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A Longitudinal Study to Develop an Emotional Design Framework for Physical Activity Interventions

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Abstract: Multidisciplinary by nature, design research brings together varying research fields to answer globally significant questions. Emotional design, a field which helps us create products that influence people's behaviour, and sports psychology, containing a growing field of recent research which focuses on understanding the emotions experienced through sport and the effects this has on our health and wellbeing, are two research fields that can be combined through design research to tackle global physical inactivity. The combination of these research fields presents an opportunity to build new tools and methods that could help designers create new interventions to promote positive behaviour change in the form of physical activity uptake, ultimately improving people's health and wellbeing. This paper proposes a framework that can be used to develop new products and services that focus on not only improving the uptake and upkeep of physical activity but also helping people have a healthy emotional relationship with exercise. To develop this framework, a set of comprehensive maps exploring the relationship between human emotions and physical activity across a range of factors was created. These maps were then further evolved through in-depth interviews, which analysed the reasons behind the emotions felt, how physical activity fits into the daily routine and how important regular exercise is to people. Finally, to progress these findings into a design framework, a longitudinal study was carried out to explore further the emotional relationship people of varying sporting abilities have overtime with physical activity. This framework can be used to design more successful interventions that help people to not only become more active initially but implement long term changes to ensure they stay active.

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