

Dr Stephen Shannon – Written evidence (NPS0006)

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Please see a written response that has relevance for the following questions on the public consultation:

- How can children and young people be encouraged to participate in sport and recreation both at school and outside school, and lead an active lifestyle? If possible, share examples of success stories and good practice, and challenges faced.
- What successful policy interventions have other countries used to encourage people of all ages, backgrounds and abilities to participate in sport and recreation, and lead more active lifestyles?

Background to the Physical Inactivity Problem

There is substantial evidence, and public awareness that regular physical activity and exercise is beneficial for one's health and well-being. However, in a typical week, upwards of 60% of adults report engaging in no organised physical activity or sport, and 80% of children do not meet the physical activity guidelines outlined by the Chief Medical Officer. Based on decades of research into exercise psychology, including our own at Ulster University, I argue that compounding population trends of declining physical activity, are exacerbated by the lack of promotion on the mental, social and physical health benefits of being active.

Evidence indicates that many lack the sufficient motivation to direct their energy towards physical activity behaviours, and sustain their physical activity motivation over time (i.e., Teixeira et al., 2020). One may have multiple and sometimes conflicting motives for being active, that ebb and flow. A classic example is the influx of January gym memberships for New Year's resolutions to lose weight. In many (if not most) cases, gym memberships receive poor attendance, and cancellations involving major expense to consumers. Decades of behavioural science research show that internal, autonomous and intrinsic motives, including being active for personal enjoyment, is likely to continue over time. In contrast, being active for introjected reasons, such as the shame or guilt one feels towards their diet and/or body image, is highly unlikely to be maintained over time. Despite the potency of introjected punishments for one's behaviour, they are typically short-lived, and linked with poorer mental health. Hence, effective behaviour change interventions are needed in which the physical activity environment is conducive to positive physical activity motivations.

According to Deci and Ryan, among other behaviour change theorists (e.g., Standage et al., 2012; Reeve, 2015; Hagger & Chatzaranis, 2014), the key factor involved in motivating individuals to uptake physical activity, and maintain a healthy physical activity motivation over time, is for one's environment to support their psychological needs for autonomy (i.e. volitional behaviour), competence (sense of effectiveness), and relatedness (i.e. belongingness) during physical activity experiences. When one feels competent, socially related and autonomous in their physical activity behaviours, they

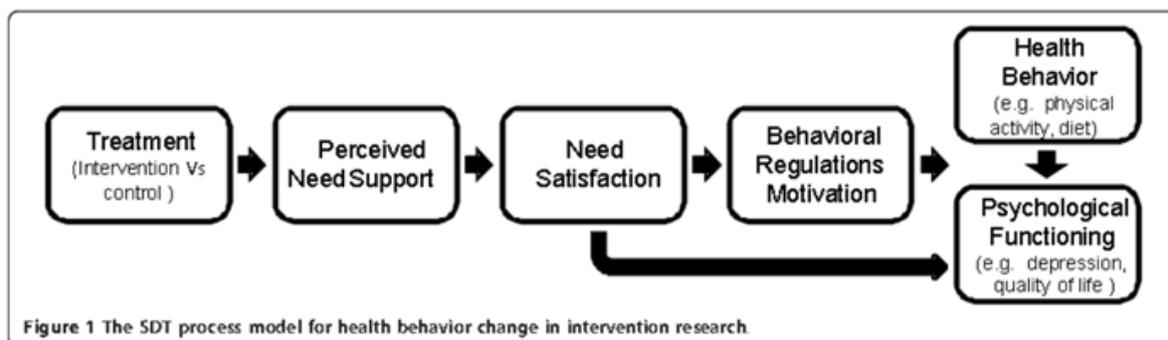
experience a sense of intrinsic motivation for the activities, which is defined as inherent satisfaction and enjoyment in the activity – that you engage in the activity because of its own merits. Such an experience is in stark contrast to physical activity behaviours that feel externally motivated wherein, for example, a person feels guilty or ashamed when conversing with their personal trainer, family or spouse for not being active. Indeed, research shows that exercise practitioners who develop exhausting, but time-efficient ‘get fit quick’ routines for their clients, often produce physical activity experiences which are unpleasant and enduring. This view is articulated well by Panteleimon Ekkekakis who has shown that adults’ early negative memories of Physical Education predict their present sedentary lifestyle.

Instead, promoting the positive social, physical and mental health benefits of physical activity is supported in our research. Some of the following examples good practice illustrate how evidence-informed physical activity interventions can engender needs-supportive social conditions, wherein enhancement of physical activity has been realised through healthy, autonomous motivation.

Successful Case Studies and Good Practice

In a study conducted our team conducted across the island of Ireland (Breslin et al., 2017) our data showed that meeting the World Health Organisation’s (WHO) physical activity guidelines among children is associated with improved health. We surveyed over 700 children, and found positive mental health, social belongingness, physical self-efficacy and healthy body composition among active children compared to inactive children. We concluded that the increased levels of physical activity among active children were due to increased motivation which stemmed from socially supportive social environment, and psychological tendency to feel capable during physical activity.

In a further study that supported the motivational analyses of physical activity above, the author led on a non-randomised school-based intervention trial among children of low socio-economic status (Shannon et al., 2018). Including an intervention group that received a 10-week programme wherein their school teachers were trained in supporting children’s psychological needs, and comparing with a waiting-list control group, our key findings were that children’s mental health and physical activity behaviours were enhanced by intrinsic motivation and perceptions of enjoyed, realised through activities again that children felt socially supported in, and experienced personal competence and autonomy. By way of illustration of the model used to inform the study design, Figure 1 highlights a behavioural process that was evidenced in the study, and guided by sound behaviour change principles.



Additionally, the Student Activity and Sport Study Ireland surveyed over 8000 university students over the age of 18, showing that those meeting the aerobic physical activity (e.g., walking, cycling) guidelines reported greater general health and mental health compared with their inactive peers. Having performed a secondary analysis of this dataset (n.b., under peer-review for publication), I found that mental health benefits are further observed when one engages in exercises that the individual feels personally capable in and enjoys.

Lastly, and turning to the world of sport, the author led on a study among 685 athletes, inquiring on how their coaches influenced their mental health (Shannon, Prentice and Breslin, 2020). Using a statistical profiling methodology, we found that athletes who perceived their coach as supportive and concerned with their development were less likely to experience burnout, and more likely to experience positive moods and sport motivation across a competitive season. These findings were comparative to profiles of athletes who felt their coaches were overly concerned about being critical, authoritative and/or indifferent to support their psychological needs.

Conclusion

The above findings highlight that physical activity and sport behaviour change is difficult to achieve, and health-promoting physical activity requires consideration of various social and psychological factors. To this end, the inference is that while recognizing there is no 'one-size fits all' approach to behaviour change, physical activities that satisfy our psychological needs can be good stimulators of physical activity adoption in childhood and be long-lasting. As a guide to such behaviour change, the evidence suggests practitioners and policy makers focus on the following:

- **Competence:** promote activities that provide a challenge, but are also within one's capability. Whether this means taking the stairs instead of the lift, walking for 10 minutes per-day, or climbing a mountain once a month, individuals can feel a sense of challenge and subsequent accomplishment, to be progressed in future.
- **Autonomy:** consider the degree of choice and how self-determined people feel for specific physical activities. Allowing choice for those that people enjoy and fit within their lifestyle can offer a sustainable path.
- **Social belongingness:** being active offers an opportunity to gel with friends and family, or meet new people. A range of activities from recreational five-a-side football, Parkrun or walking/hiking clubs offer this possibility for children and young people.

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