than their other collegiate peers due to major specific demands in addition to the typical student demands. In addition to practicing and rehearsal time, music education majors also spend a great deal of time in field placements to meet their degree requirements (Payne, et al., 2020). The study conducted by Payne et al. (2020) measured the stress levels of 1,137 music education majors and found that on a scale from one to ten, one indicating no stress and ten indicating overstressed, music education majors averaged a stress level of 7.12. Varona (2018) reports a study found music students to

have increased levels of depression and stage fright than when they began college; they were also found to experience

stress and depression at higher rates than medical students and athletes.

Health and wellness concerns have been becoming more prevalent in the music education profession. College students, typically aged 18-23, are most at risk for development of mental illness as 75% of mental illness diagnoses are before the age of 24. A national study of mental illness of music majors found 23% of participants being treated for mental illness. Out of all the participants, it was found that the student's year in school did not make a significant difference with their mental health (Koops & Kuebel, 2019; Kuebel, 2019). Bernhard (2007) found music majors were experiencing less hours of sleep, exercise, and relaxation. Bernhard (2010) found music majors have high anxiety and stress levels, depression, relationship issues, and an abusive relationship with alcohol and drugs. A similar study by Demirbatir (2012) had similar results and found music education majors had higher levels of stress and anxiety than medical students. Despite these concerns, music students are less likely to seek help, which may lead to more complicated situations (Kuebel, 2019). Payne et al. (2020) states that the "percentage of music education students reporting issues with depression was nearly double the previously reported incidence level for college students overall" (p. 57). Physical health may also be a concern for music education students. Orzel (2011) states that the number of hours spent practicing combined with the hours spent in class and on other coursework may prohibit a music student from making healthy food choices. Instead, it's easier to choose a less healthy option because it may be all there is time for. Another wellness option is exercise which releases chemicals that help the brain stay healthy so the body can stay functional.

Burnout is the result of prolonged stress and is characterized by emotional exhaustion, depersonalization, and reduced personal accomplishment (Riley, 2010). Hamman and Gordon (2000) cite that burnout exists in five stages: the Honeymoon stage, the Fuel Shortage stage, the Chronic Symptoms stage, the Crisis stage, and the Hitting the Wall stage. The Honeymoon stage begins the burnout cycle with lowered energy levels, lack of enthusiasm, and loss of occupational satisfaction. The Fuel Shortage stage is characterized by a lack of focus, exhaustion, lack of sleep, and increased use of destructive mechanisms such as smoking and drinking. In the Chronic Symptoms stage, one is more susceptible to illness, is more likely to skip commitments, and have an attitude change towards the people in their lives. The Crisis stage of burnout may cause one to become easily angered and allow even the smallest of problems become large issues. Finally, the Hitting the Wall stage “is characterized by professional incompetence, impairment, and by ‘physical and psychological dysfunction’ (Hamman and Gordon, 2000, p. 35). Bernhard (2007) found high levels of emotional exhaustion, moderate levels of depersonalization and personal achievement. Bernhard (2010) found signs of burnout present in relation to sleep, exercise, and relaxation but not in relation to coursework, ensembles and practice, or lessons. However, a study six years later by Castro found high levels of burnout in music specific areas: patience with musical progress, imbalance of personal and musical life, and inadequate practice (2016). In the case of musicians, musical burnout may be occurring when feelings of worry accompany musical activities. Burnout also may affect memory, in which case it may become difficult for a music student to memorize their music for a performance (Orzel, 2011).

Coping mechanisms can help provide relief from stress and help avoid burnout. Kuebel (2019) advocates for developing a self-care plan to help decrease the effects stress and burnout

may have on a student. She defines self care as the “deliberate action taken to care for one’s mental, emotional, and/or physical health” (Kuebel, 2019, p. 54). Kuebel also notes that self-care is not a selfish activity, rather, it allows one to be more present in their lives. Self-care should be treated as everything else; it should be a scheduled event. SMART goals, goals that are specific, measurable, achievable, realistic, and observable, are ideal when developing a self-care plan. The goal should be reassessed periodically to see if it is working or needs adjusted to better fit the needs of the individual. Hamman and Gordon (2000) provide two coping mechanisms and break them down step by step. The first of which is a breathing exercise called balanced breathing. The purposes are to focus attention on only the breathing process and to breathe evenly through both sides of the nose so as to balance the body. The second coping mechanism is called imagery relaxation and it takes one through the process of mentally reaching their happy place. Orzel (2011) found from her study that the most highly rated coping mechanisms for stress were sleep, social time with family and friends, breathing exercises, physical activity, eating healthily, meditation, and medical attention. Varona (2018) advocates for practicing mindfulness, which is to pay attention to all detail objectively. Mindfulness can be practiced throughout the day and at any time.

Methodology

The population sample for this study was music education majors at three collegiate institutions in a large, midwestern state. A purposeful sampling strategy was used to include one mid-sized liberal arts college, one conservatory, and one large-sized Research I institution. At the time of data collection, all participating colleges were in the middle of the fall semester. After obtaining approval from the primary investigator’s Institutional Review Board (IRB Protocol # 1733125-2, See Appendix A), the survey was sent to a total of 407 undergraduate music

education majors across the three institutions in the fall of 2021. Students were invited to participate in a one-time online questionnaire created through Qualtrics. The data collection window was just over a week and a half, and a reminder email was sent three days before the cutoff date to increase the response rate. There were a total of 82 complete responses, resulting in a response rate of approximately 20%.

Survey items were partially derived from the work of Bernhard (2007). In particular, a vast majority of the demographic items and several mental health items were adapted from Bernhard (2007). For example, participants responded to the Bernhard 2007 item, “I feel emotionally drained from school.” Similar to the Bernhard study, mental health items were measured using a seven-item Likert-type scale, but Likert response options were adjusted to indicate perceived frequency, ranging from zero (never) to seven (always). Other items pertained to participants’ potential sources of stress (e.g., financial stability and relationships). Respondents also answered researcher-developed questions pertaining to mental health, physical health, and time spent on certain activities. For example, participants indicated their level of agreement with statements such as, “I am making noticeable progress in my education,” and, “I find it hard to participate in extra activities because my coursework is so demanding.” The questionnaire was piloted and reviewed by graduate students from one of the participating institutions. Edits were made to provide the participants with clearer formatting and improved clarity on certain items. A complete version of the survey instrument can be found in Appendix B.

Results

A total of 46 females (61%), 25 males (33%), and 4 nonbinary/third gender participants (5%) responded to the online questionnaire. One respondent (1%) chose not to respond to the

gender item. A majority of the participants were juniors ($n = 21$, 28%) or sophomores ($n = 21$, 28%), while 18 participants (24%) were freshmen and 16 participants (21%) were seniors. Only ten participants (13%) reported double majoring in music education and another area (e.g., music performance, music composition, world languages), and approximately 30% of participants ($n = 23$) were concurrently enrolled in their school's honor college program.

Participants also responded to a series of items regarding their time commitments. Demographic data surrounding time commitments are summarized in Table 1.

Participants responded to 48 items regarding the frequency with which they experienced stress. Some items also solicited participants' self-reported self-care frequency. These self-care items were reverse scored, and a composite well-being score was calculated. The possible range for the composite well-being score spanned 48 (optimal levels of stress with many self-care practices) to 336 (concerning levels of stress with few self-care practices). The mean overall well-being score was 255.38 ($SD = 23.13$). The minimum reported composite well-being score was 186, while the maximum reported composite well-being score was 300.

The 48 Likert-type items were also arranged into the two aforementioned sub-categories: stress and self-care. Composite scores for each of these subscales were also determined. The stress subscale included 28 items, and composite scores could range from 28 (not at all stressed) to 196 (extremely stressed). The mean composite stress score was 139.48 ($SD = 24.09$), with a range of 70 to 184. The internal reliability for the stress subscale was Cronbach's $\alpha = .91$. The self-care subscale (20 items) was less reliable and had an internal reliability of Cronbach's $\alpha = .58$. The possible range for scores on this subscale spanned 20 (infrequent/no self-care practices) to 140 (frequent/many self care practices). The mean composite self-care score was 115.82 ($SD = 6.87$), and participant responses ranged from 99 to 140.

Table 1***Undergraduate Music Education Major Time Commitments***

Variable	<i>n</i>	%
Semester Credit Hours		
21+	4	5.3
18-20	38	50.0
14-17	35	38.2
11-13	6	6.6
Class Hours (per week)		
15+	54	71.1
12-14	15	19.7
9-11	6	7.9
6-8	1	1.3
Extra Curricular Hours (per week)		
15+	6	8.0
12-14	1	1.3
9-11	4	4.9
6-8	13	17.3
3-5	35	46.7
0-2	16	21.2
Practice Hours (per week)		
15+	6	7.9
12-14	11	14.5
9-11	11	14.5
6-8	18	23.7
3-5	19	25.0
0-2	11	14.5
Homework hour (per week)		
15+	4	5.3
12-14	10	12.2
9-11	13	17.1
6-8	20	26.3
3-5	25	32.9
0-2	4	5.3
Work/Volunteering		
15+	10	12.2
12-14	5	6.7
9-11	3	4.0
6-8	7	9.3
3-5	11	14.7
0-2	39	52.0

Note. Because participants were not required to respond to all demographic questions, the total N for each variable varies.

To determine group differences in composite scores, a series of one-way ANOVA tests were administered. There was no significant difference between school type (e.g., private conservatory, medium-sized public university, Research I large-sized public university) and composite stress or self-care scores. There were also no significant differences between studio (e.g., woodwinds, percussion, strings, piano, brass) and composite stress or self-care scores, or overall GPA and levels of stress or self-care incidence. A series of independent sample *t*-tests was used to determine other group differences in composite well-being scores. Students in the honors college program reported lower overall levels of stress ($M = 137.00$, $SD = 21.72$) when compared with peers outside of the honor college ($M = 140.75$, $SD = 25.20$), $t(72) = .62$, $p = .54$. However, this difference was not significant. Both groups (i.e., honors college versus not honor college) reported nearly equal incidences of self-care practice. Similarly, those students with recitals that semester reported lower overall levels of stress ($M = 132.13$, $SD = 25.84$) when compared with peers without recitals that semester ($M = 142.94$, $SD = 22.71$), $t(72) = 1.81$, $p = .07$. Ultimately, this difference was also not significant. Again, both groups (i.e., recital versus no recital) reported nearly equal incidences of self-care.

Participants also responded to a series of items regarding their overall concerns about various aspects of their personal lives and well-being. These concerns were reported on a Likert-type scale ranging from 1 (not concerned) to 4 (extremely concerned). Overall, participants reported the most concern about their mental ($M = 3.28$, $SD = 1.38$) and emotional health ($M = 3.07$, $SD = 1.43$), while they were least concerned with family stability ($M = 1.78$, $SD = 1.13$) and romantic relationships ($M = 1.89$, $SD = 1.23$). Participant concerns are summarized in Table 2.

Table 2***Undergraduate Music Education Major Areas of Concern (N = 76)***

Variable	<i>M</i>	<i>SD</i>	Skew.	Kurt.
Mental health	3.28	1.38	.08	-1.29
Emotional health	3.07	1.43	.25	-1.27
Financial stability	2.89	1.51	.33	-1.32
Physical health	2.32	1.06	.71	.56
Peer relationships	2.05	1.13	1.03	.70
Romantic relationships	1.89	1.23	1.45	1.27
Family stability	1.78	1.13	1.61	2.08

Note. Participants indicated their level of concern with each area on a scale ranging from 1 (not concerned) to 4 (extremely concerned).

In addition to quantitative items, participants responded to two open-ended items. The first open ended question solicited participants' experiences regarding various coping mechanisms. Participant responses were coded as either positive, passive, or destructive. For example, a positive strategy might be described as one that provides a chance to reflect upon and release stress, such as "counseling outside of the university and hobbies when I have time." A passive strategy may appear as a break from what is causing the stress but is not directly addressing that stressor, such as "setting time aside to watch mindless videos and activities outside of music." A destructive mechanism might reference a behavior that is potentially

harmful to one's physical and/or mental state, such as "drugs and alcohol primarily, complaining with classmates, crying with classmates, scream yelling in my car, internalizing my impossible schedule into violent self-hate." The most frequently occurring type of coping mechanism were positive measures ($n = 34$), followed by passive measures ($n = 10$), and destructive measures ($n = 7$). Because this item was optional, not all participants responded to this prompt.

The second open-ended item asked participants to share any other thoughts regarding stress-related experiences during their music education degree. One of the most frequently mentioned issues in this section was a lack of time in a day and a lack of time spent in classes. Many participants felt that there was not enough time in a day to complete all of the necessary tasks and still take care of themselves. Others reported that there was not enough time spent in some important classes, such as methods courses, while too much time was spent in other courses, such as piano. One participant reported the following:

There is no managing stress as a music major. If you're taking time to decompress, there is almost a 100% guarantee that something is going to suffer from it. Whether it is practice time, or academics, there is just not enough time in the day to get everything done AND be a functioning and healthy human.

Another common response surrounded the amount of and level expectations, particularly from professors. Some participants felt they were being asked to give one hundred percent to every class in which they were enrolled. One participant responded shared:

I understand that college is and can be stressful. I know what I signed up for. I believe that stress is a natural part of life, but there are many types of tests we have to take that amplify these feelings, such as performance based exams and making sure every class you must take is accounted for. Another thing that accounts for this is the workload.

Since I do so much, I understand that I myself am not the average music major but even when I was just one major the workload expected from us was a lot. Every semester was at least 18 credit hours, and there was a lot of homework. You are also expected to practice at least 12 hours a week. When you move off campus, the administration does not think about students who must work part time to keep their lives stable. I had to work 12 hours a week while taking 23 credit hours, and I burnt out in 6 weeks. The stakes here are very high.

A third commonality between responses centered on feelings of guilt for not spending enough time developing performance and teaching skills. There were several students who reported amplified feelings of guilt when taking time for themselves instead of dedicating that time to their studies or practice. One student reported the following:

This major requires a lot of time spent towards improving performance and teaching abilities. My personal stress has stemmed from guilt for not constantly working on improving these skills and taking time for myself. It is hard to express when you have too much on your plate and actively fix this problem. The link between expectations of others as well as myself in teaching and performing leads to an increase in stress without forgiveness. The stress can be handled but it can be overwhelming a lot of the time.

Discussion

This study explored the stress levels and coping mechanisms of music education majors at three collegiate institutions in a large, Midwestern state. Similar to previous research, participants in this study reported high levels of stress (Bernhard, 2007, 2010; Kuebel, 2019; Payne et al., 2020). In comparison to the levels of stress reported in extant research, findings from this study appear to suggest that the stress levels of music education majors are only

increasing. This apparent uptick in frequency and intensity is occurring in spite of comparatively frequent reports of self-care; though many coping mechanisms seem to be in place, music education major stress levels are still high. As such, it seems that participants' self-care strategies may be either inappropriate or ineffective. Music education majors might explore different applications of positive coping mechanisms in order to more effectively address stress related issues. One strategy might be to implement coping strategies that serve multiple stress-relieving roles at once, to capitalize upon the limited amount of time in students' schedules. For example, simply taking a walk around campus can be a useful way to both stay physically active and give the mind time to wander wherever it would like.

Indeed, while many participants reported positive coping mechanisms, others implemented passive or destructive mechanisms for addressing stress-related behaviors. These mechanisms might provide a brief respite from the stressors, but there is not any significant reflection that those interventions positively affect one's experience with stress. Finally, the most notable destructive coping mechanisms were drugs and excessive use of alcohol, binge-eating, and large amounts of caffeine. As reported by Bernhard (2010), abuse of substances and food can be detrimental for one's body and can potentially cause physiological and psychological damage, such as eating disorders and alcohol addiction. Long-term use of destructive coping mechanisms will not only make no difference in stress levels but can have lasting negative consequences on the body and the mind. When stress levels are high, the body releases adrenaline and cortisol. Per the Endocrine Society (2019, 2021), both chemicals inhibit metabolic processes. In instances where one chooses to binge-eat as a coping mechanism for high stress levels, the metabolism may not function properly and cause weight gain. A similar phenomenon occurs when alcohol is abused. It is widely accepted that abuse of alcohol over an extended period of time can cause

liver damage. If stress levels remain high and students continue to use excessive amounts of alcohol to cope with that stress, those students run the risk of liver damage and addiction.

Based on the findings of Castro (2010) and Koops and Kuebel (2019), it was expected to see high stress levels in relation to coursework and other expectations. Several participants reported feelings of being overworked, feeling particular pressure due to professor expectations. Some of the results found in relation to time commitments were particularly concerning (See Table 1). A number of individual respondents reported more time being spent in class and on homework in a week than is possible while still maintaining a healthy diet and an adequate amount of sleep. If students are having a hard time taking care of themselves because of coursework, it is likely there is simply too much being asked of the students. Certainly, it is unrealistic to expect undergraduate music education majors to do everything with full energy and enthusiasm. When course work begins to be detrimental to one's physiological and psychological state over an extended period of time, it is excessive. There are times when it makes more sense to take a break and take care of yourself. However, based upon study participants' reported time commitments, it may be difficult to find time to take such breaks.

For many undergraduate music education majors, it appears their stress can be attributed to their heavy course load and related time commitments. Most study participants reported they were enrolled in 18-20 credit hours. At most institutions of higher education, it is suggested that for every one credit hour, three hours of study are recommended. This translates to one hour spent in class and two hours spent studying/preparing. Effectively, this means that for 18-20 credit hours, students have about 36-40 hours of study outside of class per week. In a five day school week, there are 120 hours. Each day 8-10 of those hours should be spent sleeping, leaving a remaining 70-80 hours to work with. Time in class should also be included. Theoretically, in

this scenario, one credit hour equals one hour spent in class, with a total of 18-20 hours spent in class per week, leaving a remaining 52-60 waking hours in the week. Although this initially seems decently manageable from this view point, there are several concerning issues with this scenario. The first problem is that broken down into a daily amount of hours, anywhere from 7.2-8 hours per day should be spent studying. The second problem is music major credit hours are skewed. Ensembles are heavy time requirements. For instance, at one institution, the top band ensemble is set to two credit hours. Hypothetically, that would mean two hours a week would be spent in class and four hours a week would be spent on outside practice. What actually happens is the class meets four days a week for about 5.3 hours per week. If the time spent in class to study ratio is to remain true, about 11 hours of outside practice would be required per week. The weekly hours would then move from 52-60 hours of available time to 41-49 hours per week. Including time for meals, this already is not a workable scenario, and there are other classes that follow a similar pattern. Undergraduate music education majors are typically expected to practice about 12-15 hours per week. That leaves less study time than is needed and no time for meals or self-care.

Based on the findings of Bernhard (2005), it was expected that students involved in the honors college and students giving recitals would be more stressed than students who are not involved in those activities. In contrast, in this study, it was found that honors college and recital students were slightly less stressed than other students. Though this difference was not significant, it is worth noting. Also worth noting, results from this study did not indicate any bias with regard to who and how stress affects music education students on the whole, meaning all music education majors are experiencing, on average, the same amount of stress. This stress does

not appear to stem from studio differences, year, or gender identity; the stress music education majors are experiencing is universal.

Implications and Future Directions

Given that music education majors share a universal stress, a plan must be made to help students alleviate at least some of the stress they are experiencing. One part of this plan can be to provide music education students with appropriate and healthy coping mechanisms. By showing students that they are cared about and that their thoughts have been heard is an important step to take in alleviating undergraduate music education major stress. Another part of the plan is to re-evaluate the importance and relevance to each course a music education student must take. There must be a way to make the program more manageable and livable. Finally, professors can take care to avoid scheduling assignment due dates over weekends and university breaks.

One possible coping mechanism universities can better provide for their students is counselors assigned to different colleges. The idea is to have a proportionate number of counselors to the number of students in each college. This way, students will have better access to counseling and are more likely to use it as a mechanism as it would be more available. Another potential benefit to having counselors assigned to each college is having counselors with some background in that area of study. They would be able to better relate to the specific stresses of those students, thus being able to provide better help.

Another possible coping mechanism to introduce to students is mindfulness, a practice of being aware. It seems that students are sometimes unaware of the stress they are experiencing in the moment; they do not realize until a later point in time that they are feeling stressed and overwhelmed. Mindfulness comes in many forms and should be taught to undergraduate music education students throughout their time in school. Very often, it seems that studio classes

become an hour of a master class for a student or two. These types of classes can be a good experience; however, they do not typically allow for mindful practice. Instead of every week being essentially the same class, some time should be spent within studio classes to discuss how the students are doing in relation to their practice lives. What are some struggles they are having? What are some successes they are having? Taking the time to reflect upon these ideas may provide a student with a better plan to manage their stress and determine what is the root of the cause.

Curriculum restructuring is another element to consider regarding undergraduate music education major stress. Perhaps, if there is not much willingness for change, at the very least make the degree a five year program. For institutions that have a larger number of general education requirements, it may be best to reassess which courses students already have to take for their major that would also count for a general education credit. There are some music classes required for music education majors that non music majors would be able to enroll in and pass just like everyone else. It also may be ideal to evaluate the success of students in their piano courses and the relevance of the content. A rather concerning number of respondents reported that their piano labs were insufficient in teaching them anything about the piano. They also reported that they had to sacrifice practice on their primary instruments/voice to practice piano. Perhaps it would be best to have an intro piano course for students who have never touched a piano before and only require it based upon a placement exam. Piano skills are important, but other studies should not need to be sacrificed because of them. It may also be more reasonable to make the course work match the number of credit hours. That is difficult because there is a good deal of information to learn; however, it can be presented in a way that maximizes everyone's time.

Finally, in order to combat an excessive workload, a suggestion would be to increase professor communication about assignments within the college. It may be best to limit the number of assignments that can be due within one day. These limits can be by year and class levels. For example, first year level course professors can communicate so that only three assignments are able to be due on a given day. This communication can be done through the use of technology such as the Band App or Google calendar. There should also be a reevaluation of assignments. There are assignments in every class that can be weeded out in order to maximize student effort in more important tasks.

This study revealed the universal nature of stress among collegiate music education students, confirming findings from previous researchers. Given the consistent prevalence of this issue in our field, it is imperative that stakeholders identify and implement long-term strategies for addressing these concerns, not only for the experiences of undergraduate students, but so that music education majors can continue healthy habits throughout their careers as music teachers.

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Appendix A

IRB Exemption Letter



BOWLING GREEN STATE UNIVERSITY

Office of Research Compliance

Institutional Review Board

DATE: April 13, 2021

TO: Emily Carroll

FROM: Bowling Green State University Institutional Review Board

PROJECT TITLE: [1733125-2] Stress and Coping Mechanisms Among Undergraduate Music Education Majors

SUBMISSION TYPE: Revision

ACTION: DETERMINATION OF EXEMPT STATUS

DECISION DATE: April 13, 2021

REVIEW CATEGORY: Exemption category #2

Thank you for your submission of Revision materials for this project. The Bowling Green State University Institutional Review Board has determined this project is exempt from IRB review according to federal regulations AND that the proposed research has met the principles outlined in the Belmont Report. You may now begin the research activities.

As an Exempt review, changes may be made to the study without IRB approval. However, amendments or modifications to Exempt studies that *substantively changes or alters* the criteria used to make the initial Exempt determination must be submitted to the IRB for approval.

We will retain a copy of this correspondence within our records.

If you have any questions, please contact the Institutional Review Board at 419-372-7716 or irb@bgsu.edu. Please include your project title and reference number in all correspondence with this committee.

This letter has been electronically signed in accordance with all applicable regulations, and a copy is retained within Bowling Green State University Institutional Review Board's records.

Appendix B

Stress Questionnaire

Read each prompt below. Then, indicate the frequency with which you experience each statement.

- | 1 | 2 | 3 | 4 | 5 | 6 | 7 |
|-------|---|----------------------------|---------------------------|----------------|--------------------------|-----------|
| Never | A few
times a
semester or
less | Once a
month or
less | A few
times a
month | Once a
week | A few
times a
week | Every day |
- ___ 1. My coursework demands make it difficult to participate in non-academic activities.
 - ___ 2. I take on too much extra work.
 - ___ 3. I can say no to extra things when there is already a lot on my plate.
 - ___ 4. I take time for myself on the weekends.
 - ___ 5. I power through my work and finish regardless of how I am feeling.
 - ___ 6. I stop working and take a break when I am overwhelmed.
 - ___ 7. I oversleep and miss class.
 - ___ 8. I stick to a planner or calendar to keep myself on track.
 - ___ 9. I worry that I have missed an assignment or other obligation.
 - ___ 10. I journal.
 - ___ 11. I practice meditation.
 - ___ 12. I use breathing exercises.
 - ___ 13. I use the counseling center at my university.
 - ___ 14. I make time for physical activity.
 - ___ 15. I am short tempered.
 - ___ 16. I spend time outside.
 - ___ 17. I forget to do important tasks.

- ___ 18. I procrastinate.
- ___ 19. My nutrition suffers because of my schedule.
- ___ 20. My lengthy to-do list makes it hard to focus.
- ___ 21. Music makes me happy.
- ___ 22. My professors expect too much from me.
- ___ 23. I effectively balance my social life and school life.

What other coping mechanisms are you using that were not previously mentioned?

Read each prompt below. Then, indicate the frequency with which you experience each statement.

- | 1 | 2 | 3 | 4 | 5 | 6 | 7 |
|-------|---|----------------------------|---------------------------|----------------|--------------------------|-----------|
| Never | A few
times a
semester or
less | Once a
month or
less | A few
times a
month | Once a
week | A few
times a
week | Every day |
- ___ 24. I feel emotionally drained from school.
- ___ 25. I am exhausted at the end of the day.
- ___ 26. I dread getting up in the morning for another day of classes and school work.
- ___ 27. I am understanding of my friends' and classmates' feelings.
- ___ 28. I do not treat my peers well when I am stressed or irritated.
- ___ 29. I am exhausted after working with others all day.
- ___ 30. I handle my own problems with grace.
- ___ 31. I respond to my peers' problems effectively.
- ___ 32. I cannot find motivation to do my school work.
- ___ 33. I struggle to find time to practice my instrument/voice.

- ___ 34. I find myself feeling irritated.
- ___ 35. I maintain high levels of energy and feel motivated.
- ___ 36. I worry about missing more days than the attendance policy allows.
- ___ 37. I prioritize school work over my mental health.
- ___ 38. I question whether I will graduate in four years.
- ___ 39. I meet the academic goals I set for myself.
- ___ 40. I do not get the help I need from my academic advisors.
- ___ 41. I do not get adequate sleep.
- ___ 42. I struggle to find time to eat a healthy meal.
- ___ 43. I am pulled in too many directions.
- ___ 44. I deal with my emotional problems well.
- ___ 45. I blame others for my problems.
- ___ 46. I am reenergized after working with my peers.
- ___ 47. I am a positive influence on my peers.
- ___ 48. I work too hard for school.

Demographics

1. Year in school
2. Estimated graduation year
3. GPA
4. Studio
5. Gender identity
6. Official number of credit hours enrolled in this semester
7. Did you, or are you, planning to have a recital this semester?
8. Are you double majoring? If yes, please indicate what your second major is.

9. Are you in the honors college?

Hour averages

- | | 0-2 | 3-5 | 6-8 | 9-11 | 12-14 | 15+ |
|--|-----|-----|-----|------|-------|-----|
| ___ 1. Average hours in extracurriculars | | | | | | |
| ___ 2. Hours in class per week | | | | | | |
| ___ 3. Average hours of homework per week (not including practice) | | | | | | |
| ___ 4. Hours of practice per week | | | | | | |
| ___ 5. Working/volunteering per week | | | | | | |
| ___ 6. Self-care hours per week | | | | | | |
| ___ 7. Sleep each night | | | | | | |

Meals eaten per day

3+	2	1 or less
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Please indicate your level of concern with the following:

- | 1 | 2 | 3 | 4 |
|----------------------------|--------------------|----------------------|---------------------|
| Not concerned | Slightly concerned | Moderately concerned | Extremely concerned |
| ___ 1. Physical health | | | |
| ___ 2. Mental health | | | |
| ___ 3. Emotional health | | | |
| ___ 4. Financial stability | | | |
| ___ 5. Family stability | | | |
| ___ 6. Peer relationships | | | |

____ 7. Romantic relationships

Do you have any other external sources of stress? If yes, please indicate what those are.

In the space below, please share your thoughts regarding your experiences with stress as a music education major.