

Wellness Resources at Postsecondary Music Schools:
A Survey of How This Information is Being Offered

by

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A Research Paper Presented in Partial Fulfillment
of the Requirements for the Degree
Doctor of Musical Arts

Approved March 2016 by the
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May 2016

ABSTRACT

Musicians have the potential to experience health problems related to their profession. The National Association of Schools of Music (NASM) requires schools to provide information about wellness. There are 634 degree-granting, not for profit, NASM accredited postsecondary music schools in America. This study examined the types of wellness resources offered at 387 of these schools or 60%. Wellness information was divided into three categories: physical, psychological and hearing. The types of resources offered, category of information and the size of the school were considered. Schools were emailed and their websites were searched for wellness information.

Forty-eight percent of the schools had website information, 32% offered wellness workshops, 16% of the schools offered wellness courses, and 32% of the schools covered wellness information through other methods. Nineteen percent of the schools said that they did not offer courses or workshops and did not say how they are meeting the requirement. Physical wellness information was most widely available, followed by hearing information, while psychological wellness information was harder to find. Smaller schools were less likely to offer wellness courses but otherwise the size of a school did not play a significant role in the types of wellness resources they were able to offer.

Based on the findings, more schools should incorporate wellness information on their websites and hold wellness workshops. Psychological wellness information should be more widely available. Schools should advertise the wellness information that they offer so that students are aware of the options available to them.

ACKNOWLEDGMENTS

I would like to thank Dr. Feisst, Dr. Sullivan, and Dr. Caslor for taking the time to be on my committee and for their valuable input. I would especially like to thank Dr. Spring and Dr. Gardner for their guidance and for the numerous opportunities that have allowed me to grow during my time at Arizona State University.

Thank you to everyone who had faith in my abilities. I would not have made it here without you. Most of all I'd like to thank my family, whose support made everything possible.

TABLE OF CONTENTS

	Page
LIST OF TABLES	v
LIST OF FIGURES.....	vi
CHAPTER	
1 INTRODUCTION	1
2 LITERATURE REVIEW	3
Physical Wellness	3
Psychological Wellness	8
Hearing Wellness.....	12
Music Students.....	16
Music Wellness Resources	19
3 METHODS AND MATERIALS	25
4 RESULTS	28
Website Information	28
Courses.....	29
Workshops	30
Other Resources	31
5 DISCUSSION	33
6 SUGGESTIONS FOR SCHOOLS	37
Resource Type Suggestions.....	37
Content Suggestions	39
7 CONCLUSION	45

CHAPTER	Page
REFERENCES	46
APPENDIX	
A EMAIL SENT TO SCHOOLS	50

LIST OF TABLES

Table		Page
1.	Types and Categories of Website Information	29
2.	Types and Categories of Wellness Courses	30
3.	Other Ways of Distributing Wellness Information	32

LIST OF FIGURES

Figure	Page
1. Resources Offered at Different Sized Schools	34

Chapter 1

Introduction

Musicians have the potential to experience health issues related to their profession. Physical problems, including hearing damage, and psychological problems related to practicing or performing are possible. For this reason, education of young musicians should address ways to maintain health.

In 2001, NASM became aware of the importance of musician wellness and decided to require that schools provide information about wellness. At first, they encouraged schools to give information about how to connect with medical professionals and now they also require schools to provide information about potential problems in addition to prevention strategies.¹

The 2015-2016 NASM handbook states:

Students enrolled in music unit programs and faculty and staff with employment status in the music unit must be provided basic information about the maintenance of health and safety within the contexts of practice, performance, teaching, and listening.

For music majors and music faculty and staff, general topics include, but are not limited to, basic information regarding the maintenance of hearing, vocal, and musculoskeletal health and injury prevention. . . . Beyond the provision of basic general information, and the identification of available resources, decisions regarding topic areas and breadth and depth are made by the institution, and normally are correlated with the nature, content, and requirements of specific areas of specialization or specific courses of study.²

¹ Deborah L. Pierce, “Reaching Beyond Traditional Boundaries: The Librarian and Musician’s Health,” *Notes - Quarterly Journal of the Music Library Association* 67, no. 1 (2010): 52.

² National Association of Schools of Music, “Handbook 2015–16,” last modified December 14, 2015, http://nasm.arts-accredit.org/site/docs/Handbook/NASM_HANDBOOK_2015-16.pdf.

Psychological wellness information is not mentioned in the NASM handbook so schools are not required to provide information about this topic. The guidelines allow each school to decide what they want to cover and how to deliver wellness information. Some schools have created courses on musician wellness and several studies have shown that these courses can be effective. Other schools have information on their websites or hold wellness workshops. Some schools provide a combination of these or additional resources.

The purpose of this study is to examine what type of wellness resources are being offered at American music colleges and universities. The author contacted NASM accredited schools and asked if they offered courses, workshops, or other information about wellness for musicians. Music school websites were also examined for wellness information. The resulting study examines how wellness information is being offered in the hope that the conclusions drawn may help schools to improve the way they distribute this information.

Chapter 2

Literature Review

The literature review will begin by examining English language publications concerning the three categories of wellness: physical, psychological, and hearing. The types of injuries and problems that musicians may experience are not the main focus because many other scholars have already covered this information in great detail. The main purpose of this document is to show why each category is important to address when delivering wellness information. Next, relevant literature concerning music students and their health and attitudes towards their health will be addressed because this is the population to which this wellness information is being delivered. Finally, research about music wellness resources such as courses and their effectiveness will be presented.

Physical Wellness

Physical wellness was the first wellness area to be studied extensively. There are numerous studies showing that musicians are at a high risk of developing physical injuries at some point during their careers.

In 1988, Martin Fishbein et al. developed a self-completion questionnaire in conjunction with the International Conference of Symphony and Orchestra Musicians (ICSOM). ICSOM delegates distributed the questionnaires to the musicians of 48 orchestras. The researchers received completed questionnaires from 2,212 musicians and 82% of them reported a medical problem that affected their performance. Seventy-six percent indicated that their medical problem severely affected their performance and 36%

of them reported having four problems that severely affected their performance.³ This study is important because of the large sample size and it clearly shows that performers are susceptible to injuries and other medical issues that affect their performances.

In 2007, Antonio M. Abréu-Ramos and William F. Micheo studied musculoskeletal problems in a sample of 75 professional orchestral musicians. The musicians were recruited voluntarily and they filled out a questionnaire to provide information about demographics, instrument played, and history of musculoskeletal problems. After filling out the questionnaire, the musicians underwent an upper-body neuromusculoskeletal examination. The researchers found that 81% of the musicians reported a musculoskeletal problem that affected their playing. Of those reporting musculoskeletal problems, 84% said that their problem originated because of playing their instrument.⁴ Musculoskeletal problems are unfortunately, extremely common. In a study by Christopher Wynn Parry of over 1000 musicians who came to a medical clinic, poor posture, technique, poor physical conditioning, and misuse of the body accounted for 52% of musculoskeletal problems in all musicians and 70% of the problems in students.⁵ Posture, technique, physical conditioning, and the way the body is used are all

³ Martin Fishbein et al., “Medical Problems Among ICSOM Musicians: Overview of a National Survey,” *Medical Problems of Performing Artists* 3, no. 1 (1988): 5.

⁴ Antonio M. Abréu-Ramos and William F. Macheo, “Lifetime Prevalence of Upper-Body Musculoskeletal Problems in a Professional-Level Symphony Orchestra: Age, Gender, and Instrument-Specific Results,” *Medical Problems of Performing Artists* 22, no. 3 (2007): 97.

⁵ Christopher B. Wynn Parry, “Managing the Physical Demands of Musical Performance,” in *Musical Excellence*, ed. Aaron Williamson (New York: Oxford University Press, 2004), 49.

factors that the musician can control, making many of these musculoskeletal problems preventable.

Several researchers have studied college music students with similar results. Christine Guptill et al. administered a questionnaire to 106 music majors of three large instrumental ensembles. They found that 87.7% of the students reported experiencing a playing-related injury at some point in their lives.⁶ Through an online survey of 243 music conservatory students, Gunter Kreutz et al. found that 53% reported musculoskeletal pain.⁷ Alice G. Brandfonbrener studied 330 freshman music majors who voluntarily filled out an objective questionnaire and found that 79% reported experiencing playing-related pain. Brandfonbrener was not able to identify any factors linked to playing-related pain; however, other studies have found some factors linked to playing-related pain.⁸

In 2008, Rebecca Barton et al. studied a sample of 97 college music students through administering two questionnaires. In this study, 82% of the females and 50% of

⁶ Christine Guptill, Christine Zaza, and Stanley Paul, "An Occupational Study of Physical Playing-related Injuries in College Music Students," *Medical Problems of Performing Artists* 15, no. 2 (2000): 86.

⁷ Gunter Kreutz, Jane Ginsborg and Aaron Williamon, "Student Musicians' Health Problems and Health-Promoting Behaviours," *Medical Problems of Performing Artists* 23, no. 1 (2008): 3.

⁸ Alice G. Brandfonbrener, "History of Playing-Related Pain in 350 University Freshman Music Students," *Medical Problems of Performing Artists* 24, no. 1 (2009): 30.

the males reported pain. Other studies have also shown that there is a gender difference in playing-related injuries.⁹

Some researchers have tried to link the instrument played to the type of injury that musicians experience. In her study of 97 college music majors, Barton found that pain was most common in keyboardists and string players. Ninety-one percent of keyboardists and 88% of string players reported pain as opposed to 67% of percussionists, 57% of woodwinds, and 46% of brass players.¹⁰ Kreutz et al. did not find significant links between the instrument played and health problems, but instead found that poor posture and fatigue were more linked to experiencing pain.¹¹ Based on their findings, they suggest that emphasizing the importance of physical health to prevent fatigue and teaching good posture should take priority over issues that are specific to particular instruments or voices.¹²

Several studies have examined the health of young musicians. In 2004, Kristen R. Burkholder and Alice G. Brandfonbrener published a study about performance related injuries in 314 musicians age 18 and younger that came to a specialized performing arts clinic. They discovered that young musicians are not immune to playing-related disorders, with musculoskeletal pain syndrome and excessive muscle tension being the

⁹ Rebecca Barton et al., “Occupational Performance Issues and Predictors of Dysfunction in College Instrumentalists,” *Medical Problems of Performing Artists* 23, no. 2 (2008): 72–76.

¹⁰ *Ibid.*, 75.

¹¹ Kreutz, Ginsberg, and Williamon, “Student Musicians' Health”, 3.

¹² *Ibid.*, 11.

most frequent problems.¹³ Sonia Ranelli et al. studied musculoskeletal problems in 717 young musicians between the ages of 7 and 17. The musicians were from 11 different schools and filled out questionnaires while in class. They found that 67% of students reported a playing-related musculoskeletal problem at some point, and 56% reported experiencing one in the last month. Gender, music exposure, and instrument played were all risk factors.¹⁴ Ranelli also noted that the location of problems in children was similar to findings for adults in other studies.¹⁵ Young musicians are more at risk in some ways because they are still growing and they may be playing an instrument whose size is designed for adults. Since young musicians are learning habits that will affect their playing for the rest of their careers, it is important that their teachers show them the best ways to prevent injuries and take care of themselves.

Overall, it is clear that many musicians, no matter their age, struggle with playing-related pain. Factors such as gender and instrument may also play a role, but the literature is not consistent. Ideally, teachers would teach prevention strategies to young students which may help to prevent some problems. Not every physical injury is preventable; certain aspects such as required repertoire and anatomical variation are wild cards and may increase risk of injury no matter what preventative measures are taken.

¹³ Kristen R. Burkholder. and Alice G. Brandfonbrener, “Performance-Related Injuries Among Student Musicians at a Specialty Clinic,” *Medical Problems of Performing Artists* 19, no. 3 (2004): 116.

¹⁴ Sonia Ranelli, Leon Straker and Anne Smith, “Playing-Related Musculoskeletal Problems in Children Learning Instrumental Music: The Association Between Problem Location and Gender, Age, and Music Exposure Factors,” *Medical Problems of Performing Artists* 26, no. 3 (2011): 123.

¹⁵ *Ibid.*, 136.

Nevertheless, at least some injuries are preventable, hence the need for prevention information to be widely available.

Music colleges need to teach their students about the importance of maintaining health and preventative strategies. If schools are able to impress upon their students the importance of wellness, they will in turn pass this information on to their students. Providing wellness information is a crucial responsibility, especially if it leads to prevention in the first place.

Psychological Wellness

The physical side of wellness is one of the most obvious, but musicians also need to have the skills to cope with the psychological side of wellness in order to succeed in their chosen field. When children are learning to play instruments, the ones that find performing too stressful may choose not to continue studying music. The ones that can cope with stress better or who find performing rewarding may be more likely to continue. When arriving at college, stress levels may increase and coping skills become even more important. There are relatively few studies about the psychological health of musicians and its influence on a musician's performances. Performance anxiety is an exception.

Performance anxiety is the most common psychological issue that musicians face. The study of Fishbein et al. involving 2212 orchestral musicians showed that performance anxiety was the most prevalent severe medical problem affecting performance. Twenty-four percent experienced performance anxiety and 16% reported

severe performance anxiety.¹⁶ Performance anxiety is an issue with which many musicians are familiar. It is a primarily psychological issue that can affect the physical body and everyone reacts differently. Attitudes also play a role because in the same situation one student may eagerly anticipate an upcoming recital while another student may experience dread. Since everyone reacts to stress differently, there is no single way to treat performance anxiety. It would be useful to teach students about how they might react to stress in performance situations and provide strategies to help them cope with their reactions. With preparation and psychological insight, students can learn to embrace their performance anxiety and turn it into the edge of a fine performance.

Depression is also a potential issue that can affect musicians. When Fishbein et al. received questionnaires from 2212 orchestral musicians, 17% reported depression.¹⁷ According to the National Institute of Mental Health, approximately 6.7 percent of the US population aged 18 years or older experience depression in any given year.¹⁸ Anna Park et al. examined why music majors continue to study music despite the risk of injuries and this study may provide some insight. The qualitative study collected data from nine students that participated in two focus group sessions. Although the sample was small, a common theme was that students stated that music provided them with a

¹⁶ Fishbein et al., “Medical Problems Among ICSOM Musicians,” 6.

¹⁷ Ibid.

¹⁸ National Institute of Mental Health, “Major Depression Among Adults,” accessed January 27, 2016, <http://www.nimh.nih.gov/health/statistics/prevalence/major-depression-among-adults.shtml>.

sense of identity and self-worth.¹⁹ Musicians are constantly critiquing their music making in an attempt to improve. If they take criticism personally then they are also criticizing themselves. It is necessary for musicians to learn not to take criticism personally and to separate their self-identity from their music. Learning about this concept can help students to develop a healthier attitude towards music, which will help their careers in the long-term.

Colleges are a good place to educate music students about taking care of their psychological health. In a study by Claudia Spahn et al., health conditions and attitudes towards health were compared between 247 music students, 266 medical students, 71 psychology students, and 71 sports students. Questionnaires were distributed during a mandatory event and participation was voluntary. The researchers found that music students had a significantly higher level of anxiety than the other student populations did. Nevertheless, the study also showed that music students were more convinced that they could influence their own health.²⁰ If students believe that they can influence their own health, they may be more open to learning about preventative strategies and other ways that they can take care of themselves.

Louise Montello notes the high percentage of performance related disorders found in US music colleges including performance anxiety, depression, and substance abuse.

¹⁹ Anna Park, Christine Guptill, and Thelma Sumsion, "Why Music Majors Pursue Music Despite the Risk of Playing-Related Injuries," *Medical Problems of Performing Artists* 22, no. 3 (2007): 91.

²⁰ Claudia Spahn, Sandra Strukely, and Andreas Lehmann, "Health Conditions, Attitudes Toward Study, and Attitudes Toward Health at the Beginning of University Study: Music Students in Comparison with Other Student Populations," *Medical Problems of Performing Artists* 19, no. 1 (2004): 26.

Through qualitative research using a questionnaire, Montello uncovered several reasons.²¹ First, being a music student is stressful because evaluations are constant and mistakes may lead to humiliation and rejection. Leaving home to go to college is also a stressful experience. Second, many music students are sensitive, introverted and do not know how to cope with extreme emotions in unfamiliar environments. Third, the life of a music student may be overwhelming with classes, lessons, ensembles, rehearsals, and practicing.²² Montello also suggests that many musicians are “polarized perfectionists” who often tie their self worth into how their performances are evaluated by others, which may lead to over-practicing and depression when a performance does not go well.²³ Giving students the tools that they need to deal with stress could help them maintain psychological health.

Certain psychological issues may also have a role in influencing physical issues. Eckart Altenmüller and Hans-Christian Jabusch believe that there may be a psychological component to developing focal dystonia, which is characterized by a loss of voluntary motor control in specialized movements. Although only 1% of musicians develop focal dystonia, it is hard to treat and has ended performing careers.²⁴ The researchers note that

²¹ Louise Montello, “The Performance Wellness Seminar: An Integrative Music Therapy Approach to Preventing Performance-Related Disorders in College-Age Musicians,” *Music and Medicine* 2, no. 2 (2010): 109. doi:10.1177/1943862110364231.

²² Ibid.

²³ Ibid., 112.

²⁴ Eckart Altenmüller and Hans-Christian Jabusch, “Focal Dystonia in Musicians: Phenomenology, Pathophysiology, Triggering Factors, and Treatment,” *Medical Problems of Performing Artists* 25, no. 1 (2010): 3.

anxiety and perfectionist tendencies are more common in musicians with focal dystonia.²⁵ It is crucial for musicians to learn to manage their anxiety and perfectionism for a healthy career as a musician.

Hearing Wellness

Many musicians experience hearing damage and this hearing damage may have a devastating impact on their careers. According to the National Institute of Occupational Safety and Health (NIOSH), hearing loss is preventable but once the damage is done it cannot be repaired. The effect of sound on hearing has to do with exposure levels, duration of exposure, and individual biological factors.²⁶ Although medical practitioners have been aware of this fact for some time, there is not yet widespread awareness among musicians. Research in this field only began in earnest around 2009 so there is still much to learn. Nevertheless, what does exist points to a need for education about the impact that a career in music may have on hearing.

In 2009, E. J. Jansen et al. studied the hearing of 241 musicians from five symphony orchestras who participated on a voluntary basis.²⁷ They used audiological

²⁵ Ibid., 8.

²⁶ The *NIOSH Science Blog*; “These Go to Eleven,” blog entry by Thais Morata and Ryan Johnson, January 25, 2011, <http://blogs.cdc.gov/niosh-science-blog/2011/01/25/music/>.

²⁷ E. J. Jansen et al., “Noise Induced Hearing Loss and Other Hearing Complaints Among Musicians of Symphony Orchestras,” *International Archives of Occupational and Environmental Health* 82 (2009): 163. doi: 10.1007/s00420-008-0317-1.

tests to create audiograms.²⁸ A notch in an audiogram's graph indicated that a person was not able to hear a particular frequency well, and therefore showed signs of noise-related hearing loss. Their findings indicated that most musicians could be categorized as having normal hearing, but their audiograms showed notches at 6 kHz, which is an indication of noise-induced hearing loss.²⁹ Other hearing problems such as tinnitus, hyperacusis, and diplacusis were also found more frequently than was expected in the general population.³⁰ Overall, musicians showed more noise-induced hearing loss than could be expected due to age and gender.³¹

In 2009, Jennifer Stewart Walter studied the sound exposure levels experienced by university wind band members to see if exposure changed based on the location of the musician. She used NIOSH guidelines to define an allowable daily dose of sound.³² The rehearsals took place in a 2,484 square foot room with acoustical tiles on two walls and heavy velvet curtains completely covering three of the walls. After evaluating one week of rehearsals for three different ensembles, Walter found that 52% of students

²⁸ An audiogram is a means of recording the results of a hearing test. It includes a table and a graph for each ear showing how well sounds can be heard at various frequencies.

²⁹ *Ibid.*, 163.

³⁰ Tinnitus is the perception of noise or ringing in the ears. Hyperacusis is characterized by an increased sensitivity to certain frequencies or volume ranges of sound. Dipacusis is the perception of a single auditory stimulus as two separate sounds that may differ in pitch or duration.

³¹ *Ibid.*, 153.

³² NIOSH defines the maximum daily dose of sound as 85 decibels, A-weighted for 8 hours. For every 3 dB increase in frequency, the allowable exposure time is reduced by half. Therefore at 100 dB, the allowable exposure time is 15 minutes.

experienced one or more rehearsals with doses exceeding 100% of safe levels. Thirty-seven percent of the musicians were receiving a mean daily dose of more than 100% as determined by NIOSH standards.³³ The university where the study was conducted now requires that each student participating in ensembles has a hearing test each semester.³⁴

In 2010, Kris Chesky studied sound exposure levels generated during the rehearsals of two college wind bands for one semester. He also used the NIOSH guidelines to define an allowable dose.³⁵ The rehearsals took place in a 3,000 square foot room designed for large ensembles. He found that for the entire population, the mean dose per rehearsal was 109.5% of safe levels, but doses varied from 53.8% to 166.9%.³⁶ It is extremely concerning that the sound exposure dose during a single rehearsal can exceed 100% of safe levels. That does not even consider the hours of practicing and other rehearsals in which students participate. This study is limited because it was conducted at only one institution. However, it shows the need for music schools to evaluate their own spaces, especially ensemble rehearsal rooms, for sound level exposure. Due to the results of his study, Chesky petitioned NASM to include hearing loss prevention in their guidelines and they have since done so.³⁷

³³ Jennifer Stewart Walter, "Sound Exposure Levels Experienced by University Wind Band Members," *Medical Problems of Performing Artists* 24, no. 2 (2009): 63–64.

³⁴ *Ibid.*, 69.

³⁵ Kris Chesky, "Measurement and Predictions of Sound Exposure Levels by University Wind Bands," *Medical Problems of Performing Artists* 25, no. 1 (2010): 29.

³⁶ *Ibid.*, 30.

³⁷ *Ibid.*, 34.

In 2010, S. L. Phillips et al. studied noise-induced hearing loss in 329 student musicians. Forty-five percent showed a notch in their audiograms at 6 kHz or 4 kHz, which is a sign of noise-induced hearing loss. There was a significant increase in the frequency of notching in students who practiced more than two hours a day.³⁸ This finding is concerning considering many college musicians practice more than two hours a day. They also found that the frequency of noise-induced hearing loss was greater in musicians than in the general population, and more similar to that of industrial workers.³⁹

Noise-induced hearing loss is a serious problem for musicians and it may slowly accumulate without them realizing that permanent damage is occurring. It might be challenging to address hearing wellness at music schools because little is actually known about the sound levels generated and each institution will be different.⁴⁰ Every school needs to take responsibility to evaluate their own spaces and educate their students about hearing protection.

³⁸ S. L. Phillips, V. C. Heinrich and S. T. Mace, "Prevalence of Noise-Induced Hearing Loss in Student Musicians," *International Journal of Audiology* 49, no. 4 (2010): 309. doi: 10.3109/14992020903470809.

³⁹ *Ibid.*, 314.

⁴⁰ Kris Chesky, "Schools of Music and Conservatories and Hearing Loss Prevention," *International Journal of Audiology* 50 (2011): S35. doi: 10.3109/14992027.2010.540583.

Music Students

Since these wellness resources are intended for music students, it would be useful to survey the relevant literature to learn more about music students and their attitudes towards health and wellness.

Kreutz et al. found that college music students seemed to live an average healthy lifestyle similar to that of the general population.⁴¹ Education for students should stress that being physically healthy and fit will help prevent injuries in addition to helping them to perform at their peak level.

Aaron Williamon and Sam Thompson studied 63 music performance conservatory students to see where they learn about health information. The students were required to take a music and health seminar and questionnaires were administered at the beginning of the seminar. The researchers found that students were much more likely to go to their instrument teacher for health information than to a specialist clinic for musicians.⁴² They suggested that this reliance on instrumental teachers may be due to a lack of knowledge about alternative sources of information.⁴³ It may also indicate that musicians are wary of working with medical professionals who might tell them that they need to take a break from practicing.

In their study of college music students, Guptill et al. found that 42% of the students with injuries had consulted a medical professional. However, only 25% of the

⁴¹ Kreutz, Ginsberg, and Williamon, "Student Musicians' Health", 10.

⁴² Aaron Williamon and Sam Thompson, "Awareness and Incidence of Health Problems among Conservatoire Students," *Psychology of Music* 34, no. 4 (2006): 421.

⁴³ *Ibid.*, 425.

students followed through and actually received treatment from a medical professional. Eighty-seven percent of the students who had sought treatment from a medical professional were satisfied with the outcome.⁴⁴ This study shows a large gap between the students who saw a medical professional and those who decided to be treated. They also noted that of those who saw a medical professional, 97% had experienced playing-related pain. So pain seems to drive music students to see medical professionals. However, 33% of the students had experienced numbness, tingling, or weakness and did not seek medical treatment. They suggested that more education about the potential severity of symptoms such as numbness or weakness is required.⁴⁵ Ignoring symptoms is a serious issue because a delay in treatment could allow a problem to become chronic.

Why don't more music students consult medical professionals? Guptill et al. sought to find what music students look for in medical professionals. While administering a survey, they used an open-ended question that 53 students answered. The researchers discovered that students want treatment that will allow them to keep playing and they want to be involved in their own treatment. Students also look for compassionate medical professionals who have specialized knowledge about the needs of musicians.⁴⁶ They noted that the music students seemed to have preconceptions about

⁴⁴ Guptill, Zaza, and Paul, "Occupational Study," 86.

⁴⁵ *Ibid.*, 89–90.

⁴⁶ Christine Guptill, Christine Zaza, and Stanley Paul, "Treatment Preferences of Injured College Student Musicians," *OTJR: Occupation, Participation and Health* 25, no. 1 (2005): 5. doi: 10.1177/153944920502500102.

health professionals and how they approach treating musicians.⁴⁷ Music schools can help their students by providing information about how to reach medical professionals that meet these requirements when possible. Also, some students do not have health insurance and may not be able to afford treatments that could benefit their health. This issue is a challenging one to solve and perhaps schools could create partnerships with medical professionals who can offer services to their students at a discount.

Throughout history, musician injuries were a topic shrouded in secrecy.⁴⁸ More recently, musicians have started to become more open about their health but many musicians may still be reluctant to talk about their problems. The research of Park et al. showing that musicians often gain a sense of identity and self-worth from music may provide some clues as to why musicians are often reluctant to talk about their problems.⁴⁹ An injury could have the potential to end a career in music, and therefore threaten their identity as a musician. There may also be a fear that injuries lead to time away from playing, and that may give their competition time to get ahead. Nevertheless, ignoring injuries could potentially lead to serious outcomes such as the end of a music career. Clearly, a lot of work has to be done to help students to have a healthy relationship with music.

Pierce, who works as a librarian at a music college, found that many of the students with whom she talked felt that they could not confide in their studio teachers

⁴⁷ Ibid., 8.

⁴⁸ Pierce, "Reaching Beyond Traditional Boundaries," 50.

⁴⁹ Park, Guptill, and Sumsion, "Why Music Majors Pursue Music," 91.

about their injuries. She stressed the importance of a neutral environment where students could explore these issues.⁵⁰ This finding is intriguing because of Williamon and Thompson's study showing that studio teachers were the resource that students were most likely to use for wellness information.⁵¹ If many students are reluctant to approach their studio teachers about wellness information, where do they go to find this information?

Park et al. found that student musicians are well aware of the potential for injury and feel that having one is normal for a musician.⁵² They also tend to play through their pain because of their passion for music or to achieve their goals.⁵³ These findings are concerning and show a need for education. Pain due to an injury should never be considered normal and it should indicate that something needs to change and that rest may be required.

Overall, there is a need for education to change some of the ideas that music students have about wellness and pain. Encouraging students to see knowledgeable medical professionals is also important.

Music Wellness Resources

Since teaching wellness to musicians is relatively new, there has not been a lot of research in this area. There are a number of studies and articles describing wellness

⁵⁰ Pierce, "Reaching Beyond Traditional Boundaries," 60.

⁵¹ Williamon and Thompson, "Awareness and Incidence of Health Problems," 421.

⁵² Park, Guptill, and Sumsion, "Why Music Majors Pursue Music," 92.

⁵³ *Ibid.*, 94.

courses being offered or that the researchers have designed. This section will go over course designs in addition to literature that shows the effectiveness of specific wellness courses and modules.

First, wellness course designs will be covered. Montello created a performance wellness seminar that included relaxation techniques, yoga, cognitive restructuring, meditation, imagery training, group improvisation, and disarming the inner critic.⁵⁴ This course was aimed towards mostly psychological wellness but also physical wellness.

Pierce described a wellness course designed to reflect the idea that different solutions work for different people. She presented wellness information and also allowed the students to research their areas of interest and share their findings with the class. Their final project was to create a life wellness plan.⁵⁵

Laura Speck designed a course for a small group of 8–10 students with a detailed syllabus covering topics such as body awareness, injury prevention and recovery. Ideas from Body Mapping, Feldenkrais, and yoga would be offered. In addition, the course would have presentations from guest speakers and activities such as stretching.⁵⁶ This course would focus on the physical side of wellness.

Jennifer Bindel designed a Body Mapping course for collaborative pianists and their partners. The ideal size would be about 10 students and the main purpose of the

⁵⁴ Montello, “The Performance Wellness Seminar,” 111.

⁵⁵ Pierce, “Reaching Beyond Traditional Boundaries,” 59.

⁵⁶ Laura Speck, “Overuse Injury and Body Awareness in String Players: A Resource Guide for Educators and Performers” (DMA diss., Arizona State University, 2009), Proquest (AAT 3391865), 73–84.

course would be to evaluate movement during performances. While this course would focus mainly on the physical aspects of playing, one week would be dedicated to performance anxiety and other psychological topics.⁵⁷

Williamon and Thompson described a series of seminars at the Royal College of Music in London that were required for all students. There were six seminars over the course of a school year and the topics included medical and psychological resources, physicality of performance, psychology of performance, sound and hearing, physical fitness, and nutrition. The students also received information booklets outlining the major points, a reading list, and other resources related to each topic. The seminars would be evaluated each year for new research and also updated based on student surveys about the usefulness of the materials.⁵⁸ These topics cover every major area of wellness.

Anyone interested in learning more about the types of wellness courses offered by different schools should consult the three parts of the “Health Promotion Courses for Music Students” special article in *Medical Problems of Performing Artists*.⁵⁹ This brief glimpse shows that course designs vary widely and the type of information in wellness courses also vary depending on the interests of the instructor.

⁵⁷ Jennifer Bindel, “The Collaborative Pianist and Body Mapping: A Guide to Healthy Body Use for Pianists and their Musical Partners,” (DMA diss., Arizona State University, 2013), Proquest (AAT 3560028), 95–104.

⁵⁸ Williamon and Thompson, “Awareness and Incidence of Health Problems,” 426.

⁵⁹ Ralph Manchester, “Special Article - Health Promotion Courses for Music Students: Part 1,” *Medical Problems of Performing Artists*, 22 no. 1 (2007): 26.

Now it will be useful to examine the literature that has studied wellness courses to see how wellness courses impact students. Rebecca Barton and Judy R. Feinberg created a wellness module to use in a freshman orientation class. The module covered information about common medical problems, prevention strategies, and how to apply the knowledge in music and other activities. Twenty-six students were evaluated for self-reported health promoting behaviors at the beginning of the course, at the end of the course, and six weeks after the completion of the course. Once the course was complete, students had increased knowledge of how to promote health but their behaviors did not significantly start to change until the evaluation six weeks later.⁶⁰ Barton and Feinberg suggested that since behaviors take time to change, it is important to cover health and wellness information several times throughout the educational curriculum.⁶¹ This study shows the importance of a periodic reinforcement of wellness information during the course of a student's program.

Mark Zander et al. designed a preventative course that contained 32 hours of wellness instruction. The participants were incoming freshman in four consecutive years that volunteered to take part in the study. The researchers followed the health of 144 students who took the course and 103 students who did not take the course over a period

⁶⁰ Rebecca Barton and Judy R. Feinberg, "Effectiveness of an Educational Program in Health Promotion and Injury Prevention for Freshman Music Majors," *Medical Problems of Performing Artists* 23, no. 2 (2008): 47.

⁶¹ *Ibid.*, 52.

of two years.⁶² During the second year of the study, the prevention course was required for several degree programs so the participants in both groups could not be assigned randomly. The course covered both physical and psychological health. They found that the preventative effects were most apparent psychologically because the control group got significantly worse in terms of psychological health and the course group stayed fairly stable over the two years.⁶³ They did not find any clear results for physical problems, but noted that many of the students already had physical problems before entering the school. They suggested that since psychological problems can change more rapidly, they could be better influenced by interventions.⁶⁴ This study suggests that psychological health can be maintained by taking a course about wellness.

A course focusing on psychological wellness was held and evaluated by researchers. In 2011, Terry Clark and Aaron Williamon evaluated the effects of a 9-week mental skills training course held at a conservatory.⁶⁵ They used questionnaires, public performances, and participant feedback from 23 students. The researchers found that although the levels of performance anxiety and anxiety that the students experienced were no different after taking the course, the students felt more confident in their ability

⁶² Mark Zander, Edgar Voltmer and Claudia Spahn, "Health Promotion and Prevention in Higher Music Education: Results of a Longitudinal Study," *Medical Problems of Performing Artists* 25, no. 2 (2010): 62.

⁶³ Ibid.

⁶⁴ Ibid., 63.

⁶⁵ Terry Clark and Aaron Williamon, "Evaluation of a Mental Skills Training Program for Musicians," *Journal of Applied Sport Psychology* 23, no. 3 (2011): 342. doi: 10.1080/10413200.2011.574676.

to handle anxiety and started to view it as a normal part of performing.⁶⁶ Participants also said that their attitudes towards music had changed and that they were more easily able to distinguish between their self-identity and their music after the course.⁶⁷ Becoming a more confident performer and developing a healthier relationship with music are substantial benefits. If the students are able to retain the knowledge and change their habits permanently this kind of course is invaluable.

Overall, this literature review shows how important it is to cover physical, psychological, and hearing wellness information at music schools. Studies about music students were examined to get a better idea of how schools can deliver wellness information that serves their students. Finally, literature about wellness course designs and the effectiveness of wellness courses was examined.

⁶⁶ Ibid., 355.

⁶⁷ Ibid., 353.

Chapter 3

Methods and Materials

Research Questions and Hypotheses

The main purpose of this study was to find out what types of wellness resources were being offered at college-level, NASM accredited music schools. The author also wanted to know if the size of a school influenced what they were able to offer.

1. What are the most common types of wellness resources being offered? Does the size of a school influence what they are able to offer? It was hypothesized that small schools would not be able to offer as much because they tend to have fewer students and faculty and potentially fewer resources or less funding available.
2. How are the categories of physical, psychological, and hearing wellness being addressed? Is each wellness category being treated equally? Given that many musicians are most aware of the potential to experience physical issues, it was hypothesized that the physical was the most likely category to be emphasized.

Data Collection

The NASM website was used to locate accredited schools which were degree-granting and not for profit. A total of 634 schools met the criteria. Every school's website was searched for wellness information. Occasionally there was a link about health from the main music website. Other times, there was a resources page or a page for current students that contained wellness information. The student handbook was also a potential source of wellness information. If a course list was available, the author

searched for wellness-related offerings. For almost every school, all of this information was available for anyone to view on the website.

Most schools were emailed to find out what wellness resources they offered. Occasionally, a school had such a comprehensive page describing what they offered that contacting them by email was unnecessary. Email requests were sent to 502 schools and the emails were nearly identical. Without giving any background information, the author asked if the school offered any courses, workshops, or other information about wellness/health for musicians.⁶⁸ The purpose of leaving out background information was to see how easily wellness information was available to the average student. Many of the people with whom the author corresponded assumed that the author was either a prospective student, someone looking to give a workshop, or a member of the community.

Population

A total of 634 schools are accredited by NASM, in addition to being degree-granting and not for profit. The size of the schools was also noted. For the purpose of this study, small schools offered 1–6 music degree programs, medium schools offered 7–12 music degree programs, and large schools offered 13 or more music degree programs. Of the 634 schools, data were found for 387 schools. As a result, this study examined data from 61% of the eligible schools. Out of the total of 387 schools, 258 (67%) were small schools, 79 (20%) were medium sized, and 50 (13%) were large schools. The schools were included only if they had comprehensive information on their website or if

⁶⁸ Appendix A.

they responded to the email. Seventy-one of these schools had comprehensive information about the wellness resources they offered listed on their website so they were not contacted. The other 316 schools responded to the email with information.

Data Analyses

The data were gathered in a large Excel workbook. One sheet contained all the information and then sheets were added to show the more detailed information about courses, workshops, website information, and other resources. Frequency counts and percentages were used since the most important consideration was to present the information clearly.

Chapter 4

Results

The results will be presented by resource type. The different types of resources are website information, courses, workshops, and other resources. Some schools offered more than one type of wellness resource. From 387, 150 (39%) schools offered one resource type, 121 (31%) schools offered two resource types, 36 (9%) schools offered three resources types, and 6 (2%) schools offered all four resource types. Seventy-two (19%) of the schools said that they did not offer courses, workshops, or other information about wellness and nothing was found on their websites.

Website Information

From 387, 186 (48%) had information about wellness on their website. The website information was further divided into categories. The categories included NASM wellness information, other non-NASM information, links to health services, book lists, and disclaimers. Some schools had information in more than one category. Refer to Table 1 for more details about the type of information on websites and the wellness categories covered. When examining website information, no distinction was made between information that was directly on the webpage and links to information on other websites.

Table 1. Types and Categories of Website Information ($n = 186$)

	Number of Schools
Types of Information:	
NASM	116 (62%)
Non-NASM	108 (58%)
Health Services	26 (14%)
Book Lists	9 (5%)
Disclaimers	6 (3%)
Information Categories:	
Physical	152 (82%)
Psychological	85 (46%)
Hearing:	163 (88%)

Note: From 387 of the schools, 186 (48%) offered website information about wellness.

Of the schools with website information, 121 (65%) were small schools, 39 (21%) were medium size schools, and 26 (14%) were large schools.

Courses

From 387 of the schools, 66 (17%) offered courses about wellness for musicians. The types of courses were also considered. The types of courses included Alexander Technique, Body Mapping, Feldenkrais, performance anxiety, yoga, meditation, and general wellness courses.⁶⁹ Most schools (82%) offered just one type of wellness course and 18% offered more than one wellness course.

To determine the types of information being offered, the courses were grouped into the three categories: physical, psychological, and hearing. The general wellness courses would likely cover all three categories. Alexander Technique, Body Mapping,

⁶⁹ Alexander Technique teaches people how to avoid unnecessary tension during activities. Body Mapping shows students how to perceive, understand, and experience their own body shape and size, plus how their joints move and how their body functions. Feldenkrais is an educational system that uses movement to teach self-awareness and improve how the body functions.

Feldenkrais, yoga, and general wellness courses would be physical. Performance anxiety, meditation, and general wellness courses would relate to psychological wellness. The general wellness courses are the only courses that cover hearing information. Refer to Table 2 to see a breakdown of the types of courses offered and the wellness categories covered by courses.

Table 2. Types and Categories of Wellness Courses ($n = 66$)

	Number of Schools
Types of Courses:	
General Wellness	24 (36%)
Alexander Technique	28 (42%)
Body Mapping	8 (12%)
Feldenkrais	1 (2%)
Yoga	12 (18%)
Performance Anxiety	5 (8%)
Meditation	2 (4%)
Course Categories:	
Physical	62 (94%)
Psychological	31 (47%)
Hearing	24 (36%)

Note: From 387 of the schools, 66 (17%) offered wellness courses.

Of the 66 schools offering courses, 26 (40%) were small schools, 18 (27%) were medium sized schools, and 22 (33%) were large schools.

Workshops

Out of 387, 125 (32%) schools offered workshops containing wellness information. The workshop category was somewhat problematic to categorize because in the emails it was difficult to differentiate between regular scheduled or mandatory workshops and occasional workshops that occurred because a guest lecturer was visiting.

When guest lectures were mentioned, it was sometimes hard to tell if the guest was someone who visited just once or if the guest was someone that the school brought in regularly to give lectures. The author used the tone of the email to distinguish between regular workshops/guest lectures and occasional workshops/guest lectures.⁷⁰ For the purpose of this study, the terms workshop and guest lecture will be used interchangeably. Out of the schools that offered workshops, 95 (76%) schools had regular workshops and 30 (24%) schools reported occasional workshops.

Out of 125, 86 (69%) were small schools, 25 (20%) were medium sized schools, and 14 (11%) were large schools.

Most schools did not include the specific types of information covered in the workshops so the three categories of wellness were not evaluated for workshops.

Other Resources

This category included any resources outside of website information, wellness courses, and wellness workshops. The 124 schools in this category indicated that wellness was covered in lessons, ensembles, other (non-wellness) courses, or through special services. Special services included activities such as providing hearing tests annually for each student, giving out earplugs, providing free access to Alexander Technique or Body Mapping lessons, or bringing in health professionals regularly for students to work with. From 124, 18 (15%) of these schools offered wellness information

⁷⁰ For example, if the email stated that there were wellness workshops every semester or once a year that was counted as a regular workshop. If the email said that sometimes guests give lectures or occasionally they have workshops then that was counted as an occasional workshop.

in more than one of the ‘other’ categories. From 387, 29 (8%) schools only offered wellness information in the ‘other’ category. Refer to Table 3 for details.

Table 3. Other Ways of Distributing Wellness Information (*n* = 124)

	Number of Schools
Distribution Method:	
Lessons	116 (62%)
Ensembles	108 (58%)
Other Non-Wellness Courses	26 (14%)
Special Services	9 (5%)

Note: From 387 of the schools, 124 (32%) fell into this category.

Out of 124, 78 (63%) were small schools, 28 (22%) were medium-sized schools, and 18 (15%) were large schools.

It was not possible to evaluate the three categories of wellness in this section because most schools did not provide enough details about the type of information offered.

Chapter 5

Discussion

Currently, website information is the most common type of wellness resource available at 48% of schools. This website information usually includes links to NASM handouts and sometimes links to other useful websites. Future studies could examine whether students are finding this website information helpful. Most research so far examined the effects of wellness courses but the effects of website information is unknown. Workshops and other resources were tied for the next most common type of resource, with 32% of schools offering them. Courses fell far behind, with only 17% of schools offering them.

The size of a school does seem to have at least some effect on what they are able to offer, which can be seen in Figure 1. The representation of small, medium, and large schools was virtually the same in the general population and also in the schools that offered website information, workshops, and other resources. However, the distribution was different for schools that offer courses. For courses, large and medium-sized schools were more highly represented than small schools. This finding makes sense because smaller schools may not have the resources available to offer a wellness course or they may have a small population of students and no faculty interested in teaching such a course. An unexpected finding is that some small schools had detailed wellness information available or even wellness courses in some cases. One explanation is that at these particular schools there is a faculty member who is interested in the area. At least website information and workshops seem to be possible for every school, even if

sufficient research does not exist right now to show that these methods of delivery are effective.

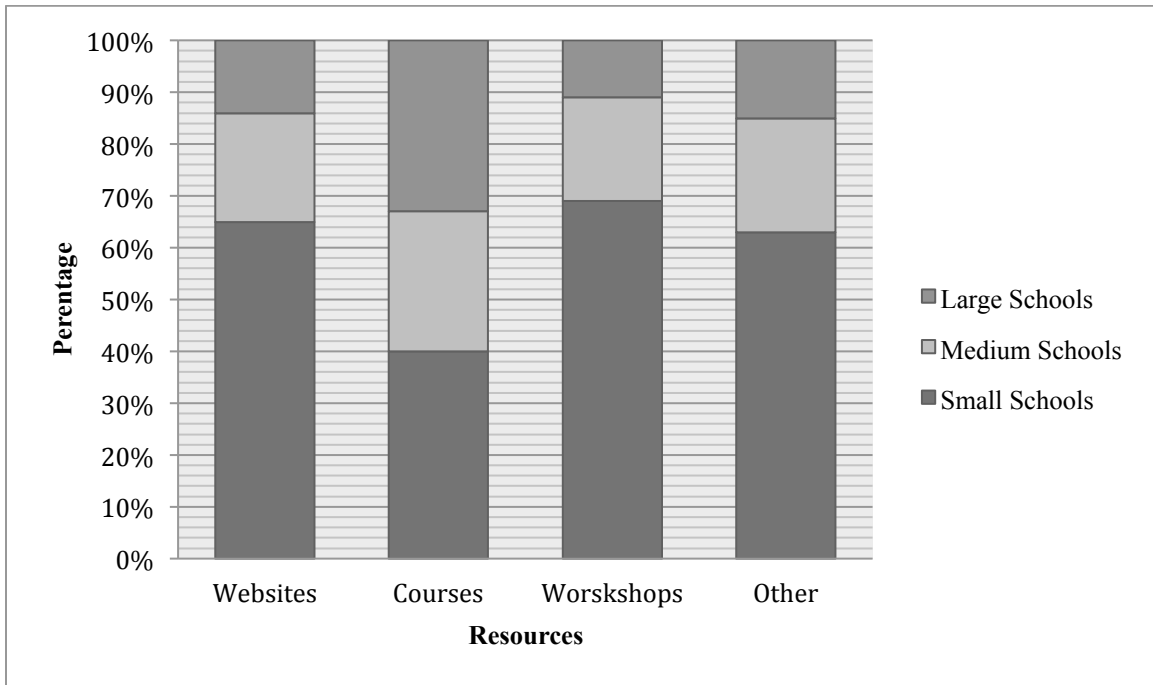


Figure 1. Resources Offered at Different Sized Schools.

The findings suggest that physical wellness, psychological wellness, and hearing wellness are not being given equal emphasis at most schools. It was possible to evaluate two resources, website information and courses, to see the type of content that is being delivered. Physical wellness information was heavily emphasized because it was covered by 82% of websites and 94% of courses. Hearing wellness information was covered by 88% of websites and only 36% of courses. One possible reason for the gap between the two resources is that most hearing wellness research is relatively new and faculty members might not be comfortable going over this information in the detail that a course

would require. NASM provides a detailed handout about protecting hearing and using this handout on a website is the easiest way to cover the information so that is what most schools did. Psychological wellness information was covered in 46% of websites and 47% of courses. NASM does not require schools to provide psychological wellness information, which could explain the lower numbers. There may also be political issues involved because if parents become aware that musicians may experience psychological challenges, they may not encourage their children to pursue musical studies.

One unexpected finding was that 19% of the schools contacted said that they did not offer anything. More than one person expressed regret that they did not offer wellness information. Since NASM requires all of their schools to offer wellness information, one possible explanation is that these schools use lessons or ensemble rehearsals to cover the information. The email only inquired about “classes, workshops, or other information.” It is also possible that there was website information available that only current students could access. Or maybe the person who replied to the email did not know. Correspondence occurred with staff members, professors, student workers, and department chairs. It was initially quite surprising to receive emails from the department chair but it happened frequently, especially with small schools. Because of the high number of schools that said they did not offer wellness information, it seems clear that it needs to be more prominently displayed or advertised at many schools.

This study has several limitations. It relied on being provided accurate information through email and there is no way to tell if all the information received was accurate. The author attempted to make the sample size as large as possible to limit the influence of inaccurate data.

The open-ended nature of the question in the email led to a huge variety of answers. Responses varied in length from two words to several paragraphs. When workshops were mentioned, usually the content of the workshop was not described. In contrast, detailed information about course topics was often provided. This variability was not anticipated and resulted in having detailed information about courses offered and only basic information about workshops.

This study gathered information about music schools and in the process it was not possible to consider the individual efforts of faculty who deliver wellness information to their students.

Chapter 6

Suggestions for Schools

The suggestions section is divided into two main parts. The first part has suggestions that are mainly directed towards the type of resources being offered at music schools and it is heavily based on the results of the survey. The second part has suggestions about how to improve the content of the three categories of wellness information. This second section is based more evenly on a mix of results from the survey and the literature review.

Resource Type Suggestions

Every school should have website information about wellness. In this study, only 48% had website information. Website information is such a simple way to cover the requirement. Once the information is on the website, it can be updated occasionally but it will not require a substantial time commitment. Even small music schools with only one webpage could have links to wellness information on other websites. Although the effectiveness of website information has not been proven yet, in the meantime it should be included just in case students find it helpful. However, website information should not be the only way that schools address wellness.

In this study, only 32% of the schools offered wellness workshops. Every school should also have wellness workshops, ideally for credit. Workshops may be held by faculty who are interested in wellness, guest lecturers, or medical professionals. Schools that are part of a larger college or university could network with the professors in other departments to see if they are interested in holding wellness workshops for musicians.

Wellness workshops should be mandatory for students. Park's study showed that although students were aware of the wellness workshops available and thought they might be useful, most of the students had not attended one.⁷¹ Students might be overwhelmed with the demands of life as a music student and may not be aware of the importance of wellness information unless they are already experiencing problems.

Ideally, every school should be able to offer courses about wellness but that is not the current reality. Creating an online course about wellness would be a good place to start. A mandatory course for credit is the best way to deliver wellness information since research has shown that these courses can be effective. Using credits also shows students that wellness information is important and valued by the institution.

Eight percent of the schools only offered wellness information in the 'other' category. The 'other' category should not be the only way that schools cover wellness but rather a supplement to other resource types. Covering wellness information through lessons or ensembles is possible, but it would be more efficient to cover this information in other ways. Addressing wellness information briefly in other courses would be useful to remind the students to use their wellness knowledge, but it should not be the only means of covering the information.

When schools do not have dedicated workshops or courses about wellness, the responsibility falls upon the faculty to cover this information in lessons and large ensemble rehearsals. Some information can be covered in this manner but usually there is a lot of other material to cover. There is no way to prove that this information is being covered when it is left up to individual faculty members. Ensemble rehearsals value time

⁷¹ Park, Guptill, and Sumsion, "Why Music Majors Pursue Music," 94.

for rehearsing and in lessons, mastering the instrument is the most important priority. It may be too much to expect faculty members to know and be able to teach all the wellness materials in addition to their own areas of expertise. Faculty may need to get a workload credit or a course release to have time to offer a wellness course. When there is no other option, faculty workshops to brush up on the latest wellness information could be helpful in some schools. Hildbrandt and Nübling provided 26 music teachers with a physiology course to help them become more aware of what their students were doing. After the course, a standardized questionnaire showed that the teachers thought that they had changed their teaching styles. A second questionnaire administered to their 66 students indicated that the students noticed slight differences in their teaching.⁷² This study was fairly small but it showed that training faculty about wellness may be helpful for their students.

Content Suggestions

This section will make suggestions about what schools can do to improve the physical, psychological, and hearing wellness information that they offer. The suggestions made are based on the literature review and the results of the survey.

⁷² Horst Hildebrandt and Matthias Nübling, "Providing Further Training in Musicophysiology to Instrumental Teachers: Do their Professional and Preprofessional Students Derive Any Benefit?" *Medical Problems of Performing Artists* 19, no. 2 (2004): 62.

Physical

The physical side of wellness is fairly well known among musicians so this information is being covered at most schools in some manner. For the schools that had website information, 82% of them had information about physical wellness. For the schools that had wellness courses, 94% included physical wellness information.

Schools need to educate students about seeking help if they experience playing-related pain or other symptoms such as numbness, weakness, or tingling. Students should be encouraged to talk about these issues with medical professionals and their studio teachers, who will ideally refer them to a medical professional. Any reluctance in seeking treatment could lead to a chronic condition, so it is best to have any concerns examined as soon as possible. Schools should find the most capable medical professionals in their area and direct students towards them. Many schools will not be near a clinic that specializes in treating musicians but medical professionals who are compassionate and have a basic understanding of musicians and how to treat them will do.

Since many students are reluctant to seek treatment and might need a neutral space to talk about their issues, it might be a good idea for music schools to have a wellness counselor just for their students. A counselor could provide the students with a safe place to talk about their problems and could point them towards appropriate information, medical professionals, or resources for their particular situation.

Personal choices in addition to other non-controllable factors play a role in determining physical injuries. It is important to make sure that students know how to practice and take breaks effectively. The importance of being physically fit should also

be stressed. If music students make good choices more frequently, the more they will decrease their chance of physical injuries.

Psychological

The psychological side of wellness was the area least likely to be covered. It is understandable that schools may not want to risk providing information that may lead to self-diagnosis when the students should go to see a medical professional. Nevertheless, at least one study has shown that psychological health tends to decline in music students as they proceed through their programs and that providing information may help students maintain psychological health.⁷³ With this knowledge, all schools should consider covering psychological wellness information. The information that schools can and should provide is invaluable.

Stigma is one of the major challenges in addressing psychological wellness. According to Peter Byrne, stigma is a sign of disgrace that sets a person apart from others and results in shame. Mental illness has traditionally been seen as a sign of weakness so many people choose to hide their problems.⁷⁴ Byrne suggests that education might be helpful to reduce stigmatization along with challenging media misrepresentations and workplace discrimination.⁷⁵ Schools can help their students by encouraging them to seek help if they need it and emphasizing that asking for help does not indicate weakness.

⁷³ Zander, Voltmer, and Spahn, "Health Promotion and Prevention," 62.

⁷⁴ Peter Byrne, "Stigma of Mental Illness and Ways of Diminishing It," *Advances in Psychiatric Treatment* 6, no. 1 (2000): 65, doi: 10.1192/apt.6.1.65.

⁷⁵ *Ibid.*, 68.

There are several types of information that schools can provide to help their students maintain psychological health. It is important to make sure that students know where to find help. Information about student services and specialists would be useful. It is also a good idea for students to study basic psychology because this knowledge might help them to take care of themselves better or even improve their performances. An understanding of performance anxiety and the importance of taking breaks and de-stressing would be useful. Helping students to separate music from their self-identity could assist them in maintaining a healthier relationship with music in general.

Studying psychology can also give music students an advantage when performing because if they study themselves and their habits they can work on making changes. The psychological side of music is often not emphasized but studying it can make a big difference to performers. The idea of potentially improving their performance skills may be a good incentive to motivate students to study psychology.

Hearing

Every school needs to take responsibility to ensure that hearing damage to their students is minimized. Monitoring sound levels at ensemble rehearsals should be done at least occasionally. Ideally, each school would be able to offer hearing tests but in the meantime, access to hearing protection would be valuable.

Hearing can be heavily influenced by the personal choices of students. That is why it is crucial to teach students about how to maintain their hearing. In the practice room, students could play more quietly or choose not to listen to music using headphones if they were exposed to a lot of sound on a particular day.

Hearing protection in the form of earplugs designed for musicians might be a useful tool for students. Many musicians may be reluctant to use earplugs, as earplugs might be seen as a barrier between themselves and the music. Industrial workers are another population that is at risk for noise-induced hearing loss. Ideally in an industrial environment, efforts would be made to first minimize the noise that workers are exposed to by modifying the environment. Hearing protection would be a last resort if the noise levels were still problematic.⁷⁶ Musicians have an unusual problem because they need to protect their hearing while still being able to hear the music and themselves clearly. It would be a good idea for students to get used to playing their instruments while using hearing protection. Marshall Chasin's book, *Musicians and the Prevention of Hearing Loss*, has recommendations about the optimal type of hearing protection for each instrument.⁷⁷

Many of the schools surveyed addressed hearing protection through written documents online. Although this information is available to the students, having website information does not guarantee that students will look at it or even realize that it is there. Since hearing damage is something that may be difficult to notice as it occurs, it is important to address hearing wellness in workshops or other situations to make sure that the students are being exposed to this information. Addressing hearing information in ensembles would also be extremely helpful since studies have shown that ensembles can produce high sound levels.

⁷⁶ *The NIOSH Science Blog*.

⁷⁷ Marshall Chasin, *Musicians and the Prevention of Hearing Loss* (San Diego: Singular Publishing, 1996), 159.

Since musicians' hearing and health is a relatively new area, it is important for institutions to keep up to date with the latest research so they can serve their students the best way that they can.

Chapter 7

Conclusion

Although music schools have made good progress in delivering wellness information, there is still a long way to go and many improvements can be made. Further research about the types of wellness information available and if students are using the current resources would be helpful, along with the effectiveness of such resources. Some researchers have studied the effectiveness of courses, but at present courses are the resources least likely to be offered. It would also be helpful to do research to see if the more commonly available website information and workshops are also good ways to deliver this information. Future research could study one or several schools in depth to determine the impact of individual faculty efforts to distribute wellness information.

In the meantime, all music schools should attempt to deliver wellness information in more than one way. Website information about wellness is a good start. Music students should have to take one or more mandatory workshops that outline health promotion strategies. Ideally, there would also be credit courses available that go into more depth. Ultimately, the personal decisions that the students make are going to be the most important factor in determining whether they maintain their health. Students need to take responsibility for themselves and we can help by providing them with the tools they need to make informed decisions. After learning the basics, they will be able to pass this information to their students and maybe the next generation of musicians will have fewer health issues as a result. Now that the research is proving how crucial it is to provide wellness information for musicians, music schools have a responsibility to be at the forefront of this growing field.

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APPENDIX A
EMAIL SENT TO SCHOOLS

Dear _____,

Do you offer any courses, workshops or other information about wellness/health for musicians? Thanks

Catherine Fraser