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## BEHAVIOURAL ADDICTION OPEN DEFINITION 2.0—USING THE OPEN SCIENCE FRAMEWORK FOR COLLABORATIVE AND TRANSPARENT THEORETICAL DEVELOPMENT

*It will be important to continue to use the Open Science Framework to build our conceptualization of behavioural addictions in a collaborative and collegiate manner.*

Our recent debate paper [1] discussed the trend in research on behavioural addiction to pathologize common behaviour. To halt this trend, we proposed an operational definition of behavioural addiction (<https://osf.io/q2vva/>) [2], with related inclusion and exclusion criteria. The definition focused on behaviours marked by significant and persistent functional impairment. An Open Science Framework (OSF) was created, supporting further development in a transparent, collaborative and iterative manner. We wish to thank the commentators for engaging with our work. Unfortunately, we lack the room to respond comprehensively to all their points. We will focus upon the most essential and implementable suggestions. We were pleased to see that most of the commentators [3–5] were in support of our consensus development process. Their thoughts contributed to evolving the definition, which will be updated accordingly [2].

We note that three commentators [4,6,7] disagreed with our fourth proposed exclusion criterion—behaviours better defined as a coping strategy should not be defined as behavioural addiction. We believe Thege [4] makes a strong argument when stating rhetorically that, as coping behaviours do not prevent a substance use

disorder diagnosis, there is no reason why they should do otherwise for behavioural addiction. However, we suggest keeping a modified coping exclusion criterion because, as Stein *et al.* [8] assert, we think that an expected response to common stressors or losses should not be conceptualized as a mental disorder. Also, when an excessive behaviour is an expression of a coping strategy and can be identified as such, this offers clear advantages in terms of treatment. In line with our iterative approach to theory development, we have updated our operational definition to reflect these comments. The updated exclusion criterion is:

‘The behaviour is the result of a temporary coping strategy as an expected response to common stressors or losses.’

This revision leaves room for considering whether coping behaviours that are long-lasting and of life-impairing nature may benefit from being classified as behavioural addiction. We would welcome further comments on this revision through the OSF [2].

Further, Griffiths [7] states that tolerance and withdrawal have been demonstrated empirically and clinically in pathological gambling and video gaming. This may be true if we label the wish to increasingly do something as ‘tolerance’ and the reluctance to give it up as ‘withdrawal’, but we question the value of these concepts as applied to non-substance-use behaviours. Their application seems driven primarily by the need to find similarities between substance and behavioural addiction in order to justify the addiction label for the latter. For understanding the unique expressions and processes that underlie behavioural addiction, such a comparative exercise lacks utility. We also disagree with Griffiths’ [7] proposal that the similarities between addictions are key to their identification. Rather, we strongly suggest [1] moving away from recycled substance addiction criteria so that we can fully embrace the unique psychological processes of potentially problematic and repeated behaviours. Tunney & James’ [4] commentary supports this: ‘any new recipe of behavioural addiction must include an analysis of the behaviour itself’.

Consequently, we propose that qualitative work aiming to pinpoint the uniqueness of a potential expression of behavioural addiction should be a prerequisite of any attempt to develop screening tools and conduct survey-based research in the general population; we argue that it is a stretch to suggest that existing qualitative studies have been used for this purpose. Finally, while we agree with Griffiths that most rewarding and potentially problematic behaviours are at first engaged in wilfully, when the behaviour becomes problematic it is characterized by loss of control and compulsivity, and thus


can no longer be considered as a wilful choice. Accordingly, we suggest retaining the second exclusion criterion, to ensure that hobbies and passions are not treated as behavioural addiction even though they are engaged in persistently but in an ultimately healthy (i.e. largely controlled) manner.

Finally, we appreciate Kräplin's [5] comment that children require age-specific diagnoses. This is crucial for behaviours related to children's spare-time activities—such as use of mobile phones, social networking sites and video games. It may even be useful here to move beyond age and consider the 'Evolving Capacities of the Child', as enshrined in the United Nations' Convention on the Rights of the Child [9]. Simplified, the convention states that children of the same age can differ considerably in their development, and so their rights to autonomy and agency should be considered in light of their evolving capacities. For clinical purposes, this means that individual assessments need to determine whether a child is truly incapable of controlling an excessive behaviour, or whether the behaviour is a conscious choice that makes sense to the child.

#### Declaration of interests

None.

**Keywords** Behavioural addiction, non-substance related addictions, open science, pathologization, theory development.

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