

Excessive appetites for video-games: An examination of the causes, consequences,  
and progression of problematic video-game playing

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## **Abstract**

The present thesis aimed to investigate the causes and consequences of excessive involvement in video-game playing. Four studies, all involving a sample of highly-engaged Australian adults, were conducted in order to explore a range of influences on problematic behaviour.

In Paper 1, associations between problematic video-game playing and several gambling behaviours were examined. Contrary to expectations based upon previous theories of video-game ‘addiction’, non-significant associations were found between frequency of video-game play and frequency of gambling. Likewise, generally weak associations were found between problematic video-game playing and all gambling-related variables. It was concluded that previous theoretical accounts of problematic gaming may not sufficiently account for developments in technology or the changing preferences of video-game players.

In Paper 2, the social contexts of normal, as well as problematic, video-gaming behaviour were investigated. Peer group influence was found to be significantly related to the severity of problematic gaming. Whereas non-problematic gamers generally preferred solitary play in offline games, problematic gamers reported lower social support; were more likely to have a friend or family member with a video-gaming problem; and, were more likely to report social or competitive motivations for playing. It was concluded that the capacity for online games to create rewarding, social environments for individuals with existing social difficulties may help to explain why involvement with certain types of game are more likely to lead to problematic behaviour.

In Paper 3, a new measure of maladaptive cognitions related to video-game playing was constructed and validated. Cognitions were found to load on four distinct factors: (1) perfectionism, (2) cognitive salience, (3) regret, and (4)

behavioural salience. Scores on each of these scales were found to correlate with two measures of problematic gaming, a measure of emotional distress, and distinguished between problematic and non-problematic gamers. It was argued that these cognitions could be usefully addressed during clinical interventions and provided new avenues for research related to the treatment of Internet Gaming Disorder.

In Paper 4, longitudinal associations between problematic video-game playing and maladaptive cognitions (as measured by the scale created in Paper 3) were assessed. It was found that gaming-related perfectionism, cognitive salience, and regret served as risk factors for developing problematic behaviour 12 months later. Lower perfectionism scores were also found to serve as remission factors during this period. It was concluded that cognition scores could be used to inform long-term changes in gaming behaviour, and that interventions which aim to address these cognitions may have long-term efficacy for the treatment of gaming-related disorders.

In conclusion, the present thesis identifies several ways in which modern video-games, and modern video-game players, have evolved from those described in previous accounts of excessive involvement. The presented manuscripts provide new avenues for future research related to the treatment of gaming-related disorders.

## **Declaration**

This work contains no material which has been accepted for the award of any other degree or diploma in any university or other tertiary institution to Cameron Forrest and, to the best of my knowledge and belief, contains no material previously published or written by another person, except where due reference has been made in the text.

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Date:

## List of Publications

- Forrest, C.J., King, D.L., & Delfabbro, P.H. (2015). The gambling preferences and behaviors of a community sample of Australian regular video game players. *Journal of Gambling Studies*. Advance online publication. <http://dx.doi.org/10.1007/s10899-015-9535-0>
- Forrest, C.J., King, D.L., & Delfabbro, P.H. (2015) *The socialising patterns and social networks of adults with and without Internet gaming disorder*. Manuscript submitted for publication.
- Forrest, C.J., King, D.L., & Delfabbro, P.H. (2016). The measurement of maladaptive cognitions underlying problematic video-game playing among adults. *Computers in Human Behavior*, 55, 399–405. <http://dx.doi.org/10.1016/j.chb.2015.09.017>
- Forrest, C.J., King, D.L., & Delfabbro, P.H. (2015) *Maladaptive cognitions predict changes in problematic gaming in highly-engaged adults: A 12-month longitudinal study*. Manuscript submitted for publication.

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