Commentary

Exercise is...?: A commentary response

Jennifer Robertson-Wilson a,*, Michelle Fortier b

a Department of Kinesiology and Physical Education, Wilfrid Laurier University, Waterloo, ON N2L 3C5, Canada
b School of Human Kinetics, University of Ottawa, Ottawa, ON K1N 6N5, Canada

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In the recent issue of *Journal of Sport Health and Science*, the question of “Is exercise medicine or what?” was posed. We wish to follow the editors’ suggestion to “...stimulate further discussion on the topic” by offering additional points of consideration to those discussed by Nesti in “Exercise for health: Serious fun for the whole person?”. We will specifically debate Nesti’s position touting the potential role of sport as an alternative to “Exercise is Medicine” (EIM) by providing a selected critique of sport.

Physical inactivity continues to be an ongoing challenge in many countries. Nesti correctly pointed out the limitations in our efforts (to date) to increase engagement in physical activity. After arguing that many individuals experience exercise as “uncomfortable”, Nesti raised the potential of sport (by considering aspects of motivation, play, and flow) as the means by which to encourage greater physical activity participation. But is sport the answer to rectify physical inactivity? We would suggest further discussion and some caution is needed before positioning sport in this way.

First, as part of the argument for sport, Nesti offered that the features of sport have “...made it by far the most practiced form of physical activity and exercise across the world” using as evidence a study of over 500 U.S. children and adolescents where physical activity and sport trajectories were linked. Yet this seems insufficient and further examination of sport participation levels is warranted. For example, a report highlighted that for Canadians over the age of 15, only one quarter reported sport participation (considered to be “at least once a week during the season or for a certain period of the year”) with higher participation rates observed in certain sub-populations such as men, those of higher economic status, and younger participants. The report also found that over the past 2 decades sport participation rates had fallen and that engagement in sport was the third most common active leisure activity reported “on a given day” for 2010 data behind walking/jogging and exercise respectively. Indeed, non-sport activities (e.g., walking) are often among the several top forms of activity reported by adolescents and adults (e.g., Refs. 5,6). While sport participation may be higher in other countries, other trends (e.g., greater participation by males) appear to be more consistent. If sport is to then be viewed with renewed interest as Nesti suggested, we must not fail to consider which individual-sport (just like exercise) has traditionally failed to cater to and draw in to a physically active lifestyle and how best to change this. We must consider the possibility of play and flow through sport against an absence of interest (one of many reported reasons for not engaging in sport). Perhaps this is where Nesti’s idea that there is a “...need to look more closely at the value of sport to the community, and its role in creating and sustaining identity” deserves greater explanation.

Second, while Nesti briefly acknowledged negative outcomes of sport involvement such as “…injuries, burnout, and over-competitiveness”, the discussion of negative outcomes was minimized. A recent review by Bean and colleagues underscored the different adverse outcomes of organized sport participation not only for the young athlete, but also for the family members. Further, many youth experience sport in physical education. The concerns with sport in physical education were well articulated by Ennis with several research examples demonstrating how sport focus and associated methods around instruction have in some cases undermined engagement in activity (e.g., Refs. 10,11). These (as well as challenges to adult participation in sport) must be adequately considered if sport is to serve as a setting for physical activity for more individuals as advocated by Nesti and others. Otherwise, sport will merely stand alongside the problem of “...the potential negatives associated with exercise” that Nesti identified as a key issue in EIM.

Given the challenges associated with sport participation, it is perhaps prudent to consider sport as a piece of the physical inactivity puzzle. Kahn and colleagues highlighted that sport is one of several recommended approaches to increasing physical activity. The potential for sport is also echoed in the findings from Kwon and colleagues as they concluded that

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“although consistent sports participation is insufficient to maintain healthy moderate-to-vigorous physical activity behavior, joining organized youth sports (despite eventually dropping out) could be important to avoid a consistently inactive lifestyle”. Sport (as well as running) participation across adolescence has also been found to predict activity levels in early adulthood. These studies notwithstanding, there is also a need for additional evidence to support sport-based interventions. For example, greater inquiry is needed for the effectiveness of sport specific interventions (across the lifespan) to raise physical activity levels as in 1 case Priest et al. specifically found “ … an absence of high quality evidence to support interventions designed and delivered by sporting organizations to increase participation in sport”.

In sum, if inactivity trends are to be remedied and physical activity, including exercise or sport, is to be anything and taken up by a greater percentage of the population, it will take efforts to work across disciplines, settings, and types of activities, something we see in Smith’s concept of “exercise is recreation”. This is consistent with ecological models of health (and exercise) promotion. MacAuley and colleagues rightly pointed out the need to consider broader social, environmental, and political drivers of activity levels in order to see greater success in increasing physical activity through EIM and/or sport. Does (as Nesti proposed) sport have a role to play—Yes. But not before being subjected to the same type of critical reflection that was applied to exercise (as medicine).

Authors’ contributions

JRW conceived of and drafted the initial version of this commentary. MF significantly edited the paper and provided additional content information. Both authors have read and approved the final version of the manuscript, and agree with the order of presentation of the authors.

Competing interests

Neither of the authors declare competing financial interests.

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