

#### **COMMENTARIES**

# Welcome to Physical Activity and Health

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Welcome to the Physical Activity and Health Journal! We proudly announce Physical Activity and Health (PAAH), the official journal for the 'International society for the study of Physical Activity and Health Research', an Open Access (OA) publication, that publishes research quickly in order to have a maximal impact upon all disciplines of Science, Technology, Engineering, Medicine and Humanities & Social Sciences.

Physical activity is an important determinant of both physical and psychological health. Regular physical activity exerts beneficial effects and prevents the progression of a number chronic diseases. It promotes well-being, and has a positive effect on both communities and societies. Unfortunately, more than 60% of adults worldwide fail to reach the recommended levels of physical activity. PAAH was created by a group of researchers from high profile universities and institutes throughout the world. We identified many challenges that needed to change to facilitate increased accessibility, reproducibility, dissemination, and preservation of human physical health studies. We sought a consensus online regarding the structure, functional capacity and organization of the Journal which lead to the current composition of our editorial board.

Scientific evidence indicates that regular physical activity, exercise, and fitness are a key determinant of health outcomes. Appropriate dosage of regular physical activity and sport participation provides benefits for males and females of all ages, including those with disability, with physical and mental health issues, as well as positive results in relation to social relationships and interactions. Physical activity is a cheap and effective means for helping to prevent disease, improve health and wellbeing, and to promote integration and social interaction (Miles, 2007). The health problems affecting the muscles and bones (arthritis, osteoporosis, back pain) can be reduced from regular exercise training of at least a moderately-intense level. Special designed programmes to improve muscle strength were reported to help reduce risk of falling in older adults (Mitchell, 2013). This benefit includes balance and muscle strengthening exercises every week performed at a moderate intensity. Prescribed aerobic activity can also help minimize hip fractures. Several epidemiological studies have shown that physical activity can reduce depression and its recurrence. Exercise also reduces anxiety and promotes a positive reaction to stress. In addition, physical activity appears to be a very useful means to improve some aspects of mental functioning (e.g., short-term memory improvement, and decision making), in reduction of dementia and Alzheimers disease (U.S. Department of Health and Human Services, 2008). In addition to health benefits, evidence suggests that people who are physically active for about 7 hours per week experience a 40% lower risk of dying early compared with those who are active for less than 30 minutes per week.

Due to both the health, economic, and social benefits of physical activity as well as the high costs of inactivity, which include increases in obesity and diabetes, and the increasing age of populations, several countries have implemented national initiatives to promote physical activity. A world-wide increase in the scientific interest in the promotion of the health enhancing benefits of physical activity during leisure time, in household and outdoor chores or at work has been observed since 1994 (Pate, 1995). Several years' later physical activity for transportation (walking, cycling, and use of public transport) became the object

of interest. The effectiveness of interventions to increase physical activity was accelerated by the growing awareness of a worldwide problem in overweight, inactivity and obesity. The evidence of chronic disease and lack of exercise in children and adolescence, and ageing populations in most parts of the world has been well documented (WHO, 2010).

The Physical Activity and Health Journal publishes papers concerning research that has been reported elsewhere (typically in a substantive journal) and from relevant research that has not been previously published, including replication attempts of previously published results. The topics related (but not limited) to the following lists are welcome topics for submission: (1) Physical Activities and Public Health, (2) Exercise Science and Clinical Medicine, (3) Physical Education and School Sports, (4) Sports Recreation and Health, (5) Sports Science and Clinical Medicine, (6) Sports and Physiology, (7) Sports and Psychology, (8) Physical Activities in Special Population. An increasing number of grant-giving organizations stipulate that study financed by public money should eventually be made available to the scientific community and PAAH offers a means of doing so in a manner that is subject to rigorous peer-review.

Our editorial board reflects the transdisciplinary global collaboration we want to encourage between the sciences and humanities as well as among academics, community members, and physical health research professionals. Together we aim to help transform how science is currently conducted with much higher levels of openness and active public participation and engagement. By advancing a culture of physical activity and health research and development, we want to actively contribute to increase openness in methods and reproducibility aspects of scientific protocols, instruments, and practices. To date, major publishers and professional organizations have done little to change the current culture of secrecy concerning physical activity and health science. This can be facilitated by a progressive journal that provides a mechanism to openly share and comment on new research and developments. We hope that PAAH will motivate researchers to share their studies and help end the culture of secrecy that is so unbefitting of scientific development.

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## **Competing Interests**

The authors have no competing interests to declare.

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