

Twenty Years of the *Journal of Physical Activity and Health*: Time to Change the Paradigm in Physical Activity Research

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In 2004, the first issue of the *Journal of Physical Activity and Health* (JPAH) was published.¹ Twenty years since its humble beginning, JPAH, the official journal of the International Society of Physical Activity and Health (ISPAH), has grown to become a flagship journal with an extensive global readership. The last 20 years have also seen growing environmental and social challenges. Global warming has reached a state of emergency with record-breaking extreme weather events increasingly experienced around the world; social inequalities have worsened in many countries; and wars, conflicts, and pandemics have interrupted the lives of many.

While physical activity remains a ‘best buy’ for chronic disease prevention, its broader role in health, society, and the environment must be reconsidered in the age of syndemics or polycrisis.² JPAH, therefore, is publishing a special issue titled “Physical Activity as a Necessary Solution to Current Global Health Challenges” to address the current role that physical activity can and should play in addressing these concerns. It’s a fitting special issue theme to commemorate the 20th anniversary of JPAH as we consider the leadership role of the Journal, too.

This special issue featured 19 papers and 2 commentaries addressing several interconnected challenges experienced in our time. Of those, 3 papers and a commentary examined how physical activity relates to climate change. Lee et al³ and Franco Silva et al⁴ reviewed the intricate association between climate change and physical activity (24-hour movement behaviors in the case of Lee et al) and found complex relationships across aspects of climate change, physical activity, and health. A specific example outlining this relationship is presented in the study by Giles et al,⁵ who found the reduction in physical activity during wildfire smoke in Canada to correlate with worsened mental health. In a provocative commentary by Gelius et al,⁶ the authors expanded beyond the typical approach to exploring the relationship between climate change and physical activity, namely, physical activity being a ‘victim’ of climate change. Instead, Gelius et al recommended further considering physical activity as a ‘perpetrator’ of climate change due to the potential carbon footprints of physical activity and sport, as well as a ‘potential solution’ to climate change.


Echoing this proposed multifaceted relationship, 2 studies examined the sport/physical activity correlates of sustainability awareness at the individual level,⁷ and the performance on indicators of United Nations Sustainable Development Goals at the country level.⁸ Taking the ‘physical activity as a potential solution’

perspective, several studies focused on active travel as an apparent intersection between physical activity and climate change solutions. Harrington et al⁹ found that Glasgow bike bus users considered bike buses as a way to promote a sustainability agenda, a transport modal shift, and community-level activism. Maulida et al¹⁰ examined national urban planning policies of 15 Asian countries and found that these policies insufficiently considered active travel in young people. Finally, van Sluijs et al¹¹ found the inverse longitudinal association between family car ownership and children’s moderate- to vigorous-intensity physical activity to be counterintuitive and unexpected, implying the complexity of the relationship and potential unintended consequences of reducing car ownership.

Equity is another key theme of this special issue. Two studies focused on the LGBTQA+ community, a largely under-researched, and often under-served, at-risk population group. Fortnum et al¹² found LGBTQA+ youth to be of higher risk in 24-hour movement behaviors compared to the general population or their heterosexual counterparts. Peterson et al¹³ found a clear lack of physical activity interventions that target LGBTQA+ adults. Hasset et al¹⁴ found largely favorable outcomes of sports participation among people with physical and intellectual disability and they therefore recommended promoting sports participation among people with these disabilities. Berry et al¹⁵ identified contextual factors that may affect how people with musculoskeletal conditions from under-served population groups access quality support from the health system and participate in physical activity. Leite et al¹⁶ reviewed studies on longitudinal changes in physical activity inequalities by sociodemographic characteristics throughout the life course. They found that gender inequalities tend to emerge from a young age but there is a lack of evidence on racial/ethnic and socioeconomic inequalities. Finally, Sone et al¹⁷ took an intersectionality approach to inequity and inequalities, and highlighted the challenges and future directions of quantitative intersectionality research in physical activity.

The relationship between physical activity and mental and social health is an area of great potential in terms of both research and practice, as highlighted by a recent commentary published in JPAH (in the October issue) calling for more translation and implementation of research evidence on using physical activity as a potential treatment for mental health issues.¹⁸ Capitalizing on the mental and social health benefits could be a viable way to promote physical activity and incorporate it into public health and clinical guidelines and practices. Through a network analysis, Martinez et al¹⁹ found that physical activity was indirectly (via stress management, diet and nutrition, and social support) linked to depression and stress and had both direct and indirect (via stress management and social support) associations with anxiety. Based

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on more than 10 years of longitudinal data, following Australian children from 8 to 9 years of age to 20 to 21 years old, Owen et al²⁰ found that continued participation in sports, particularly in team sports, was associated with a lower risk of loneliness in early adulthood.

What do we do as a field moving forward? Several papers in this special issue provided novel and informative perspectives, all of which are key ingredients for making physical activity research relevant, impactful, and solution-driven. Richards et al²¹ emphasized the importance of policies and distilled key policy focuses, such as adequate resourcing, cross-sectoral partnerships, and integrated interventions. Shilton and Milton²² highlighted the role of advocacy and reflected on ISPAH's long-term strategy to promote physical activity as a global health policy priority. Nieto et al²³ identified a broad range of social returns on physical activity and sports. This study further highlighted the importance of identifying and leveraging the broad benefits of physical activity, beyond the typical noncommunicable diseases, to engage multi-sectorial stakeholders to open new pathways of physical activity promotion.²⁴ Finally, Luo et al²⁵ put most of the relevant concepts within the special issue together by applying participatory systems mapping to better understand the problem of physical inactivity and identify potential solutions with relevant stakeholders.

Physical inactivity remains a 'wicked problem' without simple solutions.²⁶ Promoting physical activity may be even more challenging and complex in the era of syndemics.² We can no longer afford to do 'business as usual' research with mounting publications but little impact.²⁷ Instead, we need to move towards a mission-oriented research paradigm—apply systems thinking, collaborate with diverse stakeholders, capitalize on co-benefits, focus on equity, invest in advocacy, and bridge the gaps between research and implementation/policies.²⁸ We hope this JPAH 20th anniversary special issue can catalyze this research paradigm change.

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