

# Life Course Epidemiology Applied to Physical Activity Research

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Motivated by a commentary published in early 2022,<sup>1</sup> and to address the lack of application of the life course framework to physical activity research, the *Journal of Physical Activity and Health* (JPAH) took the initiative to call for a Special Issue on Physical Activity and Life Course Epidemiology. We are pleased to celebrate the successful publication of this Special Issue with our community of readers.

First, we wish to express our utmost appreciation to all authors, reviewers, associated editors, and editorial board members, as well as participants of the cohorts featured in this Special Issue. Each of these contributors has played a crucial role in bringing this Special Issue to fruition. Their invaluable contributions have ensured the publication of high-quality research, which will enrich the body of knowledge in the field of physical activity and life course epidemiology, and inspire further research and policies to promote physical activity worldwide.

We invite you to navigate the manuscripts included in this Special Issue as they offer a journey of physical activity research across all cycles of life. The scope of the studies encompasses various life stages, ranging from pregnancy,<sup>2-4</sup> early infancy,<sup>5,6</sup> and youth<sup>7</sup> to different adulthood phases.<sup>8-11</sup> By encompassing research from diverse cohorts and life stages, the manuscripts featured provide a rich and multidimensional perspective to advance the understanding of the determinants and consequences of physical activity. Such knowledge can be used to create meaningful, equitable, and accessible opportunities for physical activity that benefit everyone, regardless of their life circumstances.

The issue features a collection of 10 manuscripts lead by researchers at different career stages, including early-career researchers, and from across the world, including Australia, Brazil, Japan, Singapore, and the United Kingdom. This reflects JPAH's commitment to the principle that "Science has no Borders, so Should Scientific Publishing,"<sup>12</sup> and our vision to inspire meaningful change in how the world views the association between physical activity and health.

It has become apparent that research on determinants and consequences of physical activity could be enhanced by adopting a life course framework. The research featured in the Special Issue






draws evidence from both well-established cohort studies that have been ongoing for several decades, and contemporary cohorts established since 2010. These influential studies include the 1970 British Cohort Study,<sup>9</sup> the Australian Longitudinal Study on Women's Health,<sup>10</sup> the Pelotas (Brazil) Birth Cohort studies,<sup>3,5-8</sup> the Southampton Women's Survey,<sup>4</sup> the Singapore Preconception Study of Long-Term Maternal and Child Outcomes,<sup>2</sup> and the Sasaguri Genkimon Study.<sup>11</sup> This diversity should be celebrated, as comparing and contrasting evidence from different countries and studies established in different periods is crucial to gain a deeper understanding of current trends and patterns in physical activity, taking into account the evolving social, cultural, and technological landscapes that shape our behaviours in today's world.

Not coincidentally, physical activity and women's health have emerged as prominent topics within these studies.<sup>3,4,10</sup> This aspect deserves to be highlighted because comprehending physical activity through the lens of life course should drive us to advance strategies aimed at reducing the non-acceptable disparity in physical activity opportunities between men and women, particularly during the reproductive age.<sup>13</sup>

Despite our enthusiasm over the successful publication of these 10 manuscripts, we acknowledge there is still much room for improvement within our research field. However, we invite you to adopt an optimistic "glass half-full approach." We invite our community to use this Special Issue for more than a collection of research findings. It should also serve as a platform of innovative methodologies that can be used to drive equitable interventions and consider that complexities of life sometimes may take priority over opportunities to be physically active. Ultimately, we hope that this Special Issue will contribute to a nuanced perspective on physical activity across different stages of life, with the potential to inform evidence-based interventions and strategies that can effectively promote physical activity across the lifespan, to create active and healthy societies worldwide.

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