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Playing Without Pain: Preventing Performance Injuries in Musicians

Becoming a professional musician requires hours of daily practice to develop and refine physical skills, much like an athlete drilling agility and precision. Unfortunately, like athletes, a high percentage of musicians develop playing-related injuries. As one might imagine, these injuries can grow quite severe if they are allowed to continue without treatment and correction, even to the point of ending the musician's professional career. For example, after fourteen years as first violinist of the Tokyo String Quartet, violinist Peter Oundijan developed focal dystonia, a neurological disorder causing muscles to randomly contract or spasm. This loss of control in his hand forced him to stop playing violin for nearly twenty years (Zukerman). In the meantime, he turned to conducting, but has not yet fully recovered his ability to play the violin. Other famous performers such as pianist Leon Fleischer and violinist Hilary Hahn developed injuries and were out of commission for a time, but successfully recovered and continued their performing careers.

However, injuries can be a silent battle. Many musicians play through pain on a daily basis, thinking that it is unavoidable and simply "comes with the territory." This is not the case. Pain points to underlying technical problems which can cause severe problems. Yet, despite the gravity of the situation, the issue often is not spoken of by private teachers. As a result, many college musicians spend long consecutive hours in the practice room, developing significant pain and injury. If pre-professional musicians were better educated about the physiology of playing

their instruments and the importance of smart practice habits—and chose to implement that knowledge—we would see fewer overuse injuries in collegiate and professional musicians.

This research study will provide information about the prevalence of overuse injuries among both college and professional musicians. Hopefully this will highlight the importance of proactive education about injury prevention.

Literature Review:

A 2005 study surveyed instrumental ensemble players from an unspecified large Midwest university. 50 of 53 respondents (or 94.3%) had experienced “physical problems with playing their instruments” (Guptill et al. 5). Many of these students cited stress as a primary cause of their pain. Admittedly, this study is based on a small sample of musicians. However, anecdotes and personal conversations with current and former music students confirm the limited results of this study—namely, that college students regularly suffer performance-related injuries. Further research is needed to produce similar studies with broader cross-sections of college musicians. Surveying that demographic more thoroughly would help to identify solutions to the problem of excessive injury.

As for the professional realm, an Australian study from 2012 surveyed musicians from professional orchestras across Australia and found some alarming statistics. 84.4% of the respondents had experienced pain or injuries during their career which hindered their ability to play (Ackermann et al. 182). Moreover, 79% reported that “the pain or injury was caused by work”—i.e. a playing-related injury—and depending on the instrument, the percentage of musicians experiencing current pain or injury ranged from 37 to 67% (Ackermann et al. 183). In

other words, four out of five musicians develop pain or an injury due to their occupation at some point in their lives, and approximately half are currently playing in pain.

In a similar 2011 study, “The Lived Experience of Working as a Musician with an Injury,” researcher Christine Guptill conducted interviews and focus groups with ten professional Canadian instrumentalists from a variety of backgrounds—differing primary instruments, work experiences, types of injuries, etc. Each player had experienced a playing-related injury in some form. The interviewees discussed the similarities and differences of being an employee (e.g. of an orchestra) versus being a freelancer, and identified the common stresses of intense rehearsal schedules and earning adequate wages. Seemingly, musicians are at high risk of injury no matter what path they choose because many physical and mental stresses are inherent to a musical career. Injury will thus affect most musicians at some point in their lives, which again highlights the need to fix the problem.

Young musicians tend to be hopeful that pain will fix itself once they enter the working world or reach an undefined point of mastery. The Ackermann and Guptill studies of professional musicians contradict that notion. They exhibit the fact that stresses do not reduce once a musician leaves college and begins working full-time. High percentages of performing musicians are haunted by injuries throughout their careers, many of which are caused by poor technique or unhealthy practice habits. This means that learning to play without pain before graduating college is important—the sooner the better. Further questions then arise: What responsibility do university music programs have in training students? And what education and initiatives are in place now?

Health and Wellness in University Music Programs:

The National Association of Schools of Music (NASM) and the Performing Arts Medicine Association (PAMA) instated a requirement in 2012, stating that music schools had to inform students about health concerns related to music. It reads: “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” (Health and Safety *ECC* 1).

NASM left the execution of this requirement up to each school’s independent discretion. Because of this, the wellness education offered by colleges varies widely. It is also unclear as to whether every music program is associated with NASM and thus bound to its requirements. Upon performing some research, some colleges offer excellent education on wellness topics such as musculoskeletal injuries, performance anxiety, and hearing protection, but many others do not even provide basic information. Both prominent and lesser-known music schools will be examined here: some near Kansas City for relevance and others at greater distance as examples.

The University of Missouri-Kansas City (UMKC) is the primary music conservatory in the greater Kansas City area. UMKC does have a health information page (*Health and Safety*), but it is buried on the Conservatory’s website. This page points the students toward excerpted information on the NASM website; however, as of this writing, most of the links are dead. UMKC’s curriculum does not include health and wellness courses and the department does not seem to offer any outside classes or workshops. Despite being the most known music school within a few hours of Kansas City, UMKC does not seem very proactive in providing health education for its music students.

University of Missouri-Columbia (MU), University of Kansas (KU), and Park University have no information whatsoever on their websites. The music school at University of Nebraska-Lincoln provides working links to a few NASM resources, but does not appear to offer any courses or workshops (*Health and Wellness Resources*).

Washburn University in Topeka, Kansas, does abide by the NASM guidelines, which is interesting considering that its music program is not otherwise notable. The department holds an informational meeting each fall semester for all students in the music department and maintains a website with further information (*Musician Health and Wellness*). Washburn provides training for students involved in physical activities (moving pianos, risers, etc.) and encourages the use of earplugs in ensembles where sound levels are dangerous. Thus, Washburn seems to promote student wellness more actively than most other universities in the near-Kansas City area.

As for larger music universities, the Jacobs School of Music at Indiana University and the Peabody Institute of Johns Hopkins University have similar approaches. Jacobs offers classes “designed to help prevent the physical injuries common to performing musicians” (*Health and Safety*). However, these are limited to free, non-credit, weekly classes providing training to “reduce repetitive stress and risk of performance-related injuries” and one graduate level course dealing with posture (*Health and Safety*). Jacobs and Peabody both maintain websites with further links for student perusal. Peabody’s resource list is particularly extensive, with their goal being to help musicians “safeguard their wellbeing” (*Occupational Health for Musicians*). Peabody provides various health services and presents wellness workshops during the year, but does not offer any courses as part of the standard curriculum for music majors. These schools both lack the formal wellness education that one might hope to find at a high level music school, but do offer some education and resources.

The University of Colorado Boulder and Ohio State University both integrate the Alexander Technique, a method of building good posture and releasing tension, into their wellness programs. These schools both offer a variety of other resources—consultations, medical evaluations, physical therapy, etc. Much like Washburn, these schools are not well-known for their music programs, yet seem to have a strong health emphasis.

The most ideal example I have found in my research is George Mason University (GMU) in Fairfax County, Virginia—yet another school without a particularly notable music program. Students are required to take a course titled “Wellness Practices for Musicians” for which the school developed a textbook. Masterclasses in health topics are given each semester, and free evaluations and referrals for students with overuse injuries are available through the music department. GMU offers a Music and Well-Being minor and graduate certificate program to train students in a deeper knowledge of those principles. The university also reaches beyond the students to educate professionals in medical and psychological fields about the particular injuries and stresses of the performing arts. GMU is a prime example of a university implementing and surpassing the NASM guidelines.

The schools which are proactive in wellness are encouraging examples, yet they are too few. Surprisingly, many larger music schools (such as UMKC and the Jacobs School of Music) seem to fall short. Mainstream music education seems to lack a focus on injury prevention. While the main goal of a college music education is to further one’s technical and musical abilities, injury prevention is crucial for a lifelong career. This information and training should therefore have a place in university music program curricula.

Recommendations:

Students

Students should be aware of what actions cause pain and injury and avoid those as much as possible. What are the risk factors? The musicians in the Australian study most commonly identified long practice sessions without sufficient rest; excess tension; muscle fatigue; and a sudden increase in time spent playing (Ackermann et al. 186). These behaviors are subtle, habitual, and can be difficult to identify as harmful until damage is already done.

Music students may feel pressured to spend long hours in the practice room, whether it be a competitive impulse, fear of failure or external judgement, or simply an internal drive to practice repertoire to perfection. However, longer hours do not necessarily equal better results, and often only result in injury. Instead, Students should practice passages in efficient ways (e.g. slow practice, small chunks) to lessen the effort and time required. However, if students do need to practice several hours to prepare music adequately, they should take breaks periodically (for example, five minutes every half hour). Tired muscles are more prone to injury. Students should also limit practice and/or practice with great care when their muscles are tired. Hand in hand with that, students should avoid a sudden increase in practice time, as extra hours cause fatigue. Finally and most difficult, students must be self-aware of muscle tension and posture, working with their private instructors to develop proper, relaxed technique.

Instructors

Instructors should be mindful of the difficulty of the repertoire they assign to their students. A quantum leap in technical difficulty will likely cause the student to become stressed and frustrated in personal practice; then, tension is a common unconscious consequence of

frustration; and injuries stem directly from tension. In that vein, when a student begins learning a new technique, instructors should ensure that he understands the proper mechanics of the movement and provide guidance as necessary. Teachers also must observe students carefully in private lessons for any signs of tension or poor technique. Consistently reinforcing good technique and helping the student become more physically self-aware is crucial to injury prevention.

I can personally attest to the importance of a good teacher. During my sophomore year of high school, I developed a repetitive stress injury by multiplying the hours I spent in practice and rehearsals, all while playing with improper, tense technique. By summertime, the pain was obviously more than a fluke. I changed teachers to study with a professor who refashioned my technique and helped me become aware of tension. He gave me the tools to succeed without pain during a busy senior year and my first year of music school.

In short, music teachers play a large role in setting their students up for success. A significant part of that is educating their students about playing-related injuries and training students with good, relaxed technique.

Program directors

Music program directors at universities should consider the benefits of including—and requiring—a health and wellness aspect in their curriculum. Adding a course may be inconvenient: added strain on the budget, finding a suitable instructor, fitting the course into an already-busy curriculum. However, the long-term effects are potentially very high. Students will have a greater measure of surety in their careers. Beyond that, most musicians teach privately at some point. If they have been properly trained, their students will reap the rewards as well.

Conclusion:

As written by the Peabody Institute, “Music making is endlessly rewarding, yet it also places great demands on performers” (*Occupational Health for Musicians*). High percentages of musicians suffer from injuries during and after college, and these performance-related injuries can jeopardize a musician’s career. Tension-causing habits should ideally be fixed in college or even earlier. However, many colleges do not provide web resources and do not offer any courses or workshops on the subject. Admittedly, college websites only show part of the picture. In-person education could be happening at the school without being recorded on the website. Even more likely, one-on-one technique training could be happening on a weekly basis in private lessons. As was discussed, professors should aid students with proper, relaxed mechanics—and that is the most effective vehicle for this education, given a good teacher.

However, the responsibility is shared. Students must be humble enough to admit the problem, proactive in seeking information and help, and flexible enough to change bad habits to healthier ones. Professors must be aware of the issue and willing to spend time in lessons with the student to fix technical problems, or simply point the student to other people or resources. Program directors ought to consider the long-term effects of incorporating wellness courses into the curriculum, or at least providing more education than is currently offered.

Hopefully, trends will continue toward injury prevention education and teaching relaxed technique. These are “integral parts of a process that makes it possible for musicians to achieve and sustain their highest levels of performance” (*Center for Arts and Wellness*). Through combined efforts, colleges, teachers, and students can reduce the number of musicians who play with injuries, resulting in a thriving community of artists unhindered by pain.

Works Cited

- Ackermann, Bronwyn, et al. "Musculoskeletal Pain and Injury in Professional Orchestral Musicians in Australia." *Medical problems of performing artists*, vol. 27, no. 4, December 2012, pp. 181-87. ResearchGate, www.researchgate.net/publication/233941573_Musculoskeletal_Pain_and_Injury_in_Professional_Orchestral_Musicians_in_Australia.
- Center for Arts and Wellness*. George Mason University, 2007, <http://www.gmu.edu/centers/artswellness/>. Accessed 17 April 2017.
- Goals for the Center for Arts and Wellness*. George Mason University, <http://www.gmu.edu/centers/artswellness/goals.html>. Accessed 17 April 2017.
- Guptill, Christine. "The Lived Experience of Working as a Musician with an Injury." *Work*, vol. 40, no. 3, Dec. 2011, pp. 269-280. EBSCOhost, pegleg.park.edu/login?url=http://search.ebscohost.com/login.aspx?direct=true&db=buh&AN=67115102&site=eds-live.
- Guptill, Christine, et al. "Treatment Preferences of Injured College Student Musicians." *OTJR: Occupation, Participation & Health*, vol. 25, no. 1, Winter 2005, pp. 4-8. EBSCOhost, pegleg.park.edu/login?url=http://search.ebscohost.com/login.aspx?direct=true&db=rzh&AN=106600403&site=eds-live.
- "Health and Safety." *ECC – Music*. East Christian College. www.eastcentral.edu/education/music/. Accessed 5 April 2017.
- Health and Safety*. Indiana University, <http://www.music.indiana.edu/departments/health-safety/index.shtml>. Accessed 17 April 2017.
- Health and Safety*. UMKC Conservatory, conservatory.umkc.edu/content.cfm?cont=1B24EB. Accessed 5 April 2017.
- Health and Wellness Resources*. Glenn Korff School of Music, University of Nebraska-Lincoln, arts.unl.edu/music/health-and-wellness-resources. Accessed 5 April 2017.

Musician Health and Wellness. Washburn University, www.washburn.edu/academics/college-schools/arts-sciences/departments/music/musician-health-and-wellness.html. Accessed 17 April 2017.

Musicians' Wellness Program. University of Colorado Boulder, www.colorado.edu/music/academics/centers-and-programs/musicians-wellness-program. Accessed 5 April 2017.

Occupational Health for Musicians. Peabody Institute of the Johns Hopkins University, <http://www.peabody.jhu.edu/conservatory/mecc/health.html>. Accessed 17 April 2017.

Zukerman, Eugenia. "From the Bow to the Baton (and Perhaps Back!): Peter Oundijan's Personal Journey." *Musical America Special Reports, June 2012, 'Musicians and Their Healthcare,'* http://www.musicalamerica.com/specialreports/HEALTHCARE_2012.pdf. pp. 10-11. Accessed April 17, 2017.