

## Chapter 82

# Internet Gaming Disorder and Its Relationships With Student Engagement and Academic Performance

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### **ABSTRACT**

*Recently, the research community increased its investigations of the student engagement construct in association with learning and academic success. Some scholars linked student engagement to higher academic performance, higher retention rates, and lower delinquency rates. However, the spread of gaming among learners is thought to hinder student engagement. This study attempts to fill a gap in the literature by investigating the association among gaming disorder, student engagement, academic performance, and gamer-related characteristics, in a tertiary context on a sample of 345 university students using the internet gaming disorder (IGD-20) test and an 18-item assessment of student engagement based on the National Survey of Student Engagement. Student engagement was significantly negatively predictive of gaming disorder, whereas the latter was significantly negatively predictive of cumulative GPA. The implications of the findings for future research and recommendations are discussed.*

### **INTRODUCTION**

A growing body of research has emphasized the role of student engagement in achieving learning outcomes and ensuring academic success (Rashid & Asghar, 2016; Sinatra, Heddy, & Lombardi, 2015). In addition, the literature includes a fair number of publications that have studied how educational means, technological processes and technological resources can facilitate student engagement (Griffin & Howard,

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2017; Kift & Field, 2009; Schindler, Burkholder, Morad, & Marsh, 2017; Shernoff, Csikszentmihalyi, Schneider, & Shernoff, 2014). Furthermore, educators and policy makers have been questing after the design of effective contextual interventions to increase student engagement (Fredricks, Filsecker, & Lawson, 2016). Concurrently, a multi-billion-dollar video-gaming industry has been developing Internet games for entertainment and consumerism that are getting more addictive by design (Batchelor, 2019). Indeed, nowadays students worldwide are investing a considerable amount of time on their electronic devices on either social media or gaming which is having a negative impact on their physical and mental health and academic performance (Chang et al., 2019; Do et al., 2019; El Asam, Samara, & Terry, 2019; Hawi & Samaha, 2019; Hawi & Samaha, 2017a; Helsper & Smahel, 2019; Peterka-Bonetta, Sindermann, Sha, Zhou, & Montag, 2019; Shen, Wang, Rost, Gaskin, & Wang, 2019; Tong, Islam, Low, Choo, & Abdullah, 2019). Gaming is magnified by mobile gaming (Hawi, Samaha, & Griffiths, 2018; Kuss & Griffiths, 2012; Ng & Wiemer-Hastings, 2005). This practice seems to hinder academic success by distracting learners from following appropriate educational trajectories (Hawi, 2010) and consequently achieving desirable educational outcomes (Irmak & Erdogan, 2019). So far, the role of non-educational gaming on student engagement has received little attention (Hawi & Samaha, 2016).

## **Student Engagement**

For several years, researchers have acknowledged student engagement as one of the most important theories for guiding higher education research (Denovan, Dagnall, Macaskill, & Papageorgiou, 2019; Junco, 2012; Kahu, 2013; Kahu & Nelson, 2018; Masika & Jones, 2016; Trowler, 2010; Wilson, Broughan, & Marselle, 2019; Zepke, 2018). Student engagement is “the quality of effort students themselves devote to educationally purposeful activities that contribute directly to desired outcomes” (Hu & Kuh, 2002). The concept was introduced by Alexander Astin in 1984 as student involvement (Astin, 1984). He defined engagement as “the amount of physical and psychological energy that the student devotes to the academic experience.” More recently, researchers have started to refer to this concept as “student engagement” (Heiberger & Harper, 2008; Junco, 2012). The construct is multifaceted (Fredricks, Filsecker, and Lawson 2016). It encompasses a student’s 1) cognitive engagement such as the energy devoted to learning; 2) behavioral engagement such as the daily amount of time spent on campus, and active participation in university organizations and/or extracurricular activities; 3) emotional engagement such as contact frequency with faculty; and interaction with other students (Kuh, 2009; Pascarella, Seifert, & Blaich, 2009). Some researchers have stated that student engagement reflects the time and effort invested in educational activities (Kuh, 2009). Although some researchers believe that student engagement is the sole responsibility of the student (Hu & Kuh, 2002; Krause & Coates, 2008), others believe that it is the responsibility of the institution or of both the student and the institution (Kuh, Cruce, Shoup, Kinzie, & Gonyea, 2008; Trowler, 2010). Nevertheless, student engagement is influenced by the wider context. However, this variation in views does not affect the focus on student engagement as an outcome. It is noteworthy that in addition to studies that investigate active student engagement by focusing on factors that promote it, studies are needed that investigate factors that may hinder engagement, such as multitasking (Griffin & Howard, 2017; Heflin, Shewmaker, & Nguyen, 2017; Judd, 2014; Rashid & Asghar, 2016).

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