

The Dualistic Model of passion in the scope of problematic gaming

In the Diagnostic and Statistical Manual of Mental Disorders (DSM-5), the criteria for a diagnosis of Internet Gaming Disorder are based on those of substance use disorder (e.g., withdrawal, tolerance, continue despite problems) and gambling criteria (e.g., deceiving, escape adverse mood) (Petry et al., 2014). Nevertheless, a growing body of literature shows that some substance use disorder or gambling disorder criteria are not necessarily valid in the context of problematic gaming (Castro-Calvo et al., 2021). It is worth noting that the largest part of problem gaming research of the last decade was based on DSM-5 criteria to assess Gaming Disorder (GD). In particular, these criteria have been criticized for conflating high – but healthy – and problematic patterns of gaming (Billieux et al., 2019). In this context, it is important to elucidate the mechanisms involved in high – but non-problematic – involvement versus problematic involvement in video games, to eventually contribute to refine and improve the diagnosis, assessment, and treatment of GD. Ultimately, acknowledging the difference between problematic and non-problematic intense involvement in video gaming would contribute to reduce the stigma around the concept of GD.

The current study combines a person-centered and a variable-centered approach to pursue two main objectives. The person-centered approach (first objective) was designed to identify the psychological factors that discriminate highly involved (but healthy, i.e., non-problematic) gamers from problematic gamers. For that purpose, we used a K-means cluster analysis approach to identify different groups of gamers based on their profiles of passion towards gaming (using the Dualistic Model of Passion, Vallerand 2010, 2015). The variable-centered approach (second objective) was used for the evaluation of GD criteria. The aim here was to identify the most discriminative criteria for the detection of a potential GD. For that purpose, we used two cross-validated elastic net regression model (supervised machine learning) to identify which GD criteria/symptom predict either a harmonious or an obsessive passion.

Participants were recruited from four Spanish universities (the Catholic University of Murcia, the University of Granada, the University of Extremadura, and the University of the Basque Country). Participants were required to report playing video games at least two hours per week and to be at least 18 years of age to be included in the study. A total of 1130 participants started the completion of the online survey. Participants were excluded if they had at least one missing data point on one of the study's variables (n = 133), did not meet the inclusion criteria (n = 48), or if they provided invalid information such as playing more than seven days per week or more than 24 hours per day (n = 104). The final sample consisted of 845

participants with a balanced gender distribution (50.41% of male). Participants were aged between 18 and 50 years ($M = 23.5$, $SD = 5.03$).

Results of our first objective identified three distinct clusters of gamers based on their passion profiles, including potentially problematic gamers ($n = 100$, 12%), engaged gamers ($n = 434$, 51%), and casual gamers ($n = 311$, 37%). For potentially problematic gamers, obsessive features overcome harmonious features and promote problematic and uncontrolled engagement in gaming (as reflected by higher GD symptoms). In terms of gaming motives, they showed higher levels of escape/coping, competition, skill, and fantasy motivations than the other groups, but also the highest general motivation. Regarding impulsivity traits, we found that they are especially characterized by a lack of perseverance. For our second objective, results showed that harmonious passion presents a strong and negative relationship with conflict and positive relationships with salience, mood modification, and tolerance. In contrast, obsessive passion presents positive associations with conflict, relapse, and withdrawal.

By combining person-centered and variable-centered approaches, the present study contributes to models of and clinical approaches to the treatment of GD. Regarding the theoretical models, our results emphasize the importance of considering not only symptomatic or diagnostic features, but also underlying psychological processes and mechanisms (Brand et al., 2020). The present results also further emphasize the risk of “recycling” substance use disorder criteria to assess and diagnose GD (Castro-Calvo et al., 2021; Kardefelt-Winther et al., 2017) and potentially other types of excessive behaviors (Billieux et al., 2022; Flayelle et al., 2022). On the clinical aspect, our results support the relevance of person-centered approaches to the treatment of problematic gaming (Park et al., 2021).

Keywords

gaming disorder, obsessive passion, harmonious passion, impulsivity, gaming motivations

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