



Editorial

## Tai Ji Quan: From traditional applications to contemporary practice

A warm welcome to this special issue of the *Journal of Sport and Health Science*, which is devoted to Tai Ji Quan and its wide range of applications.

Tai Ji Quan is a unique aspect of Chinese culture, with a history extending back several centuries.<sup>1</sup> Although it evolved from the martial art of Wushu,<sup>2</sup> training and practice of Tai Ji Quan involve synchronized execution of bodily movements with deliberate intention and rhythmic breathing. For this reason, it has often been viewed as a healing art for nurturing the human body, warding off diseases, and enhancing overall health and well-being. The unique combination of these martial and healing dimensions has made Tai Ji Quan a distinctive exercise modality that attracts practitioners of all ages from all walks of life.

Despite the substantial variation in styles and practical applications that exist among Tai Ji Quan schools,<sup>1,2</sup> the world community over the last 2 decades has witnessed widespread dissemination efforts to promote Tai Ji Quan and raise awareness of the growing body of scientific research supporting a broad range of health benefits from its practice. Both its popularity and the accumulating scientific evidence point to a promising future for continued applications of Tai Ji Quan as an integrative movement therapy and exercise protocol for improving health and preventing disease.

The increasing focus on establishing the efficacy of Tai Ji Quan interventions through well-designed and rigorous scientific research is both of public health importance and clinical relevance in terms of promoting evidence-based healthcare and preventive programs. However, the lack of emphasis on developing tailored programs for specific health conditions and disseminating effective Tai Ji Quan interventions for health promotion and chronic disease prevention is problematic. Therefore, the primary purpose of this special issue of the *Journal of Sports and Health Science* is to bridge the gap between research and practice by providing readers with a

comprehensive review of the current state of Tai Ji Quan used for health promotion and disease prevention while introducing them to various perspectives on Tai Ji Quan in practical community and clinical contexts.

The 10 peer-reviewed articles in this issue are led by an overview by Guo and co-authors<sup>3</sup> of the history and evolution of classic Tai Ji Quan styles and the functional utility of Tai Ji Quan, features that have not been covered extensively in the literature. Guo et al.'s paper also provides insight into the broad contextual applications of Tai Ji Quan traditionally and contemporarily, and explains how this ancient art has been used as a vehicle for enhancing cultural understanding and exchange between East and West.

Focusing on contemporary applications of Tai Ji Quan in community and clinical practice, Li<sup>4</sup> discusses the transformation of traditional Wushu-based movements into therapeutic training and rehabilitation practices for treatment and restoration of movement-related disorders such as balance and/or mobility impairment. By introducing the evidence-based balance-training modality *Tai Ji Quan: Moving for Better Balance*, Li highlights the therapeutic potential and need for a paradigm shift in the application of Tai Ji Quan to address functional impairment and deficits in postural control and movement.

Examining the substantial research literature supporting the use of Tai Ji Quan, Harmer<sup>5</sup> investigates the dearth of high-quality evidence. As the volume of Tai Ji Quan research continues to increase, it is clear that little effort has been made to address efficacy, effectiveness, and cost-effectiveness issues related to the application of Tai Ji Quan as an intervention modality to prevent health declines or to enhance physical and psychological function. Harmer's article highlights the barriers to broad dissemination of Tai Ji Quan programs into community practice and speaks to the need for comprehensive and coordinated approaches to developing and disseminating best-practice evidence in public health.

Falls and injuries from falls in older adults represent a significant public health problem worldwide.<sup>6</sup> Connecting research findings to public health and policy, Stevens and co-authors<sup>7</sup> describe applications of Tai Ji Quan to the field of fall prevention in older adults and discuss the integration of evidence-based programs into routine community healthcare services and public health policy. As an example of research-to-practice implementation, Fink and Houston<sup>8</sup> present a case study of the application of a fall prevention project in a

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multicultural setting in the United States. This article provides “lessons learned” for translating evidence-based Tai Ji Quan programs by nonscientific community programmers/practitioners and policymakers in diverse communities with varying resources, cultural backgrounds, and languages. The commentaries by Sleet and Baldwin<sup>9</sup> and by Leung<sup>10</sup> offer additional perspectives on implementing evidence-based programs in real-world settings.

The final three articles present a succinct, updated summary of state-of-the-art research on Tai Ji Quan related to preventing brain deterioration, managing cardiovascular disease, and recovering from cancer treatment. On the basis of the available evidence, Chang and colleagues<sup>11</sup> offer a mechanistic approach and framework for future research utilizing Tai Ji Quan to promote brain health, while Taylor-Piliae<sup>12</sup> delivers an overview of the potential of Tai Ji Quan to prevent and manage cardiovascular disease and suggests the need for continued high-quality research to clarify its place in the treatment of this important lifestyle pathology. Finally, the review article by Winters-Stone<sup>13</sup> highlights the scarcity of Tai Ji Quan research and applications in cancer. In identifying the potential merit of Tai Ji Quan in facilitating the recovery process in cancer patients, Winters-Stone’s article emphasizes the ample research opportunities for exploring Tai Ji Quan as a non-Western exercise modality aimed at improving long-term outcomes for aging cancer survivors.

The publication of this special issue reflects the journal’s drive toward publishing substantive, quality multidisciplinary research from around the world. Collectively, it provides a comprehensive review of current trends and new approaches in Tai Ji Quan research related to health, as well as insights into translating and/or moving the findings into real-world contexts by informing researchers, policymakers, and practitioners of the need to implement effective public health and evidence-based programs in community and clinical settings.

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