Who are sports gamers?

A large scale study of sports videogame players

Abe Stein, Mia Consalvo & Konstantin Mitgutsch

Abstract

Sports videogames rank among the most successful products of the game industry. Yet, very little is known about the players of sport videogames resulting in a blind spot for media and videogame research. Little is known about how sports videogame players fit their games into a larger sports related context, and about how their videogame play informs their media usage and general sports fandom.

The following empirical online investigation is an answer to this research gap, providing one of the first large-scale data sets detailing who sport videogame players are. Through an online survey of 1718 participants, general demographics of sport videogame players, their habits and activities were investigated in early 2011. While until now our knowledge about players of sports videogames has been based on anecdotal evidence or extrapolated from wider surveys of game players, this study demonstrates that there are interesting and important differences demanding further study.

1. Introduction

In 1958, William Higginbotham created the first game to run on an analog computer and named it *Tennis for Two.* One of the earliest arcade videogames was another tennis themed game—*Pong*—released in 1972. And on the list of video game franchises that have sold more then 100 million copies is the FIFA series (Business Wire, 2010). Over the last several decades game players have actively and enthusiastically played games featuring sports. But despite their popularity, little attention has been given to understanding sports videogames, or the players who engage with them.

This omission is glaring, given the large share of the market that sports games command. Overall, sports videogames accounted for 16.3% of all games sold in 2010 in the US, with *Madden NFL 11* the number 2 ranked game overall (ESA, 2011). Indeed, the Madden franchise has sold more than 85 million copies of its games since it began in 1988 (Zuniga, 2010). Likewise, the FIFA soccer series has sold more than 100 million copies in its 18-year history (McHugh, 2010). Yet we know very little about the people who have bought and played such games on a research-based level.

With this in mind we endeavored to conduct a study that would help to identify and characterize players of sports videogames. It is important to note that we chose not to engage in the complicated discourse of what constitutes a "sports videogame" or for that matter how to define "sports" in general. These are certainly important theoretical questions to explore, but we felt for our purposes with this study it was optimal to allow respondents to define "sports" and "sports videogames" in their own personal way.

This study is the first large-scale research of its kind examining sports videogame players. These findings should raise more questions and promote further research on this very active videogame play community.

2. Sports and Videogames: Literature Review

Some early work has been done examining groups and individuals who play fantasy sports, both online and offline. Shipman (2001) investigated the history of fantasy sports and its evolution from pen-and-paper hobby to online activity. Shipman argues that for its players the rhetoric of such games is "one of empowerment and role-playing. It asks the player to imagine himself or herself as the coach, with all the power to make decisions for the team" (p. 4). Yet such games rely on positioning the player solely as coach or general manager, rather than as a player, since their focus is on managing a team rather than actually playing the sport.

Smith, Sharma and Hooper also found that play of online fantasy sports primarily focused on decision-making and mathematical skills (2006). However, they found "few (if any) instances of formal decision-making [in forums about roster building] relying on extensive computation. Most players seem to create their rosters by relying on domain-specific knowledge of NBA athletes and applying this knowledge in various ways" (p. 356). Farquhar and Meeds (2007) attempted to categorize types of online fantasy sports players, identifying the most common types as casual players, skilled players and isolationist thrill-seekers. They further concluded that motivations for play fell into two categories: players who were either "highly involved and enjoyed the statistics, knowing

that they outsmarted those who did not win, or they were less involved and sought the thrill of victory and subsequent bragging rights" (p. 1224).

Thus for fantasy sports players, research demonstrates that such games center on the managerial tasks such that a coach or general manager might undertake, with players responding in different ways to those challenges. But while such research sheds light on one aspect of sports game activity, it does not help us understand why players would enjoy sports videogames that allow them to control players as well as build and manage teams, nor do such studies go beyond more surface motivations for play to delve into player interests and activities beyond their gaming activity.

With respect to games that do offer more direct play, researchers have made the important claim that sports videogames are one of the few places that racial minorities are present as primary characters, in contrast with most other genres of videogames (Leonard, 2003; Williams et al, 2009). In a textual analysis of several videogames relative to their racial representations, Leonard argues that such representations are ultimately racist, and "sports games legitimize stereotypical ideas about black athletic superiority and white intellectual abilities" (2003, p.6). Yet we do not have player studies of such games that ask about race, in order to determine if players are making the same assessments of the games and sports stars within them.

Studies of players of sports videogames are even fewer in number than those that focus on the games. In a study of professional and college athletes that play videogame versions of themselves and their teams, Silberman argues that for those athletes, at least, playing sports videogames affords them the opportunity to better learn how to play their particular sport, particularly when they play as themselves (2009).

Garry Crawford has contributed importantly to the domain of sports videogame studies, looking at a variety of topics. In his book *Consuming Sport: Sport, Fans & Culture* he positions sports videogame play in relation to sports fandom (2004). He has also explored topics relating to sports videogames and gender (2005), the culture of football management simulations (2006), and even the comparison of sports films and sports videogames (2008). Crawford's work has been important to developing the study of sports videogames from a sociological and cultural perspective, placing sports videogame play into a larger context of player identity and culture.

Similarly, Conway (2010) investigated players of *Pro Evolution Soccer 2008*, trying to determine how the game fit into the larger contexts of players' lives. Through interviews and observations he learned that players' gameplay was "a highly social, intertextual and immersive experience for the user. Whether alone or in a group, public or private, online or offline, the game-playing event is defined not only through what happens in-game, between teams, but also in what happens between the players, the spectators, the wider games-playing community and the culture of sport" (p. 351). Conway further argues that such games are not simply activities unto themselves but should be contextualized as "an authentic extension of football culture" (p. 352). As such, players were just as likely to talk about "footballers' lives, current team news, the analysis of statistics, and other topical sporting issues" (p. 352). Crawford's and Conway's works inform our own study of sports videogame players.

This study seeks to advance Conway's findings and investigate how much and in what ways sports videogames play a role in players' lives. Specifically, we began this study to investigate how playing sports videogames could be one expression of an overall

interest in sports, and how that interest was expressed across various media as well as through physical sporting activities. We were interested in how sports gamers expressed interest in various mediated forms of sport, and also what meanings they made, and what manner of play they engaged in, when playing sports videogames. We also sought to study whether sports gamers were more isolated in their gameplay – concentrating mainly on sports games and sport activities – or whether they also played other types of videogames, and how they managed those various interests. Thus this study sought to answer the following research questions, given the exploratory nature of this project:

> RQ 1: Who plays sports videogames, and how are sport videogame players
>
> similar to — or different from — "typical" videogame players?
>
> RQ 2: In what ways do sports gamers express their interest(s) in various sports?
>
> RQ 3: How do players of sports videogames play such games?
>
> RQ 4: How do players attach meaning to their sports videogames?

To answer these research questions and to conduct the first large scale quantitative study in the field, the following methods of investigation and interpretation were used:

3. Methods

To gain the widest possible picture of sports games, this research opted to recruit a broad, multi-national and diverse play community, which presented unique challenges in organizing and developing the study. We designed a mixed methods approach that would give us a broad but representative snapshot of who sport videogame players are, as well as a deeper, more interpretive component to investigate how players make meaning

through playing sports videogames. Those choices helped us gain a greater perspective on a variety of players and their multiple interests and activities.

The central component of the study was a web survey that included open-ended and closed questions. We included questions about general gameplay habits, sports game activities and preferences, personal play experiences, how players categorized certain sports games, how they defined their sports fandom, and how they related their sports fandom to their sports videogame play experiences. We also gathered basic demographic data to see how sports gamers compared with other types of videogame players across various genres. Furthermore, meaningful gameplay experiences were collected. The survey was anonymous with the option to include an email address at the conclusion should respondents be willing to be interviewed for a planned follow up study. We limited the survey to respondents 18 or older, focusing our study on adult players. All questions were optional on the survey, and respondents were allowed to skip questions or to answer survey questions in any order. After pilot testing the format and questions and making needed clarifications, we launched the website on a local server and began recruiting participants.

To garner respondents we utilized social media outlets such as twitter and Facebook, posting a link and a brief description of the survey. With the help of site administrators and forum moderators we also posted links to the survey on popular sports videogame blogs and websites.[1] The survey was open from March 7th to April 5th of 2011. A total of 1718 respondents took the survey.

---

[1] An editor at Kotaku.com that specializes in covering sports videogames (Owen Good) posted a link and brief article about the survey that garnered many respondents.

In analyzing the data we were largely interested in identifying significance in the frequencies of responses. We also checked basic relationships looking for significant patterns. We kept an eye toward finding characteristics that help to explain the relationship between sports fandom and sports videogame play behaviors. To examine the open-ended responses we categorized them by recognizable themes emerging from the responses themselves. We also used basic content analysis, such as word frequency, to help get a picture of overall trends.

4. Results

RQ 1: Who plays sports videogames?

Before exploring more detailed facets of sports gamer identity and players' various activities, it's helpful to know *who* currently plays sports videogames. In terms of basic demographics, survey respondents were overwhelmingly male. Of the 1309 respondents who answered, 98.4% identified as male and only 1.6% identified as female.

Reported ages ranged across a spectrum, although just under half of the respondents were 18-24 years old (49%), with declining numbers of older respondents: 32% were 25-31; 14% were 32-38 and only 5% were 39+ years of age. The average age of respondents is 26 ($SD = 6.54$).[2] Of course for gender as well as age, it is difficult to say if this is indicative of the larger sports game playing community, or if this is more reflective of a subset of sports gamers who go online and read related forums and blogs.

---

[2] We are aware that our study excluded players under the age of 18. This necessarily affected our age data, skewing it high.

Figure 1.

With regards to race and/or ethnicity, we asked individuals to choose from racial/ethnic categories used in US census data, although our survey gathered results globally. Overall, 80% self-identified as white, 8.4% as Black/African American, 8% as Asian, 6% as Hispanic/Latino, 1.5% as American Indian/Alaskan Native and 0.9% as Native Hawaiian/Other Pacific Islander. Eleven percent skipped the question. Such racial ethnic breakdowns are compared to census data from 2010 in the chart below.

Figure 2.

White players are over-represented compared to their actual numbers in the US, as are Asian players, while Black/African American and Hispanic/Latino players are under-represented. This finding is particularly curious, given that sports games are one of the few places we can find significant numbers of non-white characters, particularly those that are playable characters that drive the action of the game (Williams et al, 2009). However, some past research on African American videogame players also suggests many of these individuals prefer to play offline among friends and family, and thus may not have seen our survey, which was distributed via various internet sports gamer forums (DiSalvo & Bruckman, 2010).

In terms of nationality, most respondents came from North America and Europe. About two-thirds, or 64% of individuals listed a nationality from North America, while 21% were European. Further breakdowns are listed below:

Figure 3.

Overall, then, respondents to this survey were overwhelmingly male, on average 26 years old, white, and from either North America or Europe. This diverges from more

diverse accounts of player demographics as detailed by the ESA, which claims the average game players is 37 years old, and 29% of players are over 50. Likewise the ESA reports that 42% of game players are now female, and "women age 18 or older represent a significantly greater portion of the game playing population (37%) than boys age 17 or younger (13%)" (ESA, 2011).

RQ 2: In what ways do sports gamers express their interest(s) in various sports?

Because sports are significant cultural phenomena outside of their simulated play in videogames, we wanted to explore how sports videogame players relate to sports in general. A major question we investigated with our study pertains to how sports videogame players express their interest in sports through activities other than videogame play. We wanted to learn in what ways the community engaged professional and amateur sports, whether as active participants, as spectators, and/or as consumers. We also hoped to learn how sports videogame players relate their sports videogame play to their general sports interest. Results from the study show conclusively that our respondents are actively, and predominantly interested in sports across media, and are in fact fitting their sports videogame play into a larger sports related context.

An overwhelming majority of respondents, 93.5%, self identified as sports fans. This statistic indicates that for most sports videogame players there is a larger sports related context in which, or possibly against which, they understand their sports videogame playing. An additional 76.4% of players were also able to list a professional or amateur team that they support. Naturally the teams listed varied greatly. The indication of support for a team does not articulate to what degree their fandom

influences their lives, however it does suggest that on even a superficial level, sports videogame players are likely to have a rooting interest in one team or another.

Furthermore, respondents indicated that they watch sports on TV with a high regularity. Nearly 95% said they watch sports on TV. That group, when asked how much of their television viewing was of sport contests or sports related content, responded with an average of 3.71 on a scale of 1 (occasionally) to 5 (most of the time), suggesting sports viewing is a central component of their overall television diet. Television is still the dominant medium for sports consumption, and the survey respondents are certainly a part of that audience. Interestingly, 81.4% of respondents indicated that they had attended a live sporting event as a spectator in the past year. The respondents clearly extend their sports viewing beyond just that on television.

We wondered whether sports videogame players also participated in sports as an athletic activity. When asked, 74.6% of the respondents indicated that they did in fact play a sport. As it was not directly relevant to the study we did not go to great lengths to define what constitutes a "sport as an athletic activity" although we did ask what sports they played, receiving a variety of responses ranging from the expected major sports like football (33%), soccer (22%), and baseball (19%) to some less common sports like ultimate frisbee (2%), badminton (1%) and bowling (1%). When asked what their "favorite" sport was in general, the top responses were football (37%), baseball (19%), basketball (16%) and soccer (12%).

Players' preferences for sports in general translated directly to their preference for sports videogames as well. Respondents who listed basketball as their favorite sport in general also listed it as their favorite sport to play as a videogame. Similarly, respondents

who prefer baseball, football, soccer or hockey listed their preferred sport as their favorite to play as a videogame. There was, however, a fairly even distribution of other major sports videogames for each of the groups with the exception of respondents who listed soccer as their favorite sport. Almost all (93.6%) players who prefer soccer listed soccer videogames as their favorite to play, with the next highest distributions going to basketball at 24.8% and American football at 24.1%. This suggests that players who are soccer fans – from which 48.1% are Europeans – may be less interested in playing other sports videogames like baseball, basketball, American football or hockey. While it may seem intuitive that fans of a sport favor playing a videogame version of that sport, this raises interesting questions about how their preference for a sport is actualized, how fans consume sports media, and how their fandom is culturally situated.

Figure 4.

RQ 3: How do players of sports videogames play such games?

Reflecting a diversity of options that players now have, our respondents listed a range of preferred systems for their gameplay activities. The most common systems that players used included the Playstation 3 (60.3%), Xbox 360 (60%) and the PC (58%). After that was a large drop-off, with 32.4% reporting using the Wii, 31.2% using an iPhone or iPad, 22% a Nintendo DS, 16.1% a PSP, 15.6% an Android phone, and 10% a Mac. These systems are used for all types of games (not just sports games), but it does indicate that Sony and Microsoft capture the majority of console gamers, and an impressive number of players do use PCs for gaming. It's also particularly interesting that

about a third report using a mobile device such as an iPhone or iPad for gameplay, nearly equal the number who play games on the Wii.

In terms of frequency, respondents reported playing quite frequently. More than half – 56.5% – said they played every day, while approximately another third (37.4%) reported playing a few times a week. In contrast, only 2.8% stated they played only on weekends, 2.4% a few times a month, and 0.9% said they played videogames "only occasionally." This is a group that obviously plays on a regular basis.

When we asked individuals if they played sports videogames, 92.6% responded that they did. Yet when asked which genres of videogames they liked to play, respondents offered a diversity of opinions that ranged far beyond sports games. The leading choice was (not surprisingly) sports games at 89.8%, although it is somewhat intriguing that 10.2% would not list sports games as a preferred genre, given the nature of this survey. Following sports games, individuals reported enjoying shooter games (68.3%), action games (59.4%), action RPGs (50.1%), adventure games (48.1%), RPGs (46.2%), strategy games (42.9%), racing games (42.0%), fighting games (32.5%), puzzle games (26.8%), music games (25.9%), and MMOs (16.4%).

When asked to estimate how much of their total videogame playing time was centered on sports games on a scale of 1-5, the most frequent response (30.4%) was 5 or "most of the time," and the average rating given was 3.63. Only 8.2% said they played sports games "occasionally."

Figure 5.

In terms of what types of sports videogames they play, almost three-quarters (73.8%) responded with "American football", followed by basketball (62.5%), baseball

(53.9%), soccer (48.6%), hockey (38.1%), racing (38.0%), boxing (26.1%), tennis (17.6%), golf (5.9%), mixed martial arts (4.3%), cricket (2.3%) and rugby (2.3%).

Respondents are creating content for use in games with a high level of frequency. When asked if they have ever edited a roster in a sports game, a vast majority (90.5%) answered that they had. This matches up with their response to how important they consider accurate rosters are to their sports videogame playing experiences – 78.1% indicated that accurate rosters are "very important" with an additional 18.0% marking "somewhat important" as a response. Respondents are also creating playable characters with 95.2% saying they had created a playable character in a sports game and 87.3% indicating that they had created themselves as playable characters. This high majority of players creating content for use in games is striking, and suggests that sports videogame players are interested in the role-playing scenarios offered by sports videogame designers. Rather interestingly however, only about a third of respondents (33.1%) indicated that they have ever used a created player in online play. Also a small selection of only 15.3% indicated that they have paid for downloadable content to boost or improve a created players attributes scores. Given the emphasis of these features to many modern sports videogames, these numbers are compelling.

When asked if they had ever simulated a real game or series of games with a sports videogame, a majority (82.5%) answered "yes". Additionally, 89.0% indicated that they have played a full season (franchise/GM mode) with a team. While this may not come as a surprise given expectations and assumptions surrounding the genre, these statistics reinforce the notion that sports videogame players are situating their play in a greater sports fan context. While we now have responses indicating *that* players simulate

real games and seasons, it is important to explore *how* players are simulating real sporting events with videogames. This is an important question to investigate with further study.

Online, statistics based fantasy sports are also popular with sports videogame players. Many (62.1%) indicate that they participate in fantasy sports online.

When asked about playing games on social network sites such as Facebook, 81.9% responded they did not play such games. Of the 18.1% who reported doing so, almost half of the games reported (43%) were sports related titles such as *Madden Superstars, ESPN U,* and *FIFA*. Breaking things down further a range of games were identified, including *Madden Superstars* (16%), *Mafia Wars* (12%), *Farmville* (12%), *Cityville* (10%) *Family Feud* (10%) and *FIFA Superstars* (10%).

On a somewhat related note, players were asked if they had ever played *Wii Sports.* About three quarters (75.4%) reported they had done so. Yet when asked if they considered *Wii Sports* "a sports videogame" only 38.3% said yes, with 61.7% responding no. Such questions are interesting to explore in future studies, to determine why so many players consider *Wii Sports* (and similar titles) as dissimilar from other sports-themed videogames. Likewise, why so many players did not play Facebook games, despite the many sports themed games available on that platform.

We were particularly interested to find out the contexts of gameplay beyond favorite genres, frequencies of play, and who plays such games. As such we asked about play with friends and family, as well as online gameplay. A significant majority – 80.1% – reported that they play sports videogames against (or with) friends or family. Yet such gameplay is not as frequent as one might imagine. On a scale of 1-5 from occasionally to

"most of the time" the majority of respondents said they played in such a manner only occasionally:

Figure 6.

Likewise, many players reported playing sports videogames online, yet did not do so very frequently. More than half (60.6%) said they played such games online, but most did so only occasionally:

Figure 7.

RQ 4: How do players attach meaning to their sports videogames?

We also included an optional, open ended question "Please describe a meaningful or memorable sports videogame experience you have had" to our survey in order to better assess how players felt about such games, and whether or not those experiences were significant in some way. We expected a few replies, but amazingly 56% of all respondents answered the question, in many cases in great detail. Only 6% offered answers that suggested they had never experienced such moments:

> *I play them for the fun and as an escape. I don't look for "meaningful*
> *moments" in sports games and I've played so many hours of sports games*
> *that no particular moment stands out.*
> *Participant #939: Male, 29, USA*

Instead, the vast majority-- 91% of the players who answered --provided examples of meaningful experiences that they remembered and that appeared significant to them. The replies ranged from short statements to detailed reports, and included very private and

emotional stories. None of the 882 stories were identical and therefore the subjective,

biographical and contextual framing of these experiences was important to capture.

Importantly, we did not make explicit any definition of "meaningfulness" in the survey

and so it was up to the respondents to define what "meaningful play experience" meant to

them.

When analyzing the phrases and words that were mentioned most frequently in

single answers, top terms included "friends" (294), and "team" (246), followed by

specific sports and games. By matching similar word groups (for example "friend" or

"friends") the following word-cloud represents the most frequent labels:

Figure 8.

Through analyzing the different answers, stories, and memories, certain patterns were

mentioned repeatedly. After reading through the different replies and discussing

repetitions and patterns, we coded the answers into the following 11, non-exclusive

categories:

- "Social experiences," when relations to other players, friends, families (online and

  offline) were essential;

- "Single Player," when the experience focused on the single-player mode;

- "Victory," if winning was the core of the activity;

- "Narrative," when the response included a specific narrative explaining a situation

  in the sport game;

- "Mastery," when the player mentioned his/her skills developed in the game as specifically meaningful;

- "Online," if the gameplay focused on online usage;

- "Passion," if the players mentions their passion for a particular game;

- "Personal connection," if the reported story included a particular subjective framing of the play experience;

- "User-generated content," if the significance of the experience was related to user-generated content, such as character design and development or creating new teams;

- "Mix real & virtual," when the connection to real sport events or players were central;

- "Lack of meaningfulness," if the response neglected the answer or criticized the question.

Most answers included combinations of categories and 1996 category codes were assigned to the answers with an average of 2.07 categories per reply. By comparison the following graph demonstrates the central patterns found in the players answers.

Figure 9.

Forty-one percent (404) of the experiences reported as most meaningful and significant to the players are related to social experiences. A similar number --40%-- describe their meaningful experience as single player events and 35% experienced

winning a specific game or beating an opponent as most meaningful to them. While these three patterns were mentioned most often and include 56% of all assigned categories, 19% of the answers focused on ingame narratives, and 17% mentioned their mastery of a game as most meaningful and fulfilling to them. Thirteen percent of the respondents wrote about online experiences, 11% mentioned their passion for a particular game as the main trigger, and 8% gave insights into personal contexts that made their play experience meaningful. User-generated content was mentioned in 8% of the answers, while 6% found the connection between specific real sport events and their game play experiences. Six percent could not recall any meaningful experiences related to their sport videogame play.

To offer deeper insights, we next focus on responses to the two largest categories found: Social Experiences and Single Player Experiences, and include how such responses also touched on other categories.

As mentioned before 80.1% of the participants reported that they play sports videogames against (or with) friends or family. Forty-one percent of meaningful experiences and 23.5% of all the participants find those sport videogame experiences the most meaningful. Many of these experiences reach far back into a player's past and are surprisingly precise and rich. The following example is typical of hundreds of others:

> *The most meaningful memory I have of sports video gaming has to be how*
> *I got my start. It was 1993; I was 10 years old and I remember going to*
> *my grandmother's house for Sunday dinner every week. After dinner; my*
> *uncles, cousins and family friends would all huddle around the upstairs*

TV with the Sega Genesis connected and take turns playing John Madden

Football '93. I was a little kid amongst the older kids and adults; so no one

ever took me seriously. I got beat at the game, sometimes badly, because I

was young and the older kids and adults were all much better than me. I

started to play solo at home; at first to get better to be able to beat them,

but then I started to enjoy it myself. I had always casually played sports

games but before this point other genres had piqued my interests more.

After training to beat the older kids and the adults; I became hooked on

sports games. Even though the Sunday dinners and games around the TV

have stopped, I still play fanatically,

Participant #1104: Male, 28, USA

This answer shows how strong the sport videogame experience can be relative to a

particular social setting, to a specific game (*John Madden Football '93*), to a time in the

player's biography, and to the challenge of being beaten and learning how to play the

game. Many of the reported stories are about brothers, roommates, or other family

members or friends.

Accounts often focus on victories against someone specific (21.5%) or a particular

moment in the game, which was related to a larger narrative (14.9%). While some players

like participant #1104 do not recall a specific point in time when they played a game but

instead a larger play period, others attach their experiences to particular moments in

games. For example participant #854 provides a typical example of how a moment in the

game shaped the meaningfulness of the experience:

It was in NBA 2K11. I was the lakers and my friend was the heat. The

game close throughout the whole game but in the fourth Kobe Bryant got

injured. He was my main scorer and I had no other choice but to use my

other players. The score was 67 to 65 and I was down. There was 00:10

left on the clock and Fisher brought the ball up the court. I passed it to

Artest and he shot a three with two seconds on the clock. And as the

buzzer sound the ball went in and Artest ran to the sideline and celebrated

with Kobe as if he won the game for him. That was the most meaningful

game I have ever played

Participant #854: Male, 24, USA

In this example, similar to 17% of the players, the meaningfulness of the experiences is strongly related to a specific narrative developed in the game. Here the rules of the game, real players, virtual gameplay and dramatic situations all collide.

The two examples show – and turned out to be significant in all stories told – that the experiences were very emotional and deep for the players. Overall then, we know that in the case of social experiences it is not just about winning a game, it is the experience of winning against someone particular (22%), in a specific game at a certain time in the player's life. Additionally, just under a quarter—24.8 %—of these social meaningful experiences were related to a player or a group of players online, which indicates that the online bond between players can provide unique meaningful experiences, in addition to more traditional face-to-face encounters. The following graph summarizes the categories that social experiences in sport games relate to:

Figure 10.

Single Player Experiences

Forty percent of the players (386) reporting meaningful experiences and 22.5 % of all the participants outline single player experiences as being most significant to them. This group relates the meaningfulness of their experiences more strongly to victories (34%), to mastering a specific challenge (17%) and to a detailed narrative in the game (18%). To highlight we draw on two additional examples, from participants #1318 and #1034:

> *In College Hoops 2K8, a college baskeball simulation game made by 2K Sports, I played a full Legacy mode while playing/simming all games over 30 seasons.... I created myself as a coach at a small conference school, and worked my way through my career, winning various awards and achievements including winning the NCAA tournament with Boise State and a Perfect Season. Also in MLB The Show I play a mode call Road to the Show which I created a minor league prospect, myself fully detailed, as a Starting pitcher. My greatest moment in that was being called on in relief in a deciding playoff game with a 1-run lead with my job to stop the other team from scoring. I was able to lead my team to victory and got called up to the Majors the next season. Sports games unique in that you feel you could do what the players on the court or field are doing. And that when something amazing happens you feel like "I did that".*

Participant #1318: Male, 23, USA

This example shows typical patterns for meaningful experiences of single players. The experience is strongly related to building up a user-generated team or player over a longer time period and winning with that team.

In some cases it was not even about winning the game, but about the relation between real and virtual sport (7%) and about experiencing something unique that shapes future sport videogame experiences:

> *I was playing NFL Football 94 on my Sega Genesis. I had played through a season of games to reach the Super Bowl. But my favorite team, Cleveland Browns, was not in the game. So I picked the team of my favorite QB. So I took the Green Bay Packers and Brett Favre to the Super Bowl. We were matched against the Denver Broncos, which was the only other team I would have picked. The game was a lot of fun, there was no defense, but a lot of fun nonetheless. It ended up tied at a really goofy score 98-98, and went into overtime. I won the coin toss and waited in the end zone to take the kick. I got it, ran back into the end zone and promptly lost the Super Bowl by a score of 100-98. The replay showed my player started at the 1 yard line, which made my run back a 2 point safety for the Broncos. I learned never to do that again and I learned more about football to get better at the game and enjoy the real game more. This happened in late 1997. The real Super Bowl that followed featured the*

Denver Broncos beating the Green Bay Packers. And I still smile thinking

about it.

Participant #1034: Male, 22, USA

It is worth mentioning that the player here is describing a game narrative from almost 17 years ago, and he still vividly recalls playing that game and losing against the Denver Broncos. Although the game just took a few minutes, the memories have lasted decades and relate to real sport events that happened years after that. The mistake the player had made changed the way he experiences American Football in general. In particular, a videogame gave the player not only a meaningful one-time experience, but also a deeper knowledge of the sport and its rules and his relation to them.

To summarize, the following graph shows the division of the nine other categories, which focus mainly on winning, mastering the game and on narratives in the game.

Figure 11.

If we compare the two strongest patterns that we find in the meaningful play experiences, it can be shown that social experiences (41%) and single player experiences (40%) differ in their relation to the importance of winning (22% / 34%) and mastery (11% / 17%). While it appears logical that online experiences were mainly related to social experiences (25%), for those players who play in single player mode, winning and mastering is most important. Likewise user-generated content (7%) and the relation between real and virtual sport (7%) is more important for single players than for the

social group (User-Generated 3% and Real/Virtual 2%). The final example that we want

to highlight is one of the online experiences (13%), that shows how relationships

established through online networks, can also offer unique and meaningful experiences:

> *Wow, I don't know how to pick just one. I guess if I had to pick, I'd say my*
> *best moment in sports gaming occurred when I was playing online vs. a*
> *friend I met online. I was losing by a field goal with under 10 seconds and*
> *no timeouts remaining. We were playing NCAA Football 10. I can't recall*
> *the team he had but I was playing as USC. All he had to do was kneel the*
> *ball and the game was over, but instead he calls a running play. I user*
> *controlled Rey Maualuga trying to make a play since he was an impact*
> *player in the game. Well the ball goes through the middle and I used the*
> *hit stick trying to force a fumble and I did. I picked it back up with*
> *Maualuga jumping out of my chair and raced for the endzone. By this time*
> *the clock had already expired so it was TD and victory or I lose. His WR*
> *or RB is gaining on me towards the end it was gonna be close. With 2*
> *yards to go I dive in the endzone and win the game, I couldn't believe it.*
> *What made it that much sweeter was that he had never beaten me, and all*
> *he had to do was kneel the ball and the game was over. That's probably #1*
> *for me.*
> *Participant #860: Male, 23, USA*

Sport videogame players develop unique, deep and meaningful experiences through their game play. Many find meaning in social game play experiences, while others find significance in winning or in user-generated content, in their passion for a sport or a game or just in the meaningful narrative of the event. To understand how these memories relate to the play experiences and biographies of the players further research on a qualitative level is needed.

5. Conclusions

Until now, much of what we have known about players of sports videogames has been based on anecdotal evidence or extrapolated from wider surveys of the game playing population. This study demonstrates that some of what we assumed was correct, but with interesting and important exceptions. Although our survey was only distributed online and was disseminated in a way that encouraged those more invested in sports games to participate (based on its posting in various sports games forums and via Kotaku's promotion), the large response does offer some insights into who is currently playing sports videogames and the role such games play in their daily lives.

Our survey found that the majority of those who play sports videogames are male (98.4%), white (80%), and in their mid-twenties (avg. 26). In comparison to other representative videogame player demographics, the field is less diverse and the average player is younger (cf. ESA, 2011). Based on data about the larger game playing population, it seems that sports gamers are drawn from a more traditional demographic of game players, at least in relation to console and certain PC-based videogames.

Perhaps one of the biggest findings to emerge from this study is obvious, but finally documented: the overwhelming majority of sports gamers (93.3%) self-identify as sports fans. And that identity pushes beyond the playing of sports-themed videogames. Attending sporting events, watching them on television, participating in those activities themselves as well as following certain teams or sports were regular parts of their daily lives.

Furthermore, survey data suggests that sports videogame players are situating and understanding their sports videogame play as part of a broader sports context. The players are sports fans, but the emphasis on accurate rosters and its significance to the players, and their propensity for recreating real sporting events digitally suggests that their sports videogame play is necessarily experienced as part of a broader sports context; they want their sports videogame experiences to be simulative, or at least closely related to the sports they experience through other media. Players are passionate about the videogames that suit their interest in sports in general and watch sports they play digitally. The frequency of playing sports videogames – with more than half of the players playing every day and 94% playing a few times a week – indicates that sports videogame players invest a lot of their free time and most of their videogame playtime on these sports games.

A characteristic of sports videogame players that will need more examination in the future is the significant interest in character creation. A vast majority (95%) created a playable character, or themselves as a player (87%), but only a third of the respondents indicated they used that character online. Interestingly only 15% of all respondents ever paid for downloadable content, while 24% of the players using their created characters

online invested money to boost or improve their character. How and why sports videogame players include digital versions of themselves in the sports games they play needs to be researched further.

While an expected number of 62% play fantasy sports, a new audience may be emerging in the areas of Facebook games, Wii sports-themed games, and perhaps mobile games as well. These newer platforms also suggest a flashpoint for tensions emerging in terms of the sports playing audience – many 'traditional' sports gamers do not consider *Wii Sports* a real sports videogame (59%), and the large majority do not play sports-themed games on Facebook (77%). Conversely, those who do play games on social network sites such as Facebook are more likely to have played *Wii Sports* (84% versus 75.4% for all players), and Facebook players are more likely to consider *Wii Sports* a sports game: 47% considered it a sports game, compared to 38.3% of the general population. And interestingly, Facebook players are more likely to have played fantasy sports online—74.1% have done so, compared with 62.1% of the general population. Such differences need to be further explored, to determine if newer audiences for sports games are emerging, or if certain types of players are branching out to feed their interests in sports games.

Additionally, the stereotype of the sports gamer as interested only in Madden or hockey proved false. Players reported a wide diversity of genres of videogames they enjoy playing beyond sports games – with shooter, action, RPGs, adventure and strategy games being among the top choices. Thus sports gamers play a wider variety of games than previously thought, demonstrating that their interests do go beyond one or more types of sporting activity.

Another key finding was evidence that although sports gamers do enjoy playing games online and with friends and family, such activities are engaged in only occasionally for the majority of respondents, rather than most of the time. We did not ask why this was so, but will be pursuing reasons in future research. However, even if such activities are not frequent, they are often among the most meaningful for players. Some of our most interesting data came from the open-ended responses, asking players to recount their most meaningful or memorable experience while playing a sports videogame. Although the players spend less time playing with others, these experiences shape their passion for sport games significantly. Such responses demonstrate the importance of games as facilitators for social interaction among friends and family, as well as systems that offer players a way to compete and engage in competitions they feel challenge their skills and abilities. The study makes obvious that players are relating their game experiences to a specific biographical and social context and connect their game play to real life sport events and competitions with others. A quarter of the players experienced their most meaningful game play online. When playing in single mode winning (34%) and mastery (17%) are the strongest components of meaningfulness. User-generated content (7%) and the relation between real and virtual sport (7%) is more important for the single players than to the social group.

Clearly playing sports videogames are one additional way for individuals to express their interests in a variety of sports. Therefore a reduction of sports videogames to a secondary, or subordinate "extension" of television consumption (Nesbit and King 2010) or of sport culture (Conway 2010) appears to underestimate the importance of video games as a driving factor for enhancement of sports fandom in general. This

finding suggests that it may be worth exploring in more detail how theories of sports fandom might overlap with sports videogame play experience. In addition we need more insights into why there is little diversity in the player demographics, and why female players and Black/African American players are in a minority. Furthermore, the fact that online playing appears to happen seldom and that players create characters but hardly use them online, begs further investigations. While this study provides novel insights into who sport videogame players are and what they play and why, we still lack knowledge on how these players relate their passion for videogames to their sports fandom in general. Therefore further qualitative studies are needed, to help inform the empirical findings.

References

Business Wire (2010) EA sports FIFA soccer franchise sales top 100 million units
lifetime. *Business Wire.* Available at
http://www.businesswire.com/news/home/20101104006782/en

Conway, S. (2010) "It's in the game" and above the game: An analysis of the users of
sports videogames. *Convergence* 16: 334-354.

Crawford, G. (2004) *Consuming sport: Sport, fans & culture.* London: Routledge.

Crawford, G. (2005) Digital gaming, sport & gender. *Leisure Studies, 24*(3), 259-270.

Crawford, G. (2006) The cult of champ man: The culture & pleasures of *Championship
Manager/Football Manager* gamers. *Information Communication and Society*,
9(4), 496-514.

Crawford, G. (2008) "It's in the game": Sport fans, film & digital gaming. *Sport in
Society*, *11*(2/3), 130-145.

ESA (2011). Essential facts about the computer and video game industry. *Entertainment
Software Association*. Available at
http://www.theesa.com/facts/pdfs/ESA_EF_2011.pdf

Farquhar, L., Meeds, R. (2007) Types of fantasy sports users and their motivations.
Journal of Computer-Mediated Communication 12: 1208-1228.

Leonard, D. (2003) "Live in your world, play in ours": Race, video games, and consuming the other. *Studies in Media & Information Literacy Education* 3(4): 1-9.

McHugh, M. (2010) EA's FIFA franchise reaches 100 million units sold. *Digital trends.* Available at http://www.digitaltrends.com/gaming/eas-fifa-franchise-reaches-100-million-units-sold/

Nesbit, T., King, K. (2010) The impact of fantasy sports on television viewership. *Journal of media economics* 23(1): 24-41.

Shipman. F., III. (2001) *Blending the real and the virtual: Activity and spectatorship in fantasy sports.* Available at http://www.csdl.tamu.edu/~shipman/papers/dac01.pdf

Silberman, L. (2009) *Double play: Athletes' use of sport video games to enhance athletic performance.* Master's thesis, Massachusetts Institute of Technology. Available at http://cms.mit.edu/research/theses/LaurenSilberman2009.pdf

Smith, B., Sharma, P., & Hooper, P. (2006) Decision making in online fantasy sports communities. *Interactive Technology and Smart Education* 3(4): 347-360.

Williams, D., Consalvo, M., Caplan S., Yee, N. (2009) Looking for gender: gender roles and behaviors among online gamers. *Journal of Communication* 59: 700-725.

Zuniga, T. 2010. Madden men. *GamePro.* Available at http://www.gamepro.com/article/features/216184/madden-men/

Age

39+, 5%

32-38, 14%

18-24, 49%

25-31, 32%

■ 18-24
■ 25-31
■ 32-38
■ 39+
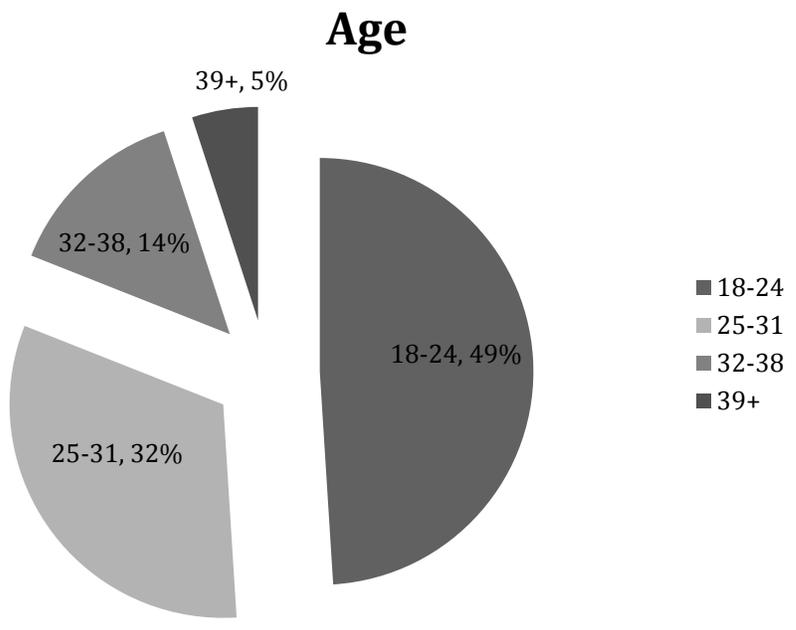
Figure 1: The age breakdown of survey respondents

Racial/Ethnic Breakdown

■ Survey ■ US Census

White Black/Afr Amer Asian Hispanic/Latina Amer Indian Pacific Islander
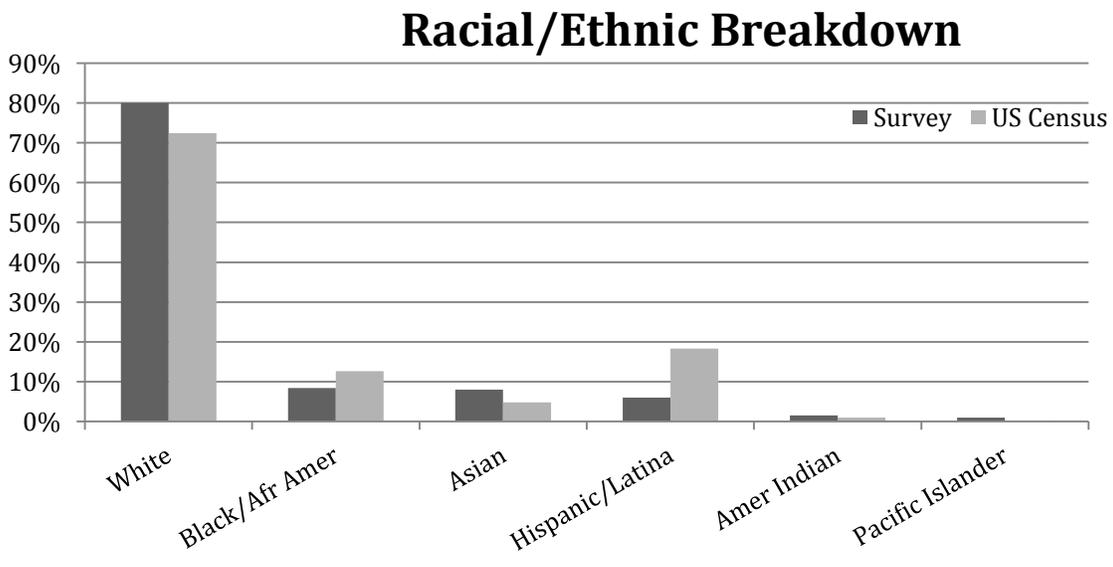
Figure 2: The racial/ethnic breakdown of respondents compared to that of the US Census

Nationality

- North America (64%)
- Europe (21%)
- Asia (4.8%)
- Australia (2.8%)
- Central/South America (3.7%)
- Africa (0.3%)
- Uncategorized (1.8%)
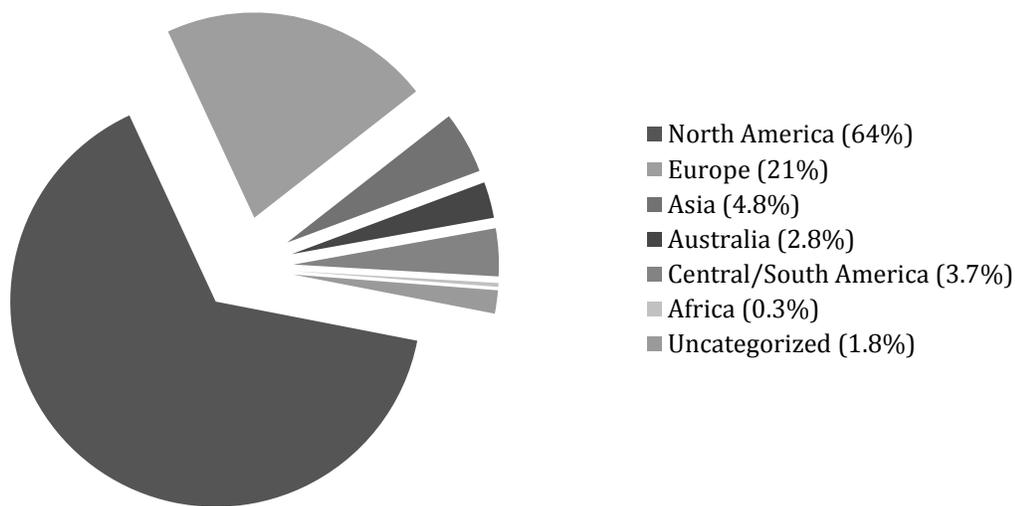
Figure 3: The breakdown of nationalities for survey respondents

# Which sports are your favorite to play as a videogame? Mark all that apply.

- Favorite Sport American Football
- Favorite Sport Soccer
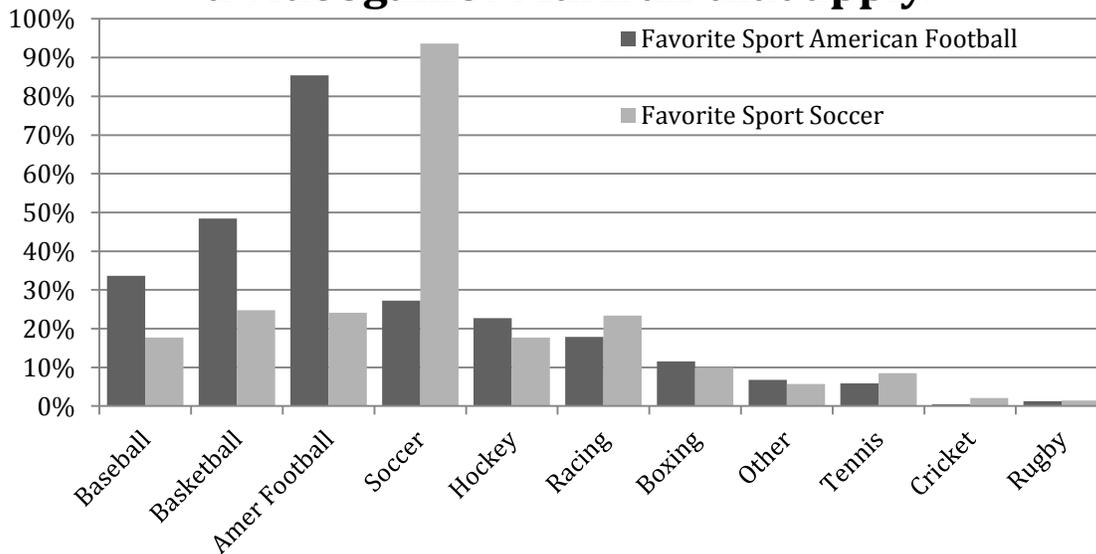
Figure 4: A comparison of the distribution of preferred sports videogames for

respondents who list American Football and Soccer as their favorite sports

Sports videogame play as portion of total videogame play time
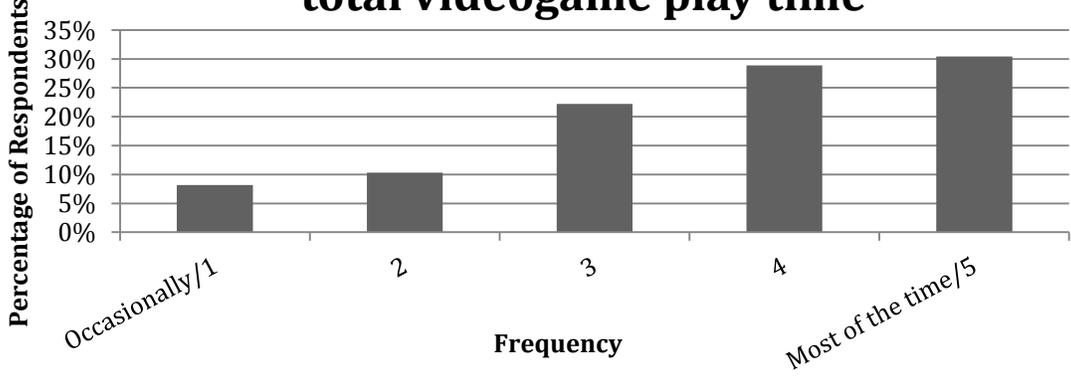

Figure 5: Sports videogame as a portion of total videogame play time

Frequency of play with friends and family
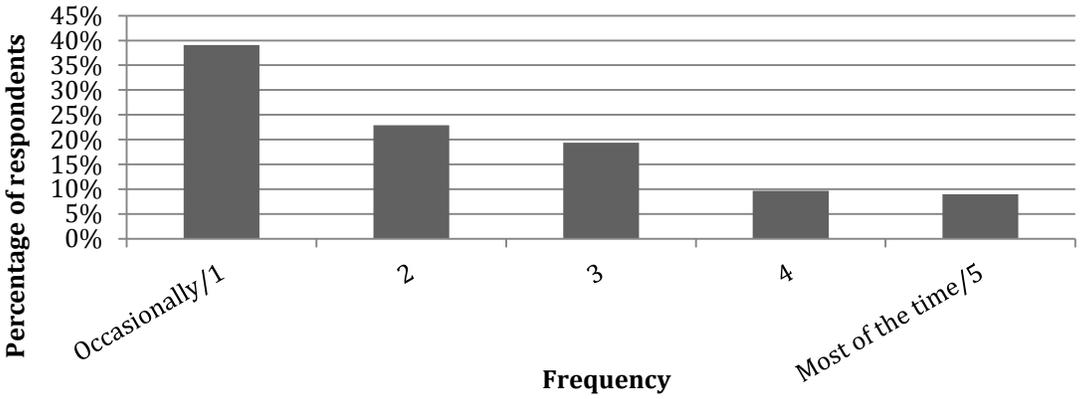
Figure 6: Frequency of play with friends and family

Frequency of play online

Figure 7: Frequency of play onilne

Figure 8: A word cloud of meaningful experiences

# Categories of Meaningful Experiences

Number of Responses
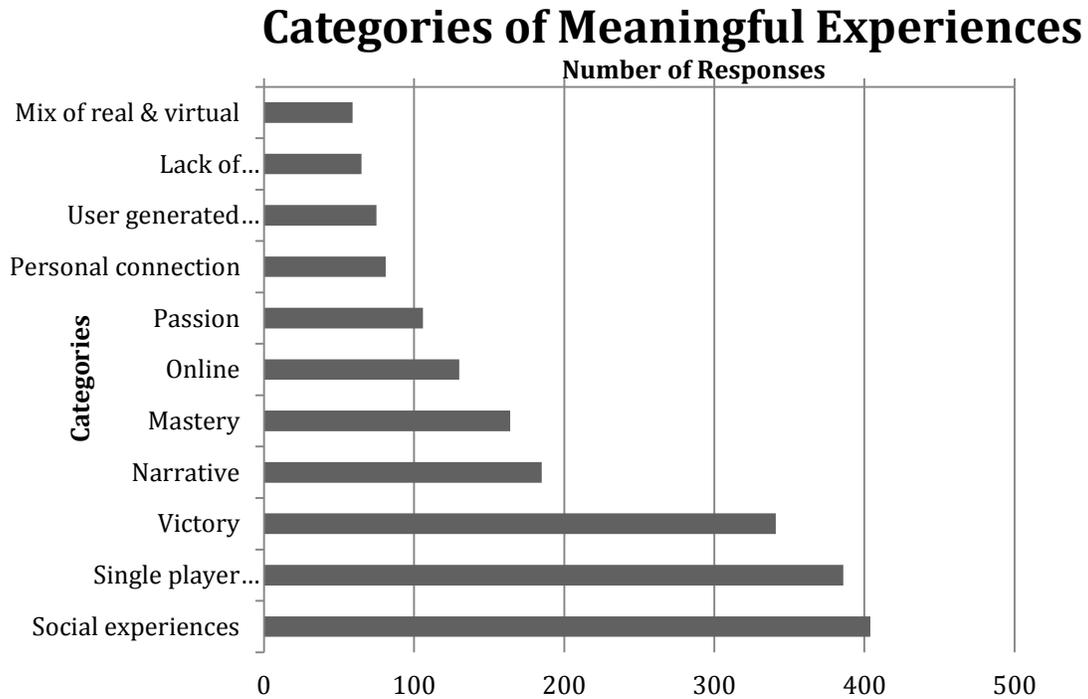

Figure 9: Categories of meaningful experiences

Categories Related to Social Play Experiences
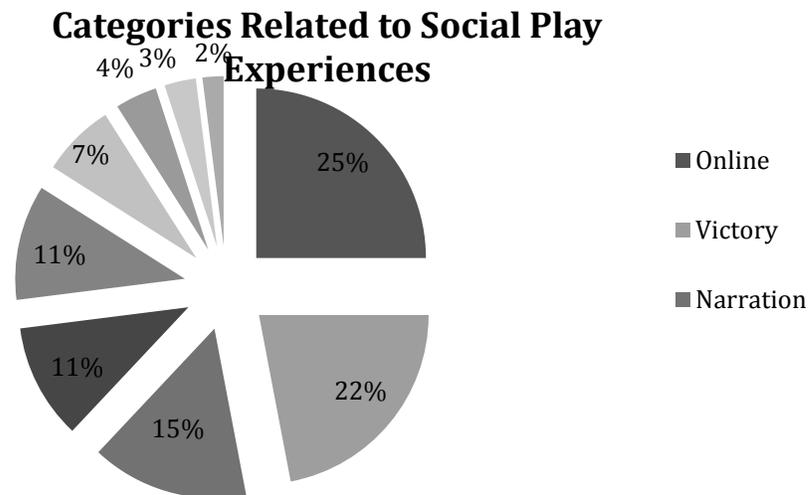
Figure 10: Categories related to social play experiences

Categories Related to Single Player Experiences

Legend:
- Victory
- Narration
- Mastery
- Virtual
- User generated content
- Passion

Values: 34%, 18%, 17%, 7%, 7%, 6%, 4%, 4%, 3%
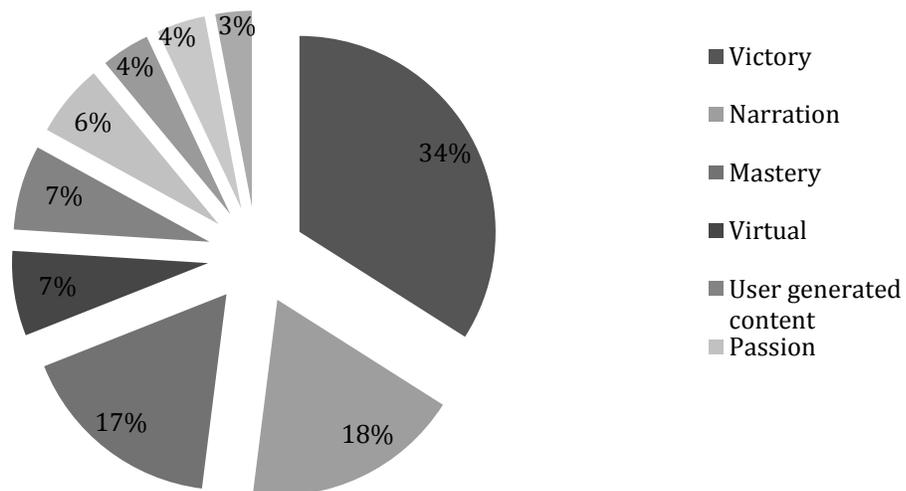
Figure 11: Categories related to single player experiences