

Understanding how video games impact players' well-being and who benefits from gaming

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Purpose and Goals of the Study

The study described in the referenced paper (Wagener & Melzer, 2023) was conceptualized and conducted as an online survey assessing gaming motivations, the fulfillment of various psychological needs, and the general well-being of video game players. These psychological needs are summarized in Seligman's PERMA model (Seligman, 2011), which comprises Positive Emotions (i.e., feelings of happiness and satisfaction), Engagement (i.e., being fully invested and immersed, experiencing flow in an activity), Relationships (i.e., positive social relations and interactions), Meaning (i.e., feeling a sense of purpose and fulfillment), and Accomplishment (i.e., a sense of achievement and satisfaction). The fulfillment of these dimensions has consistently been shown to be positively related to mental health and well-being. Video games have also been shown to effectively fulfill these needs (Jones et al., 2014).

Our online survey study investigated how well-being varies across gaming-related factors such as different player types (i.e., High Performers, Casual Players, Highly Involved Players, and Crafters) and time spent playing video games, based on reports from 963 gamers. Additionally, we explored if there are still gender differences in time spent playing, video game status, and genre preferences, given that gender differences in gaming are starting to disappear.

More specifically, this study aimed to investigate several questions: Are there different player types who play and prefer video games that enable them to fulfill specific needs? What impact does playing video games to fulfill these specific needs have on players' well-being? How does the well-being

of players vary across gaming-related factors such as different player types and time spent playing video games?

What We Found

Firstly, we did not find any relation between the amount of time people play video games and their well-being. This aligns with previous research (Johannes et al., 2021; Vuorre et al., 2022) suggesting that time spent playing may be a poor predictor of the impact of video games on well-being. Other factors, such as the motivations behind playing and the fulfillment of players' needs, may play a more significant role. Interestingly, however, both our data and previous research (Jones et al., 2014) suggest a "sweet spot" where moderate game time (5 to 7 hours per week) may have some positive effects on well-being. However, this absolutely requires further investigation.

Remarkably, we found persistent differences between four player types in fulfilling their psychological needs through gameplay:

- **Highly Involved Players** (playing primarily for storytelling and achievements): These players benefit most from Positive Emotions. They are less concerned with Social Relationships in games and may struggle with regulating positive social interactions within the gaming context. Notably, Highly Involved Players showed the lowest scores across the PERMA factors, which may have serious implications for future research on problematic gaming.
- **Casual Players** (playing for fun, engagement, and to combat boredom): These players benefit mainly from Positive Emotions and Accomplishment. They also do not derive significant benefits from social engagement in games.
- **Crafters** (enjoying creation and building within games): Crafters benefit most from Engagement and Meaning, with Accomplishment showing the weakest association with their well-being.
- **High Performers** (playing to compete and show skills): These competitive players benefit primarily from Accomplishment and Meaning.

Lastly, we did not find any gender differences in the amount of time spent playing video games or in the importance of gaming compared to other leisure activities. However, it is important to note that this study only involved individuals with some gaming experience. Future research should include the general public for broader insights. We did find some persistent gender differences in genre preferences: men tend to prefer shooter games, MOBAs, and role-playing games, while women prefer role-playing games, sandbox games, and MOBAs.

Why is This Research Relevant and Who Can Benefit from It?

Our research into different player types, their motivations for playing specific games, and the benefits these games provide has multifaceted societal benefits for several stakeholders.

Game Designers and Publishers

Firstly, insights from our research can help game designers and publishers understand their target populations better. Secondly, video games can be tailored to meet the specific needs of different player types, potentially leading to designs that satisfy players' psychological needs. This is particularly relevant for developing psychologically meaningful and educational video games, which can be used in targeted interventions. However, the findings can also aid in developing commercial games that address specific target populations by understanding who is attracted to what types of games and what benefits they seek.

Public Outreach

Our study, along with similar research, can help provide a more nuanced understanding of the effects of video games, countering the often one-dimensional portrayal in general media. The COVID-19 pandemic saw an increase in video game play, highlighting even more the exponential growth of the popularity of video games in recent years. Investigating whether video games can mitigate the negative mental health impacts of the pandemic (such as social isolation, depressive symptoms, and increased stress levels) is essential. Video games could serve as accessible and cost-effective tools for mental health interventions.

Support of UN activities

As the United Nations steps further into the realm of video games and their impact on players, the current research seems beneficial for their activities. The United Nations and its partners have produced video games that promote positive outcomes such as delivering Sustainable Development Goals and mental health benefits, and also developed games for learning. Regarding mental health, the United Nations reported that video games might be more than just entertainment and could be an ally to mental health (United Nations Regional Information Centre for Western Europe, 2023).

Understanding the relationship between video games and mental health and identifying those who might especially benefit from video game engagement, is crucial for developing targeted games and understanding the target audience. We believe that the United Nations' activities in creating and promoting video games aimed at specific mental health goals may be supported by research in this direction, such as our presented study.

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