

The Fluidity of the Self-Concept as a Framework to Explain the Motivation to Play Video Games

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Abstract. A better understanding of the motivation to play video games and potential antecedents have a long history in Human Computer Interaction research. Besides different motivational dimensions specific to video games, researchers already used the personality of players to explain the motivation to play and the subsequent video game use. At this juncture, they postulated a rather static self-concept underlying the personality of players. The study at hand tries to resolve this shortcoming and proposes a more holistic perspective on personality following the assumptions of the Social Identity Approach from psychology, which postulates a much more fluid and context-specific salient parts of the self-concept. Specifically, we use findings from consumer research arguing that the dimensional fit between the perception of the self-concept of a player and the corresponding video game holds the potential to explain the motivation to play as well as the subsequent usage of the video game.

Keywords: Video Games, Motivation, Personality Traits, Self-Concept.

1 Introduction

In this day and age, video games can be considered as a specific and especially popular form of socio technical systems [1]. Within the last decade, they experienced an upturn regarding their popularity. In 2017 more than 2.2 billion people worldwide played video games and the industry had an estimated global revenue of \$108.9 billion [2]. This indicates that a better understanding of the hedonic motivation to play video games and the subsequent use is a crucial question for academic research and practice.

Information Systems (IS) and Human-Computer Interaction (HCI) research already captured hedonic motivation as a driver for the use of sociotechnical systems (e.g. live streaming, ecommerce) [3, 4]. Additionally, research already explored motivational drivers to play video games. Pioneering work in this regard, identified different clusters of relevant motivations in the context of video games and looked for predictors of motivation [5]. Notable examples used the personality of players as potential predictors of motivation. Surprisingly, the majority of empirical studies postulated a rather static self-concept of personality including demographic or context unspecific personal traits, which limits the explanatory power significantly [5–8].

With our study, we aim to address this shortcoming and follow the assumptions of the Social Identity Approach (SIA) from psychology postulating a much more fluid and context dependent self-concept of players [9, 10]. We plan to use existing findings from consumer research and test them for the first time in the context of video games [11–13]. Specifically, we propose the fit between the player’s self-concept in the specific domain of a video game as a relevant antecedent for the motivation to play and the subsequent use. Providing a more holistic and relational explanation for video game use promises several important contributions. First, it allows researchers to better understand one contemporary especially meaningful form of technology use and transfer the findings to neighboring IS relevant contexts (e.g. health, learning). Second, it provides the gaming industry with the opportunity to learn more about the design of a game and gain insights into hedonic motivation as a driver for economic success. To ensure the external validity of our findings and explore differences and commonalities between different games, we intend to examine the three most successful games of the year 2017 (League of Legends, Fortnite: Battle Royal, and Overwatch) [14]. Additionally, we want to make use of a multi-level analysis using the levels of single games and aggregate the findings on a higher level of all three games. Therefore, the short paper is guided by the following research question:

RQ: *Can the self-concept of a player explain the motivation to play and the subsequent video game usage?*

2 Related Work

2.1 Game Use

In the specific context of video game use, two different streams of research can be detected. First, negative issues like pathological use and addiction [15, 16], violence [17, 18], and physical correlates [19, 20] are oftentimes dealt with. Second, based on the psychology of action [21, 22], several studies proposed different motivational drivers to play video games [8, 23]. We anchor our study within the second stream since we want to expand the current understanding of the motivation to play video games.

2.2 Gaming Motivations

Looking for potential predictors of video game use different motivational models were already proposed using different theoretical underpinnings. Two noteworthy approaches in this regard are the self-determination theory [24, 25] and the uses and gratifications theory (UGT) from media psychology [26, 27].

We build our study around the UGT since we target to theoretically enrich the existing status-quo of video game motivation, which allows for a flexible approach. The UGT is a widely accepted taxonomy of six main motivations (action, social, mastery, achievement, immersion, and creativity) to play video games [5].

2.3 Predictors of Motivation

According to the UGT, players actively seek to satisfy their needs with their behavior [26]. Therefore, the choice of behavior largely depends on the player's personality consisting of personal traits and the self-concept, which can be understood as UGT components predicting motivation and usage [27].

Personality traits. One of the most established models to categorize personality traits is the five-factor model of personality, which has been used as motivational predictors in several game related studies [6, 28]. The Big Five taxonomy assumes a rather static personality of players and consists of the dimensions openness, conscientiousness, extraversion, agreeableness, and neuroticism [29].

Self-concept. The self-concept can be understood as the totality of the individual's thoughts and feelings referencing to himself/herself as an object [30]. Considering the self-concept from a SIA perspective, it can be characterized by its fluid and context-specific salience [9, 10]. Therefore, we assume that game use largely depends on an individual's own perception of how well a certain game is able to satisfy needs and the corresponding self-concept. The following dimensions are commonly used to describe the self-concept: actual self, ideal self, social self, and the ideal social self [11, 13].

2.4 Relevant Contexts

We intend to examine the three most successful games of the year 2017 *League of Legends*, *Fortnite: Battle Royal*, and *Overwatch*. For comprehensive overviews of the games, we refer to previous literature providing detailed descriptions [31–33].

3 Methodological Approach

3.1 Research Design

We plan on using a cross-sectional approach. Therefore, we will use an online survey to collect self-reported data and covariance based statistics. Additionally, we will make use of a pre-study to develop a measurement (semantic differential) of relevant dimensions related to the games and to have a benchmark to compare them to the different parts of the self-concept. Figure 1 shows our research model and hypotheses.

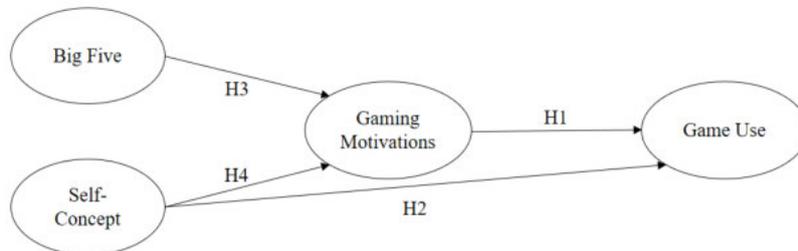


Figure 1. Research Model

3.2 Data Collection

In order to ensure conclusive results, we will survey players of the three games *League of Legends*, *Fortnite: Battle Royal*, and *Overwatch*. We want to consult ordinary players, since the aim of our study is about stereotypical use patterns. In order to acquire a significant amount of respondents (we plan to acquire at least > 200), we will use different channels (e.g. community boards, social media, gatekeepers) to disseminate the link to our survey and promise different forms of incentives (e.g. game currency vouchers) to ensure the motivation of participants in our study.

3.3 Data Analysis

To analyze the data, we aim to make use of different statistical tools. First, we will use co-variance based path modeling to test the hypotheses. Second, we intend to carry out a multilevel analysis to compare findings from the lower level of single games and aggregate them to a higher level.

3.4 Measurements

To measure the variables of our study, we will adapt empirically validated scales to the context of our study (see Table 1). Additionally, we will measure demographic and control variables to have the chance to control our results for potential confounds.

Table 1. Measurements of the study

<i>Type of variable</i>	<i>Name of variable</i>	<i>Exemplary wording of item</i>	<i>Source</i>
Dependent	Game Use	Please indicate your frequency of play? (5 items)	[34]
Mediating	Gaming Motivations	I like chatting with others (12 items).	[35]
Independent	Big Five	I am someone who is full of energy (30 items).	[36]
	Self-Concept	I have respect for myself (35 items).	[37]

4 Outlook

The paper at hand proposes a holistic approach to capture the motivation to play and the subsequent use of different video games. This leads to different implications. First, capturing the effects on different levels of different games indicates the potential for additional insights (e.g. commonalities and differences between games). Second, illustrating the meaningfulness of the self-concept promises fruitful avenues for theory (e.g. a context specific theory to explain video game use) and practice (e.g. demand and economic meaning). Besides the significant insights, the proposed study includes several limitations. First, we will not have the chance to identify causal connections between the constructs because we plan a survey. Nonetheless, on the basis of our results it is possible to conduct experiments to test the causality of relationships. Second, the amount of items is rather high (> 100) which might limit the response rates. To avoid this shortcoming, we plan to use different types of incentives.

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