Conceptual Framework for Virtual Apparel Consumption in Gaming Virtual Worlds

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Introduction

The virtual world of gaming has proliferated into a burgeoning cyber universe with a built-in economy (or multiple economies) in which gamers actively engage in consumption of a myriad of virtual products including virtual apparel. Except for the deduction of real-world currency (i.e. US Dollars [USD]) from the bank accounts of the gamers who purchase these products, none of these virtual products have physical or real-world manifestation at any point. Globally in 2017, consumers spent over $700 million USD on products related to virtual reality (Statista, 2019). Additionally, massively multiplayer online games (MMOGs) are a multibillion-dollar industry that is projected to reach $14 billion USD by 2023 (Statista, 2019). In February 2018, the MMOG *Fortnite* grossed $126 million USD—which is a significant amount of money that gamers spent purely on clothing and accessories for their avatars (Thier, 2018). Additionally, in February 2019, *Fortnite* shut down game play on all servers and held a live, in-game concert for which they hired a popular, real-life artist, *Marshmello,* to perform virtually in the game and sold virtual items for the concert such as clothing, dance moves, and equipment that gamers could purchase for their avatars. Over 10 million people across the globe attended that concert in *Fortnite*, many of which purchased memorabilia (Tassi, 2019). With this influx in virtual product consumption, an understanding of the motivations for purchasing these items is paramount to the future direction of both gaming and the apparel industry.

Although there have been studies conducted around virtual product consumption, most studies examine motivations toward virtual product consumption within social virtual worlds (Animesh, Pinsonneault, Yang, & Oh, 2011; Chung, 2005; Domina, Lee, & MacGillivray, 2012; Kim, Gupta, & Koh, 2011; Mäntymäki & Salo, 2011; Shin, 2008). While there has been a limited number of studies examining virtual product consumption in gaming virtual worlds (Guo & Barnes, 2012; Hamari, 2015), little published research has exclusively examined motivations for virtual apparel consumption in gaming virtual worlds. The purpose of this study aims to provide a conceptual framework for examining consumers' motivations for virtual apparel consumption in gaming virtual worlds. Such a framework is important to understanding gamers' motivations for purchasing virtual apparel, a phenomenon that will impact the future of virtual apparel retail and marketing.

Literature Review and Research Conceptual Framework

The current study is built upon Theory of Reasoned Action (TRA) and flow theory. The TRA was designed to help researchers understand the impact of salient attitude and social norms on a particular behavioral intention, which is believed to be the best predictor of actual behavior (Ajzen & Fishbein, 1980; Fishbein & Ajzen, 1975). Generally, individuals who have more favorable attitudes and perceive stronger subjective norms regarding a behavior are more likely

to show greater intentions to perform that behavior. In this study, attitude toward purchasing virtual apparel refers to a person's general feeling of favorableness or unfavorableness for purchasing virtual apparel. Additionally, social influence of gaming community represents subjective norm which refers to perceived pressure from relevant social networks. Flow is defined as "the wholistic sensation present when we act with total involvement" (Csikszentmihalyi, 1975, p. 43). Flow theory examines the impact of flow on various daily activities. Drawing from the TRA and flow theory, a conceptual framework (Figure 1) is presented that will enable future researchers to examine consumers' attitudes toward purchasing virtual apparel within gaming virtual worlds influenced by dimensions of flow (Csikszentmihalyi, 1975; Hooker, Wasko, & Paradice, 2009). The framework also depicts the influence that social influence of the gaming community has on both attitude toward and purchase intention of virtual apparel. Previous studies examining flow and virtual worlds have mostly utilized flow as a unidimensional construct. However, the original flow theory is comprised of nine dimensions: enjoyment, loss of self-consciousness, focus, lost sense of time, explicit feedback, sense of control, activity vs. challenge balance, intrinsic pleasure of action, and automaticity (Csikszentmihalyi, 1975; Hooker et al., 2009). Studies that have examined the relationship between flow and attitude in virtual worlds or online consumption have found that flow positively impacts attitude (Hsu & Lu, 2004; Korzaan, 2003; Mäntymäki & Salo, 2011). Based on the findings of previous studies, it is expected that flow's nine dimensions will positively influence attitude toward purchase and use of virtual apparel. Figure 1 also illustrates the relevant hypotheses proposed for studying the relationships between flow dimensions, attitude toward purchasing virtual apparel, social influence of gaming community, and purchase intention of virtual apparel.

Discussion and Implications

The proposed conceptual framework provides a foundation for future research and theory development. The conceptual framework incorporates the elements of TRA (attitude and social influences) and the dimensions of flow as antecedents of virtual apparel purchase intention. This study will have several theoretical implications. It will be the first conceptual framework available to researchers for examining how the various dimensions of flow influence a gamer's attitude toward purchase and use of virtual apparel in gaming virtual worlds. It will also allow researchers to examine flow as a multidimensional construct for research on virtual apparel consumption in gaming virtual worlds. This framework will also be useful in exploring general motivations that impact a gamer's purchase intentions of virtual apparel in gaming virtual worlds.
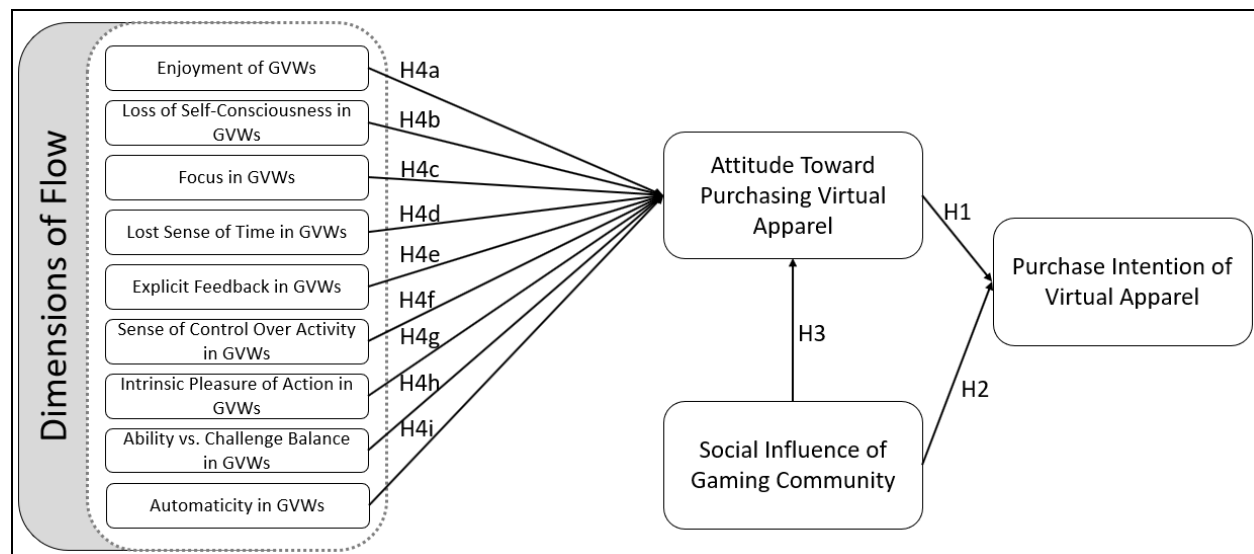
Figure 1. Conceptual Framework for Motivations of Virtual Apparel Consumption
in Gaming Virtual Worlds

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