Adolescent Problematic Gaming and Domain-Specific Perceptions of Self

Devin J. Mills, McGill University, Montreal, Canada
Jessica Mettler, McGill University, Montreal, Canada
Michael J. Sornberger, Hull Services, Calgary, Canada
Nancy L. Heath, McGill University, Montreal, Canada

ABSTRACT

Problematic video game use (PVGU) is an inability to meet personal and social responsibilities due to video gaming. It is estimated to affect 5 to 6% of adolescents. Research demonstrates greater video game engagement is associated with a poorer perception of self in several domains; however, the relation between PVGU and self-perception has not yet be examined. The present study explored this association using a sample of 758 Grade 7 adolescents (55.1% Female; \( M_{\text{age}} = 12.34 \) years; \( SD = 0.49 \) years). Results revealed greater PVGU to be associated with a poorer perception of self within the behavioural conduct and close friendship domains. Similar differences emerged when examining reports of self-perception across the PVGU classifications (i.e., None, Minimal, At-Risk, Problematic). Unexpectedly, two interactions between gender and PVGU classifications were observed for the behavioural conduct and self-worth domains of self-perception. The discussion addresses the implications of these findings and points to areas of future research.

KEYWORDS
Adolescents, Domain-Specific, Gaming, Perceptions, Problematic Video Game Use, PVGU, Self

INTRODUCTION

Problematic video game use (PVGU) manifests itself in the inability to meet social and personal responsibilities. In the Diagnostic and Statistical Manual of Mental Disorders, Fifth Edition (DSM-5; American Psychiatric Association, 2013), PVGU is proposed as an emerging construct meriting further study under the name of Internet Gaming Disorder, however, the proposal states that non-Internet video games may as well be included. Nine criterion are included with this proposal. Petry and colleagues (2014) provide a brief review of the proposed criteria which include all six components of Griffiths’ (2005) biopsychosocial framework of behavioural addictions (salience, mood modification, conflict, relapse, withdrawal, and tolerance). Although individuals may report anywhere from zero to nine symptoms, the proposed cutoff to be considered as a “problematic gamer” is five or more symptoms. Research using representative samples as well as the DSM-5 proposed criteria has found PVGU may affect 5% to 6% of adolescents (Lemmens, Valkenburg, & Gentile, 2015; Rehbein, Kliem, Baier, Mößle, & Petry, 2015). More recently, research has begun to identify a variety of variables differentiating problematic gamers from other gamers, and even non-gamers. Building upon this area of research, Evans, Noam, Wertlieb, Paget, and Wolf (1994) suggest that a measure of self-perception may be helpful in identifying individuals’ strengths and weaknesses from their own perspective. In the present study, reports of self-perception across several domains pertinent to the period of adolescence were explored in relation to the report of problematic gaming symptoms. The present paper is the first to explore self-perception within the emerging field of problematic gaming.
Video Games and Problematic Use of Video Games

Video games are broadly defined as interactive games played on electronic devices. According to Granic, Lobel, and Engels (2013), a key element of this definition is interactive. That is, video game users directly affect not only the outcome of the game, but also the overall story. Video games may be played online, implying the use of the Internet, or offline, suggesting users are playing against a computer player or exploring the video game world. Video game users from around the world may join other video game users playing online creating a multiplayer experience, however, this is not always the case. For instance, some video games only exist online and do not provide a multiplayer experience. Moreover, offline games are frequently played with friends in same physical space. Therefore, the contrast between online versus offline video games does little to explain the significance of the video games in today’s society.

The Entertainment Software Association (2013) reports 59% of the total U.S. population play video games with additional research suggesting as much as 88% of U.S. youth between the ages of 8 and 19 years play video games at least occasionally (Gentile, 2009). In Asia, Gentile and colleagues (2011) found that over 80% of adolescents in Singapore play video games, and Ko, Yen, Chen, Chen, and Yen (2005) found that over 80% of adolescent males in Taiwan play video games. Thus, video games are a ubiquitous part of societies throughout the world.

Research focusing on the quantity of playing has explored several correlates. For instance, research by Anderson and colleagues (e.g., Anderson et al., 2010; Bushman & Anderson, 2002) has demonstrated a possible link between exposure to violence in video games and measures of aggression. Other research has examined the quantity of video game use in association with academic performance (Hastings et al., 2009) and obesity (Mitchell, Rodriguez, Schmitz, & Audrain-McGovern, 2013) suggesting lower academic performance and increased obesity are connected to higher quantities of gaming. Finally, an extensive research program by Kowert and colleagues (Bowman, Kowert, & Cohen, 2015; Kowert, Domahidi, & Quandt, 2014; Kowert & Oldmeadow, 2014) has demonstrated that social characteristics of gamers may be predicted by their level of video game involvement (i.e., time spent playing, game variety, social identity toward video game community). In recent years, gaming research has moved away from focusing solely on the amount of video game use and attempted to understand how an addictive or problematic style of video game engagement manifests itself (e.g., King, Haagsma, Delfabbro, Gradisar, & Griffiths, 2013; Sim, Gentile, Bricolo, Serpelloni, & Gulamoydeen, 2012).

According to King and colleagues (2013), PVGU is most commonly described in the literature as an inability to control one’s video game consumption, the experience of withdrawal-like symptoms (e.g., sadness or irritability) during periods of not playing, increased conflict in relationships, and decreased involvement in day-to-day responsibilities. The rationale for not including quantity of video game use as a symptom stems from a larger perspective that a disorder must be accompanied by negative outcomes (Griffiths, 2009). However, previous research has consistently found amount of time spent playing and the number of reported symptoms to be positively correlated ranging from .20 (Lemmens et al., 2015) to .30 (Gentile et al., 2011).

Prior research has shown PVGU in adolescence to be associated with several indicators of maladaptive functioning such as increased loneliness (Lemmens et al., 2011), greater impulsivity (Gentile et al., 2011), and elevated aggression (Desai, Krishnan-Sarin, Cavallo, & Potenza, 2010; Gentile et al., 2011; Lemmens et al., 2015). Additionally, Spekman, Konijn, Roelofsema, and Griffiths (2013) found PVGU was positively correlated (r = .65) with participants’ own feelings of being addicted to video games, suggesting a level of cognitive awareness of the effect of one’s own video game use. In a study by Rehbein, Kleimann, and Mössle (2010), groups of gamers were classified
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