

The conceptualisation, status and measurement of technology-based gaming
behaviour and its correlates

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**NOTE: Chapter numbers are incorrect in
the main body of the thesis**

SUMMARY

The present thesis examined the psychological mechanisms of excessive involvement in video games. Through seven manuscripts, including four studies, this thesis has made a contribution to theory and research in an emerging field of technology-based problem behaviour.

In Paper 1, it was argued that the structural characteristics of video games may play a significant role in initiating, developing and maintaining problem video game playing behaviour. The paper noted the lack of quantitative data in this area of research and highlighted the need for theoretically driven research comparable to research on gambling machines.

In Paper 2, a new psychological taxonomy of video game features was proposed, including: (a) social features, (b) manipulation and control features, (c) narrative and identity features, (d) reward and punishment features, and (e) presentation features. The taxonomy was designed to refine the traditional psychological view of video games and guide further research projects.

In Paper 3, the methodological challenges associated with studying video game players were discussed. These challenges included *player-specific factors*, *researcher-specific factors*, and *external factors*. The paper also offered practical advice for researchers in the field of video game play to ensure the practice of ethical and efficient research.

In Paper 4, it was argued that the psychosocial context of video game play may influence problem play behaviour. Thirty eight participants were interviewed. Results showed that video games provide a sense of self-worth and status, emotional safety, a sense of belonging, and personal investment through in-game rewards.

In Paper 5, a new measurement tool of problem video game play, the Problem Video Game Playing Test (PVGTT) was developed. Drawing on two

data sets ($N_1 = 373$; $N_2 = 416$), this paper presented the internal consistency, score distribution, dimensionality and convergent validity of the PVGT. It was concluded that the PVGT demonstrated potential as a continuous measure of problem video game playing.

In Paper 6, the motivations which underlie video game playing were examined. Three hundred and ninety-nine participants were surveyed. It was found that, consistent with gambling research, problem playing is associated with extrinsic motivation factors, including introjected regulation, identified regulation and external regulation.

In Paper 7, the general health status of heavy video game players was examined. It was found that those individuals who reported playing over 30 hours per week scored lower on measures of physical functioning, mental health, vitality, general health and social functioning than normal Australian adults. They also did not meet the national guidelines for weekly physical activity and report some sleep difficulties.

It is concluded that the present thesis provides both a theoretical and empirical account of (i) the psychological mechanisms that drive problem video game playing, and (ii) the consequences of this excessive behaviour. The presented manuscripts provide the necessary foundation for numerous further research projects in this developing field of technological addiction.

DECLARATION

I hereby declare that this submission is my own work and that, to the best of my knowledge and belief, it contains no material which has been accepted for the award of any other degree or diploma of a university or other institute of higher learning, except where due acknowledgement is made in the body of the text.

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Daniel King

Signed: _____

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LIST OF PUBLICATIONS

- King, D.L., & Delfabbro, P.H. (2009). Motivational differences in problem video game play. *Journal of Cybertherapy and Rehabilitation*, 2, 139-149.
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- King, D. L., & Delfabbro, P. H. (2009). Understanding and assisting excessive players of video games: A community psychology perspective. *Australian Community Psychologist*, 21, 62-74.
- King, D. L., Delfabbro, P. H., & Griffiths, M. D. (2009). The psychological study of video game players: Methodological challenges and practical advice. *International Journal of Mental Health and Addiction*, 7, 555-562.
- King, D. L., Delfabbro, P. H., & Griffiths, M. D. (2009, in press). Video game structural characteristics: A new psychological taxonomy. *International Journal of Mental Health and Addiction*.
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