

Positive Personal Development through eSports

Research-in-Progress

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Abstract

This research-in-progress paper investigates the personal development players experience from eSports participation by identifying the benefits that players gain from play, and why these are important to players. This study utilises a qualitative methodology consisting of semi-structured laddering interviews, and content analysis to analyse data. 12 high level groups, split into 8 benefits and 4 values, were identified of importance to players, with the attainment of these benefits allowing eSports players to achieve their values. The initial identification of benefits and values contribute towards IS literature by understanding how benefits can drive player participation in eSports, and how benefits are tied to players' values. The results of this study can also be leveraged to promote eSports to external audiences to improve its legitimacy and perception.

Keywords: eSports participation, positive personal development, benefits, values

Introduction

eSports, also known as 'professional gaming', is a growing form of team competition enabled through electronic systems, such as online games. The eSports industry is growing quickly, making \$463 million in direct revenue in 2016, and is expected to reach \$1.1 billion by 2019 (Newzoo 2015). Additionally, the number of professional eSports players has increased significantly in recent years (eSports-Observer 2015), with players generating income through tournament winnings, sponsorships, and revenue earned from their live streams (Edge 2013).

People play online games for various reasons, many of which provide positive personal experiences. These may include overcoming challenges, alleviating tension, socialising with others, and enjoyment purposes (Wu et al. 2008). More 'community-oriented' players may interact with one another to form guilds, from players with loose affiliations, to dedicated and specialised groups with strong comradeship within gaming environments (Meredith et al. 2009). Of interest to this study, the move from hobbyist to professional team player through eSports highlights the blurring of boundaries for millennial players between work and play, as well as perceived notions of 'athletes' versus 'gamers'.

However, the rise of eSports as a professional avenue for gamers in building a successful career appears somewhat bleak, due to low earning potential (Taylor 2012), unstable sources of player salary, and lack of job security (Agha 2015). Combined with the known negative aspects of online gaming, such as flaming between players (Kou and Nardi 2013), online gaming addiction (Mehroof and Griffiths 2010), and the high skillsets required to compete professionally on a national and

international level, this raises the question as to why players train to become professional eSports players. The research objective of this study is to understand the positive personal development that professional players gain from eSports. This is achieved by exploring players' personal experiences and identifying the benefits and values gained from playing eSports and the work/training required by players to attain these benefits. In doing so, this paper sets out to answer the research question: *What are the benefits and values gained from being a competitive eSports player?*

The paper is structured as follows: the paper begins by introducing eSports within the context of virtual worlds, and the motivations for play across relevant contexts (online gaming, eSports, and sport). The next section then provides insight into the intense training and sponsorships that comes with being part of a professional eSports team before discussing the role of competitive activity in contributing to positive development through the achievements of players. The research design for the study is then presented, followed by preliminary findings. Finally, the paper concludes by briefly discussing our future work and the implications of the study for research and practice.

Theoretical Background

Virtual Worlds

Virtual worlds have evolved from early text-based communities and virtual reality systems (Jäkälä and Pekkola 2007) into networked environments such as modern-day massively multiple online games. As information systems (IS), they provide shared spaces in which users can engage and collaborate together in various meaningful ways (Franceschi et al. 2009). The potential for virtual worlds to function as possible utilitarian environments for professionals came with the rise of social virtual worlds, such as Second Life, which highlighted the possible applications of virtual worlds beyond entertainment, such as education and business. While many real-world organizations failed to generate profits from their 'virtual stores' (Arakji and Lang 2008), a number of businesses were able to take advantage of virtual worlds in order to train their employees (Shen and Eder 2009), while others profited through the buying, selling and trading virtual goods (Guo and Barnes 2009).

While traditionally seen as merely a form of entertainment, online gaming has also become a means to encourage concentration and cognitive effort, initiative, adaptability, positive well-being, learning new skills, prosocial behaviour, and improving problem solving (Adachi and Willoughby 2012). Games have also been identified to help provide carefully designed challenges that help gamers feel accomplished, engaged, and focused, something that players sometimes feel real-world engagement lacks (McGonigal 2011). This research study concentrates on an emerging function of online gaming virtual worlds, as competitive and professional environments for team sports.

eSports

eSports is known by many synonyms, such as electronic sports, gaming, cybersports, competitive computer gaming, and virtual sports (Jenny et al. 2016). Over a decade ago, eSports was defined as "an area of sport activities in which people develop and train mental or physical abilities in the use of information and communication technologies" (Wagner 2006, p. 441). However, such definitions do not fittingly incorporate the competitive aspect of eSports (Jenny et al. 2016). Recent definitions have corrected this in describing eSports as a form of sports where the primary aspects of the sport are facilitated by electronic systems; the input of players and teams as well as the output of the eSports system are mediated by human-computer interfaces (Hamari and Sjöblom 2015). In sum, they are seen as a competitive and organized approach to playing computer games (Witkowski 2012).

The origins of eSports can be traced to Korea in the late 1990s with the rise of the game StarCraft, and the increased accessibility of broadband that helped build a strong gaming culture similar to that of major sporting leagues (Wagner 2006). Today, common genres of eSports now include first-person shooters such as Counter-Strike (Wagner 2006), real-time strategy games such as StarCraft (Seo 2013), and multiplayer online battle arenas such as League of Legends (Nuangjumnong 2015).

eSports consists of complex relationships between professional players, sponsors, fans, and eSport society (Kim and Thomas 2015), causing the lives, expectations, and pressures faced by eSports players to have a number of similarities and differences from those of their traditional sporting counterparts. For instance, the online medium through which eSports is played changes the way it is consumed compared to traditional sports, and leads to the main difference between the spectating of the two sports (Edge 2013). In eSports, there is a stronger emphasis on connections through social media platforms such as Facebook, Twitter, and YouTube, as well as online live video streaming sites such as Twitch.tv (Kaytoue et al. 2012). Whilst major tournaments are broadcasted on websites, platforms such as Twitch.tv allow an individual player to broadcast their games and practices live, as well as chat to fans, changing the relationship between the player and their fans (Kaytoue et al. 2012). As of 2017, Twitch.tv averaged 15 million unique daily visitors, with over 2 million unique monthly broadcasters (Twitch.tv 2017).

As an emerging industry, eSports is generating significant interest from organisations, such as Red Bull and Coca-Cola, in that it allows sponsors to target the millennial audience that make up the majority of eSports streamers, who are harder to reach through traditional forms of marketing (Gaudiosi 2014). The spread of eSports is also leading to increased consumption through traditional mediums of viewing. For instance, in Australia, where eSports is still developing compared to the major eSports players such as Korea, eSports events such as grand finals are hosted in local arenas allowing for physical audiences of several thousand fans, aired live on television sporting channels such as FOX Sports, and streamed live via satellite in selected cinemas (Rembisz 2016).

Motivations for Playing eSports

Overlap exists between player motivations identified across broader online gaming literature, such as achievement, social, and immersion (e.g. Williams et al. 2006; Yee 2006; Zanetta Dauriat et al. 2011). Similar motivations can be seen within eSports, such as trends towards playing for possible benefits, such as self-improvement, socialisation, and competition (Hamari and Sjöblom 2015; Lee and Schoenstedt 2011; Seo 2016; Weiss and Schiele 2013). Likewise, various motivations identified within traditional sports literature include competitiveness (Beaudoin 2006; Cresswell and Eklund 2005), and achievement (Chantal et al. 1996).

As sports literature has had significantly more studies on motivation compared to eSports and online gaming, a stronger focus on differentiating motivations between intrinsic and extrinsic labels (Chantal et al. 1996; Fortier et al. 1995) have been identified. Additional difference in motivations identified is that most studies on eSports focus on the motivations of fans for spectating (Hamari and Sjöblom 2015; Lee and Schoenstedt 2011; Seo and Jung 2014), and do not focus directly on players. Within online games, motivations for player participation are explored in more depth, however not within a competitive context. Casual players' motivations to play online games also focuses more on escapism and immersion compared to eSports and sports, highlighting a role that the competitive nature of eSports may bring towards achieving benefits for players.

Becoming a Professional Player

As mentioned, engaging in eSports differs from traditional sports as it is almost entirely digitally mediated, and there is a stronger emphasis on connections through social media platforms and streaming (Kaytoue et al. 2012). Despite this, eSports players stand out from hobbyists in that, like their traditional sporting counterparts, they are signed up to large sports clubs which are supported by coaches, analysts, and managers. This exclusivity may involve players living within a dedicated 'gaming house' environment where teammates live and practice together (Agha 2015).

Professional eSports players also require constant cycles of intense training and learning. Routine training is required to help players develop their skills for competitive gameplay, such as team management, a balanced body and composure, and understanding of the technologies in use (Seo and Jung, 2014). Daily practices can range anywhere from 10 hours daily (Kim and Thomas 2015), up to 16 hours in some cases (Taylor 2012). Despite rigorous training, players face constant struggles in remaining at the top of their leagues, with studies focusing on player learning highlighting different

stages of enjoyment, struggling, achievements, slumps, and recovery for players (Kim and Thomas 2015) due to constant updates to games. Finally, gaining sponsorship is central to becoming a professional eSports player and is one of the biggest sources of revenue for eSports teams (Rovell 2016). Despite this, many professional eSports players do not earn enough through their eSports activities to make a living and need to subsidise their income from other sources (Agha 2015).

Positive Personal Development through Games and Sport

The importance of intrinsic motivations for participation in online gaming and eSports leads to the understanding that players believe that they can gain benefits and achieve personal values through their personal development attained in their play of eSports. As studies within traditional sport have also identified intrinsic motivations for player participation, the similarities in these motivations also highlight how eSports can be used to develop positive personal experiences - just as within sport.

Positive youth development is an overarching framework that seeks to understand empowerment in youths (Johnston et al. 2013), and how youths have innate potential awaiting development (Holt 2007). Sport is a popular context within literature for exploring positive youth development as it provides opportunity for positive youth development (Holt 2007) through an environment for participants to feel safe both psychologically and physically, develop relationships, belong, and build their skills (Danish et al. 2004). In sport, youths have the opportunity to interact with mentors and leadership figures, allowing them to learn vital skills such as persistence, and teamwork (Holt 2007). Benefits identified across sporting studies cover mainly psychological and social areas of development. Some benefits frequently mentioned include teamwork, initiative, social skills, as well as benefits relating to self-perception (self-esteem, identity, character) (Danish et al. 2004; Hansen and Larson 2002; Holt 2007; Johnston et al. 2013). There are also long-term benefits, such as adult career achievements (Fraser-Thomas et al. 2005), and networking (MacDonald et al. 2012).

Research Design

The objective of this research-in-progress paper is to understand positive personal development that professional players gain from eSports. The research question operationalises the objective by focusing on the process in which players become professionals as well as the perceived benefits they gain from eSports. This study uses qualitative data consisting of semi-structured laddering interviews with eSports players, and content analysis to analyse collected data. The following provides information regarding the data collection and interview procedure before discussing the data analysis process.

Data Collection and Interview Procedure

To be valid for this study, participants needed to be professional eSports players over the age of 18, and have recently competed with a competitive eSports team. These participants were initially recruited from one main eSports club, and additional participants were recruited through a snowballing methodology, where participants invited other interested players for this study. As a result, all participants were involved in the same eSports game, League of Legends (LoL).

Nineteen professional LoL players competing in Australian eSports teams were interviewed, sufficient due to the in-depth nature of the laddering methodology (Reynolds and Gutman 1988), and the low amount of new constructs identified within the last few interviews. This number is also sufficient as there are only 8 teams (40 players and all males) in the highest level of Australian competitive LoL play, meaning participants represented nearly half of the existing players. The average age of participants was 21 years, ranging from 19 to 25. In terms of education, 15.7% had completed an undergraduate degree, and 47.4% were currently studying at university. Of those at university, only 1 was studying full time, with the rest either studying part time or deferring their degree. Average years of participation in competitive eSports was 3 years, ranging from 6 months to 8 years, and 52% of players were also working whilst playing either full or part time.

Laddering interviews with eSports players were conducted by the research team. Laddering interviews are an in-depth, one-to-one interviewing technique used to develop an understanding of how consumers translate the attributes of products into meaningful associations with respect to self (Reynolds and Gutman 1988). It is an interview format that uses a series of probes and repetitive questions, such as “Why is that important to you?” to help interviewees determine their linkages between attributes, benefits, and values (Reynolds and Gutman 1988). Due to its in-depth nature, it is suitable for gathering the detailed information required from a smaller pool of interviewees.

Interviews were held over Skype due to geographical distance, and face-to-face where possible. Interviews ranged between 60 to 120 minutes and had four stages.

Stage 1: Verbally collect demographic information.

Stage 2: Gather constructs through direct elicitation. The initial elicitation question used to achieve this was ‘What benefits do you feel you have gained as a person through playing eSports?’, and additional clarification was provided should interviewees show difficulty in eliciting constructs. Responses were encouraged until the interviewee was unable to come up with further constructs.

Stage 3: Probe deeper into constructs collected to understand their importance. Players were encouraged to speak freely until they were unable to provide additional reasons in response.

Stage 4: Ask interviewees for their initial and current motivations for playing eSports. Interviewees were also invited to add additional thoughts or comments they may have.

Data Analysis

Content analysis is defined as a systematic, objective, quantitative analysis of message characteristics (Neuendorf 2002). It is suitable for use in this study as it has previously been used across multiple contexts to interpret various forms of communication (Neuendorf 2002). Three steps of content analysis were used to produce findings for this study: data reduction, categorization, and classification of construct groups as either values or benefits.

Data reduction involved the reading of interviews line by line, with ideas coded into raw constructs using open coding. Coding consistency was checked throughout the coding process by comparing interviews that had been previously coded. After this process, a total of 191 raw constructs were initially obtained, and this was reduced to 58 unique constructs by comparing constructs with each other to ensure that any constructs that meant the same thing were combined e.g. ‘winning’ and ‘not wanting to lose’. Grouping constructs together also helped to identify constructs that were different but had the same idea e.g. ‘competitive mindset’ and ‘being the best’.

The 58 unique constructs obtained from data reduction were then categorised into broader groups of benefits and values, utilising frameworks in positive youth development and value systems literature. A total of 12 high level groups were identified, 8 defined as benefits, and 4 defined as values.

Preliminary Findings

As highlighted during analysis, 8 benefit groups and 4 value groups were identified by players as their main learnings from their participation in eSports, and showed how eSports help to develop positive personal qualities. These groups are listed in *Table 1*.

Splitting identified constructs into benefits and values aids in clearer identification of the importance of benefits to players by linking them to values key to their well-being. All benefits and values referenced by players, at the very minimum, were mentioned by at least 79% of players, showcasing the significance of these findings due to the high mention rate. It is worth noting that common constructs that appear within online gaming literature, such as immersion and escapism were not mentioned within a competitive eSports context in this study, further differentiating this study on a type of online gaming with those focusing more on game-based addiction. Gaming studies are also limited in that they are rarely conducted within a competitive context, hence constructs identified in this study that appear within competitive sporting contexts have not appeared in those studies.

Table 1. Identified benefit and value groups, with tally of players mentioning constructs

Benefit		N (19)
Commitment	Tendency to pursue high personal standards, with a focus on the value of effort, mastery, and self-improvement (Johnston et al. 2013)	19
Cooperation	Ability to work with, and help others to achieve a common goal (Johnston et al. 2013)	19
Initiative	Ability to set realistic goals, and achieve these though managing time and taking responsibility for oneself (Johnston et al. 2013)	18
Tangible Rewards	Something given in recognition of an effort or achievement	18
Emotional Self-Regulation	Ability to control and prevent emotions with interfering with attention and performance; using positive emotions constructively (Johnston et al. 2013)	17
Personal Growth	Feelings of continued development, growth and expansion, experiences and improvement over time of an individual reflecting more self-knowledge and effectiveness (Ryff and Keyes 1995)	17
Self Esteem	One's overall belief in their self and ability (Johnston et al. 2013)	16
Communication	Ability to listen, to give and receive feedback, and understand non-verbal behaviour (Johnston et al. 2013)	15
Value		N (19)
Hedonism	Emotions relating to pleasure and enjoying one's life (Schwartz 1992)	19
Power	Attainment or preservation of a dominant position of power within a general social system (Schwartz 1992)	16
Purpose in Life	Attainment or preservation of a dominant position of power within a general social system (Schwartz 1992)	16
Achievement	Personal success through the demonstration of competence according to social standards (Schwartz 1992)	15

Future Work and Implications

The initial identification of benefits and values gained from being a competitive eSports player delivers an important contribution regarding IS literature on online play, providing further understanding on competitive online games and how these benefits drive motivations to play. Splitting benefits and values helps to understand why benefits are significant by linking them to values they help to achieve. This study also provides preliminary ideas on eSports to be expanded further, such as an exploration of player benefits in other eSport games, and for international players outside of Australia. ESports organisations can leverage the results of studies focusing more positively on gaming to promote the benefits of eSports to an external audience and improve the legitimacy of the industry. Improved legitimacy aids in gaining sponsors, as sponsors play a crucial role in how an eSports team can operate, and helps expand the scale of the game. Further identification of factors leading to these benefits would allow us to understand the process of becoming a professional eSports player. Understanding interrelationships among benefits identified will provide a path leading to values that eSports players pursue.

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