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Judy Palac¹

Forum: Musical Wellness: Opportunities for String Researchers²

Abstract

Research in musicians' health in the last 30 years reveals that anywhere from 37 to 87 percent of both adults and students suffer pain related to the practice of their craft; nearly as often as athletes do. ASTA was one of the first professional organizations to recognize the problem. But how much do we really know about performance injuries and their prevention? Musicians, music educators, and movement and medical scientists have all investigated these issues. String researchers have been particularly active in studying the biomechanics of playing and in testing preventions and interventions, and they are uniquely qualified to contribute to understanding in these and other aspects of music wellness.

Keywords

wellness, musician heath, performance injury, higher education, research, string pedagogy

Research in musicians' health in the last 30 years reveals that anywhere from 37 percent to 87 percent of both adults and students suffer pain related to the practice of their craft; nearly as often as athletes do. The American String Teachers Association (ASTA) was one of the first professional organizations to recognize the problem, holding a conference on musicians' injuries and performance anxiety in 1984 that resulted in *Sforzando* (Mischakoff, 1985), one of the first publications on the topic. The importance of these issues has become more visible within the music education community, broadly speaking, in the

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² This Forum article is based on an invited presentation by the author at the 2012 ASTA National Conference in Atlanta, Georgia.

last 20 years. For example, two chapters of *The New Handbook of Research in Music Education* (Colwell & Richardson, 2002) are devoted to musical health (Brandfonbrener & Lederman, 2002; Chesky, Kondraske, Henoch, Hipple, & Rubin, 2002). In 2004, the Health Promotion in Schools of Music Conference (HPSM), in which ASTA partnered, gathered health professionals and music educators to a Tanglewood-style summit "designed to help music schools assist students in acquiring knowledge from qualified professionals regarding the prevention of performance injuries" (Chesky, 2004). HPSM has had widespread influence on music professional organizations, and eventually resulted in a new accreditation standard adopted by the National Association of Schools of Music (NASM) in 2011:

It is the obligation of the institution that all students in music programs be fully apprised of health and safety issues, hazards, and procedures inherent in practice, performance, teaching and listening both in general and as applicable to their specific specializations. This includes but is not limited to information regarding hearing, vocal, and musculoskeletal health and injury prevention, and the use, proper handling, and operation of potentially dangerous materials, equipment, and technology. Music program policies, protocols, and operations must reflect attention to injury prevention and to the relationships among musicians' health, the fitness and safety of equipment and technology, and the acoustic and other health-related conditions in practice, rehearsal, and performance facilities.... (NASM, 2012, p. 67)

How much do we really know about performance injuries and their prevention? Musicians, music educators, and movement and medical scientists have all investigated wellness from different perspectives with increasing frequency in the last quarter-century. In fact, the bibliography of resources housed on the Performing Arts Medicine website grew from one thousand in 1988 to 12,000 this past year (Performing Arts Medicine Association, n.d.). However, as I will discuss, there is still much to be learned, and in view of the NASM imperative, string researchers have a great opportunity to contribute to this body of knowledge.

Performing arts medicine for musicians is usually divided into four topic areas: musculoskeletal, psychological, vocal, and hearing health. I limited this article to an overview of research on musculoskeletal health, with an emphasis on string musicians. It is divided into four areas: epidemiology, referring to the "who, what, where, when" of injury; etiology, having to do with the "how" or the causes of injury; biomechanics, exploring the "why," or underlying mechanisms of music-making and injury, and finally, prevention/intervention/pedagogical studies that address the question, "What can we do about it?" I explore the biomechanical and prevention categories in some detail, as they are the ones to