Pain Across Artists' Lifespan

Having a lifelong career as a professional performing artist carries both challenges and benefits across different body systems. Pushing one's body to the limits results in a higher risk of suffering from some kind of episode of overload, whether it be physical or psychological. Indeed, a sudden increase in playing load (overtraining) is linked with increased frequency and intensity of pain or performance-related musculoskeletal disorders in both dance and music student populations. In this issue, research highlights this across the lifespan and in different genres of performing arts, including Irish fiddlers (Porter et al., p47).

As described in the studies presented in this volume by Ioannou, Altenmüller, and colleagues (p26) and by Robitaille and colleagues (p6), acute episodes of pain continue to be a prevalent issue reported by music students, often linked to sudden increases in playing time. Pain research has received much attention recently, with chronic pain conditions reported to be the most burdensome issue facing global Western health today (Moseley and Vlaeyen, 2015).[1] Simply speaking, there are traditionally considered to be three main components to pain—the signal from nociceptors to real or perceived danger, the neural transmission of this message to the brain, and then an interpretation based on all of the brain inputs into a pain response, which can have profound effects on an individual's ability to function (Howland et al., 2016).[2]

In performers such as dancers, who must control their movements precisely and aesthetically, pain may cause substantial disruptions to their perception and management of their body in space, leading to suboptimal performances (Bellan et al. 2017).[3] Indeed, research conducted by White, Hoch, and Hoch (p14) and reported in this issue indicates that feelings of impaired motion occurred as well as pain in dance students, causing clinically relevant levels of disablement.

Pain does not only affect the young and elite, of course, with musculoskeletal pain linked to unhealthy ageing in the general population (Wilkie et al).[4] A growing and broad body of literature concerning performing arts participation and ageing indicates that continuing to actively participate in performing arts into older age can be physically advantageous and emotionally rewarding. However, the artist needs to be able to adequately adapt to any age-related changes in psychological and physical characteristics that may increase the likelihood of pain, injury, maladaptive changes, burnout, or overload occurring (Kenny and Ackermann 2016).[5] This is highlighted with some instrument-specific stressors becoming maladaptive over time, as seen in the structural teeth changes occurring in professional Brazilian woodwind musicians, described by Glória et al. in this issue (p1), and yet other positive adaptive changes such as increased flexibility occurring with higher training in Bharatanatyam dancers, as described by Sharma et al. (p20).

Kenny et al., in this issue (p39), found ageing in Australian orchestras to not be associated with physical or psychological decline in professional orchestral musicians over the age of 55. However, there was a dramatic decrease in the number of musicians playing professionally in this age group, leading the authors to consider the possibility of "musical survivors."

In support of this notion, a health and ageing paper just published from a large musician population in Germany revealed that when many more musicians >55 years remain in professional orchestras, they do report higher injury rates than their younger colleagues (Gembris and Heye, 2018).[6] It is unclear why the attrition rate is higher in some countries than others as musicians age, possibly in relation to insurance or other factors, but there is clearly still room for further research to focus on what may contribute to positive ageing in symphony orchestras. (Brodsky, 2011).[7]

There remains a clear need for research into optimal approaches to managing pain in the performing arts across the lifespan of this population, engaging concepts such as the holistic and multimodal injury prevention and management strategies, as suggested by Ioannou, Altenmüller, and colleagues (p26). The increasing emergence of systematic reviews in performing arts medicine, such as the musculoskeletal assessments of posture and motion in upper string players by Schemmann et al. in this issue (p56), will facilitate the identification of methods and knowledge gaps to assist in such future research plans.

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EDITOR'S NOTE—A Thank-You to Judith Peterson

With this issue, Judith Peterson, MD, has finished her term as Associate Editor for Dance for MPPA. We thank Judith for her commitment and efforts in expertly evaluating the dance papers submitted to MPPA, ensuring that these papers received careful and rigorous review to verify their quality. It has been a pleasure to work with Judith, and we all thank her for her contribution as Associate Editor as well as for her greater service to the health of performing artists.

Beginning with this issue, we are very pleased to announce that Shaw Bronner, PT, PhD, has agreed to become the new Associate Editor for Dance for the journal. Please join us in welcoming Shaw to this new role.

—B.J.A., Editor