

Chapter 35

What Factors Determine the Usage of Online Games One Year Later?

Huynh Van Nguyen
Chang Gung University, Taiwan

Jiajun Yu
Suzhou Institute of Industrial Technology, China

Ching-I Teng
Chang Gung University, Taiwan & Chang Gung Memorial Hospital, Taiwan

ABSTRACT

Heavy usage of online games may negatively affect the gamer's health and take a toll on school performance. However, to date, no study has utilized a longitudinal design to identify predictors of heavy usage of online games after a year of play. This study thus refers to relevant theories (e.g., flow theory and habitual theory), investigates potential correlates of game play and examines which correlates predicted the likelihood of a gamer's heavy usage after one year of play. In total, 1,852 online gamers were recruited in the first wave of this two-wave study. The results identify several predictors of heavy usage of online games, including skill and flow, and the findings enable the identification of, and the development of interventions for, individuals likely to be heavy online gamers.

INTRODUCTION

Online games are extremely popular, with more than 700 million people playing them worldwide (Johnston, 2013). This number approaches 9.9% of the global population (7.1 billion) (World Bank, 2013). In 2013, the global game market was worth \$70.4 billion with an annual growth rate of 6% (Johnston, 2013). World of Warcraft has attracted more than 100 million players worldwide (Blizzard Entertain-

DOI: 10.4018/978-1-5225-8900-6.ch035

What Factors Determine the Usage of Online Games One Year Later?

ment Inc., 2014). These figures demonstrate the social importance of online gaming and underscore the importance of research that aims to understand online gamers.

Playing online (digital) games enables people to relax and recover from work (Collins & Cox, 2014), which is a positive contribution to society. However, when players lose track of time, heavy usage of online games ensues (i.e., many hours of play per week), which then reduces time spent sleeping (Hussain & Griffiths, 2009) and causes health problems (Kim & Kim, 2010). One potential reason for this sequence of events is that heavy gaming is a risk factor for becoming a pathological gamer, which can contribute to lower school performance (Gentile et al., 2011).

Moreover, Internet Gaming Disorder (IGD) was identified as warranting more research by the *Diagnostic and Statistical Manual of Mental Disorders, Fifth Edition* (DSM-5) (Ko, 2014). Excessive use, often associated with loss of a sense of time, is an indicator of IGD (Ko, 2014). Research is therefore necessary to investigate the type of individuals likely to become heavy players of online games.

Heavy gaming does not necessarily mean that a person is addicted (Griffiths, 2010) and high game exposure does not necessarily lead to problematic gaming behavior. However, continuous heavy usage of online gaming can hinder other regular activities (e.g., Hussain & Griffiths, 2009), thus warranting research into potential predictors of heavy online gaming.

Therefore, the purpose of this study is to examine predictors of heavy online gaming. Previous theories have identified numerous factors potentially related to use of online games. Flow theory posits that skill, challenge, and flow contribute to continuance intention (Csikszentmihalyi & Csikszentmihalyi, 1988), which should lead to heavy online gaming. This study thus includes these factors as predictors. Personality theories indicate that personality traits (i.e., openness, conscientiousness, extraversion, agreeableness, and neuroticism) likely influence game usage (Teng, 2008; Tosun & Lajunen, 2009), so these theories motivate this study to examine these traits as predictors of heavy gaming behavior.

The literature reviewed above has indicated and verified predictors of online gaming. However, few studies have examined predictors of heavy usage of online games using longitudinal designs. Such a research design can help identify individuals who are likely to be heavy online gamers and thus optimize the allocation of resources to intervention efforts. This study thus employs a longitudinal research design that examines predictors of heavy online gaming, an initiative that is unique to the literature.

LITERATURE REVIEW

Flow Theory

The flow theory posits that flow—an individual experiencing intrinsic enjoyment with full concentration, unaware of time and surroundings—is very important because it creates positive feelings that can trigger loyalty (continuance intention) in various settings, including online gaming (Chang & Zhu, 2012). The underlying mechanism may be the reinforcement theory (Skinner, 1969), which posits that positive feedback (flow) triggers repeated use. The importance of flow leads this study to include it as a potential predictor of heavy gaming.

9 more pages are available in the full version of this document, which may be purchased using the "Add to Cart" button on the publisher's webpage:

www.igi-global.com/chapter/what-factors-determine-the-usage-of-online-games-one-year-later/228883

Related Content

Media and Participation: A Site of Ideological – Democratic Struggle

Itir Akdoganand Celia Romm Livermore (2013). *International Journal of E-Politics* (pp. 54-56).

www.irma-international.org/article/media-participation-site-ideological-democratic/76896

False Information Narratives: The IRA's 2016 Presidential Election Facebook Campaign

J. J. Sylvia IVand Kyle Moody (2023). *Research Anthology on Social Media's Influence on Government, Politics, and Social Movements* (pp. 678-702).

www.irma-international.org/chapter/false-information-narratives/312703

Empowering the Economic Impact of Virtual Communities: Managing Trust in the Sharing Economy

Tuçe Aslanand Adem Akbyk (2020). *Managing Social Media Practices in the Digital Economy* (pp. 150-171).

www.irma-international.org/chapter/empowering-the-economic-impact-of-virtual-communities/242524

A Social Framework for Software Architectural Design

Manuel Kolpand Yves Wautelet (2010). *Social Computing: Concepts, Methodologies, Tools, and Applications* (pp. 490-511).

www.irma-international.org/chapter/social-framework-software-architectural-design/39739

Social Computing: An Examination of Self, Social, and Use Factors

Sandra A. Vannoyand B. Dawn Medlin (2017). *International Journal of Virtual Communities and Social Networking* (pp. 31-47).

www.irma-international.org/article/social-computing/212728