# The growth of the mobile markets media essay 

Media

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This dissertation outlines the female video game industry. Female video game players have grown considerably over the last three years, increasing from $40 \%$ of the market in 2010 to $47 \%$ of the market in 2012 (ESA report, 2010, 2012). The aim of this project is to find out what factors have led to the growth of female video gaming since 2010. In this section, the primary research question is discussed, as well as several factors that were identified that could be associated of the primary research question.

## Research Question

The establishment of the research question was made during an initial period of tentative research. This involved the examination of an IT industry that the researcher was somewhat familiar with - the video games industry, and identifying what areas of interest there were to research. Several possible questions in various areas of interest were found, but the researcher's experience of Facebook and mobile video game markets gave inspiration to define the research question as follows: What are the factors that have led to the growth in female video gaming since 2010? Outlining a response to the core research question led to further establishment of a number of secondary questions, which were revealed during the literature review and the research module. These questions outlined possible factors in the primary research question, and include: How are games currently being played by females, and how does this compare to three years ago? Have the increases in social gaming (in particular Facebook games) impacted this growth? Have the growth of the mobile markets and the adoption of smartphones and tablets impacted this growth? What impact has new or improved access to technology on this growth? Do females play much with
their family, and does this have an influence? What impact has femaletargeting video games has on this growth? These are addressed through the literature review, the survey and the findings and results phases of this research, and how each tie in as factors to the primary research question.

## Rationale

This section of the video games industry, the female gaming market, has grown considerably in the last three years according to ESA report data. The rationale of this project is to encompass the Information System technology and business aspects of female gaming and to determine what the factors that have led to this growth are. The industry is worth studying, as the growth of the gaming industry, not only as a whole but the increase in female participants, is one of the highest growing sectors of the entertainment industry, providing thousands of jobs within the IT sector. It is currently worth $\$ 67$ billion globally, and expected to rise to $\$ 82$ billion by 2017 (DFC Intelligence, 2012). The aim of this project is to understand what factors have caused the 7\% growth in the female games market since 2010 (ESA, 2012), and to compare these to findings in the past.

## Scope

This research focuses on the experiences and thoughts of the female population, surveying the general public to find trends or contrasts within the games industry. Gender refers to the sociocultural and psychological aspects of being female or male (Santrock, 2004). ' Gender roles' are the social expectancies that advocate how males and females should be in common society (Adya and Kaiser, 2005). A survey will ask responders about some possible factors that have led to the growth of the female games market, https://assignbuster.com/the-growth-of-the-mobile-markets-media-essay/
and gather information about gaming habits and how they spend their time playing video games. Both males and females are able to answer, and though some questions may be female specific, answers from both genders will be used answer some of the secondary questions as outlined above. Females from all around the world, of all age groups, will be targeted to best answer the questions outlined above. The responses will reveal the gaming habits of females, and how they spend their time playing video games now and compared to three years ago, to define what factors have led them to play the games they do today and how much more they play games. Some possible factors, found to exist through research (as outlined in the Literature Review), are the fluctuations in online social gaming, the growth of the mobile market and the adoption of smartphones and tablets, playing games as a family activity, improvements of game design for female targeting games, and if it is considered more ' socially acceptable' for females to play particular types of games today than three years ago.

## Roadmap of Document

Chapter 1. Introduction: Chapter 1 explains the research question, the subquestions and the rationale behind the research. It also contains a brief outline of the research conducted. Chapter 2. Literature Review: Chapter 2 is a detailed account of the different literary sources, spanningChapter 3. Methodology: Chapter 3 outlines the research methods and methodologies adopted in this research project. Here I discuss the research philosophy that informs the study, and the methods employed to gather and analyse relevant data. Chapter 4. Findings: Chapter 4 outlines the major findings of the surveys and compares and contrast these findings with those of the
literature review. Chapter 5. Conclusions and future research: Chapter 5 gives details of the conclusions based on the findings, identifies the limitations of the study and suggests areas where further research would be of value. Chapter 6. ReferencesChapter 6 contains references used throughout this project. Chapter 7. AppendicesChapter 7 contains appendices of the Survey Questions, the Distribution Websites and *

## Literature Review

## Introduction

The literature review examines several areas of the video games industry and how the relationship of women with the industry has changed over the years. The literature review allows for a better understanding of the research, and allows insight into previously researched material surrounding the female video gaming industry. Since 2010, there has been a reported increase in the number of females playing video games (ESA reports, 20082012). This literature review explores some possible factors that could have led to the growth in the last three years, and will explore the dominant themes of the research question, which have been identified through examination of academic research and business reports about changes in the video games industry. Projections forecast further growth in the tablet and mobile market, a market which has already seen huge growth of the last few years (Forbes, 2013) providing a larger platform for games companies to develop products for with more confidence (Perez, 2011). Other research has also indicated that PC or Console gaming is not the primary way in which their video games are played (Nzegwu, 2000), which show that it is worth focusing on the growing market of female gaming on new and emerging
mobile and tablet platforms. As a family activity, video games are played not only individually but as a group across a variety of platforms. This could be a contributing factor for how females are introduced to games and how they get used to the idea of playing games. The focus of the gaming industry has also shifted over the last number of years, with more titles being released that specifically target female based audiences, such as Top Girl (Crowdstar, 2011), Diner Dash (GamerLab, 2003) and Candy Crush Saga (King, 2013). Devices now have established platforms with a wide availability of apps or digital services available to them. This could provide the easy access to markets through ' App stores' and could be a factor in why the female gaming industry has grown. There are a variety of ways in which games are advertised to people, of both genders, and it would be good to investigate how games are picked up by individuals, be it word of mouth, advertising, social media, or through friends or family.

## Female gaming growth since 2010

The female video game market has changed significantly over the last few of years according to market research conducted by the Entertainment Software Association. " Essential Facts about the Video Game Industry" (ESA, 2008 to 2012) reports are published each year and have several statistics relating to the current state of the games industry across a number of fields. These were conducted by Ipsos MediaCT for ESA, and the study gathers data from more than 2, 000 United States representative households. The ESA is currently comprised of 33 members, consisting of most of the top publishers in the gaming world. The ESA conducts business and consumer research, operates and owns the E3 Expo, and represents video game industry
interests in federal and state government relations. According to results from research from 2008 to 2010 (ESA, 2008), (ESA, 2009) and (ESA, 2010), the overall gaming population by gender in the United States stood at about 60/40 split in favour of males. In 2011, this changed to $58 \%$ males/42\% females, and in 2012, the findings showed that this had changed again to $53 \%$ males $/ 47 \%$ females, an increase of $7 \%$ over the general population in just three years after several years of no change. This information shows a huge increase since 2010 for the amount of females playing video games. The ESA reports only address the US market, but this market is also the largest and most profitable in the video games industry with total spending at $\$ 14$ billion in 2011 (PricewaterhouseCoopers, 2011). It could therefore be deduced that the US has the largest percentage of male's vs females in the world. China has the second largest games market with total spend at $\$ 8$ billion, followed by Japan, South Korea and the UK. (PricewaterhouseCoopers, 2011). The ESA reports explain in much detail the current state of the gaming population as it is today in the US, but reports from other countries would be of interest as well.

## The relationship of females with video gaming

The relationship of video gaming with females has changed throughout the lifetime of the video games industry, adapting as technology has changed. Research by Schott \& Horrell (2000), examined this relationship and how it was in the late 90 's, when the games industry was still considered a new and growing sector. This paper describes an investigation conducted into the how approachable video games were to females, and what the lure of gaming platforms was for females in the late 90's. This technology was still considered a new and growing sector, and that " computer games represent one of the most developed of the new media technologies." (Schott \& Horrell, 2000, p. 36). A " traditional feminist approach" (Schott \& Horrell, 2000, p. 36) of investigating the issues and characteristics that excluded females from new technologies was avoided, so that the paper and research could focus on the ' experiences' and approaches of females who already viewed themselves as 'gamers'. This gives a good insight as to how female gaming has changed in the last decade. The paper also reveals that females have a different ' playing orientation' from males, and that females play their games in different styles from males. The report also revealed that gaming cultures have become part of the household dynamics; overall, respondents owned the games consoles on which they played. Exceptions were found amongst older adult responders with families. In such cases, access to gaming was initially spurred by male interests and playing habits. Similarly, the kinds of games females played was also invariably determined by the preferences of the console owner. Research in the early 2000's found that the female gaming population was on the rise, albeit it slowly (Bryce \& Rutter, 2003; Crawford \& Gosling, 2005; Kerr, 2003). Research by Kerr addresses the topic of gender and games from two perspectives: the producer's and the consumer's. The first part of the research explores how Sony represented the PlayStation 2 in advertisements in Ireland and how adult female game players interpreted these representations. This gave an insight into how females were advertised to by producers. The second part goes on to chart the gaming biographies of these women and how this leisure activity is incorporated into their adult everyday life. It also discusses their views about the gendered nature of game culture, public game spaces https://assignbuster.com/the-growth-of-the-mobile-markets-media-essay/
and game content, and how these influence their enjoyment of game playing and their views of themselves as women. Kafai et al. (2008)'s uniquely titled book " Beyond Barbie® and Mortal Kombat: New Perspectives on Gender and Gaming", draws attention to how gender stereotyping and related social and economic issues impact the games industry. It is a follow up to their previous book " Beyond Barbie and Mortal Kombat" (Kafai et al., 1998), published ten years earlier and explains that the number of women and girl gamers had risen considerably throughout the 2000's. Despite this, gender disparities remain in gaming, such as through the use sexual imagery in some games, and the use of ' booth babes' to promote games at expositions as part of advertising. The contributors discuss the rise of massively multiplayer online games (MMOs) and the experience of girl and women players in gaming communities; these communities and games are still male-dominated, and find that there is a need for different perspectives in game design for females. More recently, a study by (Terlecki et al., 2011) surveyed 2, 000 college undergraduates for video game experience, preferences, and how efficiently they are able to play particular video games. The research found that, overall, males play video games more often compared to women, and have had more experience in the past in playing a wider variety of video games. Males also feel more confident in their game playing ability compared to females. However, the traditional outlook that males vastly outnumber females was shown to be incorrect, as a moderate female population was found to exist, who's had as many similarities in gaming styles as differences. Findings showed that males played at least weekly, while women played once a month, if that, which were contrary to thoughts of 7 hours a week for both females and males (ESA, 2009). The https://assignbuster.com/the-growth-of-the-mobile-markets-media-essay/
types of games liked by both men and women were primarily adventure games. Some previous literature also purports that men and women, boys and girls prefer adventure games (Grimes, 2003), though reports that adventure games with heavily violent themes were mostly played by males. These researches were conducted before two possible key factors to the video games industry were present; online social gaming through Facebook, and the smartphone and tablet markets. Therefore, the relationship of females with the video games industry has changed over the last few years, and examinations of the Facebook video games market and the mobile market is necessary to see how this relationship has changed.

## Facebook and social gaming

Over a 20-year time span, the landscape of the Internet has constantly reformed, and video games have reformed with it, embracing new networking technologies for better gaming experiences. Hansbury, (2011, p. 309) proposes that having an active social connection with friends online is increasingly common in many countries, and is becoming ' more integrated with life in general'. Research by Kirman et al. (2009) documents the rise of Facebook gaming and other online social networks, and the social demographics of this growing industry. The research found that these particular games have strong social implications to the individual playing, and discusses how they are distributed throughout the public realm and how this distribution ' decays' over time. Games that have been built for distribution on a social network have often been characterised by a sharp cut-off of players, compared with the classically scale-free nature of the social network for the game not built on an existing social graph. Research
into the incentives and emotional outlooks of social networking games by Järvinen (2009) analyses existing popular games hosted on social networks. Several Facebook games were played as part of a case study, and the author extracts a selected set of design principles that are common within these games into a design framework where interaction, social, service, and game design meet. This social video games framework, such as offered through Facebook, aims to support the inherent sociability, impulsiveness, and playfulness that are infused into online social networking games. The incentives of playing a social-network game are interesting, and research by Lee et al. (2012) examined what motivations were present from playing these games, and what the attitude and the social outcomes of these types of games were. They found there were the " six motivations for playing social-network games; social interaction, self-presentation, fantasy/role playing, passing time/escapism, entertainment, and challenge/competition." The results established that distinct kinds of motivations influenced the attitudes toward playing social-network games and intentions to engage in different social network gaming activities differentially. This examination of cyber psychology also revealed there was an increased level of "internet addiction" involved with these types of games. In the last three years, there has been a decline in the video games market through Facebook and other online social media networks (Bailey, 2012). In 2010, about 50 percent of Facebook's monthly active users (MAUs) were gamers. At the end of 2011, the amount of gamers changed very little, and so the percentage of Facebook MAUs that were gamers slipped to just 25 percent. The growth of the mobile market has led consumers away from the laptop and towards the smartphone or tablet. This has led to video game companies moving away https://assignbuster.com/the-growth-of-the-mobile-markets-media-essay/
from developing for the Facebook platform, and towards the iOS and Android platforms in the mobile market.

## The handheld and mobile market

## The early handheld video game market

The handheld-device market began in the early 1990s, mostly through the work of Nintendo with the Gameboy, released in 1989 to the Japanese and North American markets and in 1990 to the European markets (McFerran., 1995, pp. 42-47.) The device was originally bundled with the title ' Tetris', and the Game Boy and Game Boy Color combined have sold 118. 69 million units worldwide, with 32.47 million units in Japan, 44.06 million in the Americas, and 42. 16 million in other regions. (Nintendo, 2010). They have gone on to create many other versions in the popular Gameboy series, including the Gameboy Advance, and the DS series and most recently the 3DS. Sony have also experimented with the handheld industry, with versions of the PSP series selling 71. 4 million units worldwide (EveryEye, 2011). The introduction of ' Snake', a casual video game developed in the 1970's in arcades, to Nokia mobile phones in 1997 brought gaming to the mobile phone market, with an estimated 350 million Nokia phones offering Snake as standard (ESA, 2012), and played by an estimated one billion people worldwide, making it the most played game on earth. (Guinness World Records Gamer's Edition, 2010). Mobile-phone gaming moved slowly from here until the introduction and establishment of the smartphone market.

## The smartphone and tablet market

The smartphone and tablet markets are dominated by two platforms at the moment; Android based operating-system devices and Apple iOS based devices. The iOS platform, consisting of Apple's iPhone, iPad and iTouch series, have sold over 500 million devices to date (Tim Cook, Apple Press Release, Q1 2013), while the Android platform, which is present on a number of smartphone and tablet devices from different manufacturers such as Sony, Samsung, HTC, and many more, have sold nearly a billion units combined (IHS, 2013). This is still a new market dominated by two platforms, but Windows 8 is now available on some devices, but lags considerably behind Android and iOS market share. Gartner (2013) forecasts Microsoft's Windows 8 to take the third position in the ' business tablet' market by 2016, trailing iOS and Android for total devices. Gartner (2013) predicts that twothirds of the mobile workforce will own a smartphone in 2016, and 40 percent of the workforce will be mobile. More recently, business reports and articles have documented the rise of mobile gaming (Snider, 2012; Terlecki et al., 2011), and according to (Perez, 2010), females make up a greater portion of the mobile gaming industry than males. The global mobile video game industry is worth an estimated $\$ 7.8$ billion in 2012 , and up to $\$ 18.9$ billion by 2016 (Avista Partners, 2012). A report from mobile analytics firm Flurry, by Perez (2011) examined the ' social gaming audience', and compared this market to ' traditional console gamers'. According to the firm's reports, the mobile social gaming audience tends to be younger than traditional console gamers, and mobile players have a higher percentage of females than males. This is part in due to better access to disposable income than traditional gamers (Flurry, 2011). On mobile platforms, the report found https://assignbuster.com/the-growth-of-the-mobile-markets-media-essay/
that the average gamer age is 28 , compared with 34 on consoles. The population for mobile gaming is also considerably larger than the worldwide base of console game leaders (Wii, Xbox 360, PlayStation 3) combined, estimated at 180 million. Mobile gaming is at an estimated 250 million iOS and Android devices, with 750000 coming online every single day. It is also bigger than other handheld gaming (Nintendo DS/Sony PSP), estimated at 200 million units. A study by Snider (2012) examined the mobile-gaming market to establish what amount of mobile gaming was done by females. This business article was written for the Electronic Entertainment Design and Research (EEDAR) firm, surveyed 2, 491 active mobile gamers between 15 and 64 years of age. The report claimed that up to $60 \%$ of current mobilegaming is done by females, and the most popular games on mobile for females are online multiplayer games at $63 \%$, compared to $52 \%$ for males. The report also found that females are more likely to play multiplayer games with family, and are more likely to send and accept Facebook game invitations.

## The family and video gaming

With the release of new games devices and new ways of playing games, gaming has been known to be a family activity. Video games have shown to play a significant role in the development of a child's attitude to technology (Bennett and Bruner, 2000), and can be seen to have positive effects on a child's development as cited in a large amount of studies (Blumberg et al., 2013; Saleem et al., 2012; Prot et al., 2012). Snider (2012) found that females are more likely to play multiplayer games with their families, and also have a strong influence on what games are played in the home.

Furthermore, video games can be seen as a physical activity because of devices such as the Microsoft Kinect or the Nintendo Wii, and motiontracking software can turn video games from a couch based activity to an opportunity to exercise (Baranowski et al., 2012)The improvements in technology and easier access to games through various devices have allowed for more games that specifically target the female games market. Last year, female market targeting games such as Just Dance, The Sims, Zumba Fitness and other titles were shown to be in the most grossing games of the year for console and PC gaming (UKIE and GfK Chart-Track report, 2012).

## Game design for the female market

To aid this section of the literature review, I have attached " A list of femaletargeting games". Male game developers have traditionally preserved a male dominance within the gaming industry, based on their own tastes and cultural assumptions (Cassell \& Jenkins, 1988). Video games that incorporate fantasy and violence are said to maintain gender differences in play, and can affect the amount of gaming females do as well. MacCallum-Stewart (2008, p. 38) argues that " more than any other media, the videogame allows players to revel in their own embodiment as alternative beings". The idea of ' female games' became prevalent in the 1990s, after the video games market had already started to become quite established in the western world. In the past, female games have often been developed by adapting girl-oriented subjects in other media, such as Hello Kitty, Barbie, and The Breakfast Club (Brown, 1996), while leaving male-targeted genres such as sports games, shooting and action games, and driving simulations to the
male audience (Yap, 2000). The introduction of the Sims, a strategic lifesimulation game based much on the idea of a dolls house, in 2000 brought many females to play video games for the first time, with over 150 million copies sold as of May 2011 (NPD Group, 2011). This attitude towards female gaming began to change through the 2000s, with the expansion of " entrepreneurial feminism' and a greater integration of females into the games development process (Winegarner, 2005). This has spawned companies such as GirlGames, GirlTech, and Silicon Sisters; all video gaming start-ups that are female owned and predominantly female staffed. However, though there have been successes in targeting the female audiences, some claim that categorising video games by gender reinforces negative stereotypes (Wolf, 2012), and also that the small number of female-targeting games may discourage future game development of female games, as the male market is that much more lucrative which keeps the female-targeting games market small. As a result, those games that are designed for females may be of lower quality or given less consideration in design. Designing games for the female audience differs from those for males, as there are differences with regard to sociological, psychological, and cultural interests (Nzegwu, 2000). The drive of expanding the video games market to include more females through the development of gender-neutral games has also much support. Critics have proposed that female gamers, especially older female gamers (Hamilton, 2008) prefer gender-neutral games such as Tetris, The Sims, or Civilization to " girl games" (Yap, 2000; Brown, 1996). This trend has continued through the efforts of Nintendo in its release of the Wii. Nintendo's shift from the important of core gamers (i. e. male gamers) to a broader audience has been recognised as making good business sense and https://assignbuster.com/the-growth-of-the-mobile-markets-media-essay/
has paid off for Nintendo, as it is more lucrative to target the untapped female gamer market share than to restrict marketing to males alone (Watts, 2009). In fact, the Wii's success with female gamers has been seen as closely related to the fact that the console is aimed to be gender neutral, and targeted to the field at large rather than at females solely (Kelly, 2007). Kafai (1994) also finds that females prefer realistic settings and androgynous characters, and studied how females design games differently to males when given the opportunity to do so; these games were found to have little or no violence or aggressive competition, yet prefer higher quality graphics and sound than males do.

## It is easier to learn about and buy games.

One of the largest drivers of growth in the games industry has been online distribution and online usage business models. By being able to market and sell games digitally to consumers, games publishers and developers have been able to cut out the middle man. Digital downloads continue to take share away from the traditional model of selling physical boxed software at retail, and a report, " Online Game Market Forecasts", estimates worldwide revenue from online games to reach $\$ 35$ billion by 2017, up from $\$ 19$ billion in 2011. (DFC Intelligence, 2012).

## Conclusion

Video gaming is such as a large area of research - a simple search for " video games" in Google Scholar reveals about 265, 000 results, and is one of the quickest changing industries in the world. Much of the literature referenced above is still subject to debate. The topics identified above through the literature review have helped categorise some of the possible https://assignbuster.com/the-growth-of-the-mobile-markets-media-essay/
factors for growth of female video gaming. The reported 7\% growth since 2010 as revealed by the ESA could be attributed to several factors, such as the growth of Facebook gaming, the growth of mobile gaming, the positive aspects of video gaming in a family environment and the ever growing section of games designed for the female market. The changes in technology have driven these changes, and easier access to ' common' technology (e. g. laptops, Facebook and smartphones, etc.) and therefore video games, have allowed for large growth in the female gaming market and drives video games companies to develop more for this market. This literature review could still be expanded upon; this research is but a snippet of the video games industry as it is today and has been in the past.

## Methodology

## Introduction

Before the area of research could be explored for this dissertation, it was necessary to define exactly what ' research' is. Often the simplest explanation is the best one, and thus the Oxford English dictionary provided a definition:" The systematic investigation into and study of materials and sources in order to establish facts and reach new conclusions." (Oxford English Dictionary). To conduct this research, I had to not only study existing works about the games industry, establish facts about the growth of the industry, but also conduct new research to document how the existing information stood up to my own research, and to understand if there are any new factors that have emerged in the industry since the existing research was published. Before attempting to communicate the understanding of the female gaming industry, I needed to find out exactly what was being
researched, and what parts of this initial research required further evaluation. It has been established that the key to insightful research is a good research question. To my own knowledge, I had known that the industry had grown, but had no timeframe, no known reasons why it had grown, or what was the current state of the industry truly was. To find these out, I had conduct initial research to establish my research question. The initial scope of the project was much larger than it is today, with several methods of research considered to gather the information about the female gaming industry. This document could have ended up with merely superficial and shallow information if this scope had not been narrowed down. It was clear from the beginning that this research project would involve developing a sound working knowledge of the topic before deciding on how to develop any findings. This working knowledge was defined as:" You have a working knowledge sufficient to work with at a basic level." (Oxford English Dictionary). This working knowledge could only be developed properly by further refining the topic to something which was workable within the timeline of this research project. This involved some negotiation with the supervisor to determine which factors were important enough to be considered part of the research. There was always caution to provide clear information and clear instructions for candidates in the research module, which helped shape the questions asked in the research and what factors may be present.

## Qualitative Versus Quantitative Research

The combination of qualitative and quantitative research was an essential part of this research that needed to be studied and reviewed in order to best
outline the factors related to the growth of female gaming. There was a requirement to perform some qualitative research before even thinking about getting the numbers together to support any arguments made. It very much depends on the subject being researched which is the correct method to choose, but the bottom line should be to ensure that the investigation is as thorough and accurate as possible." The generalizability of quantitative research as well as the contextualisation of qualitative research was required for this project. It was necessary to be able to balance the detachment, impartiality and objectivity of the quantitative researcher role required with the partiality, empathy and personal involvement of the qualitative researcher role. In the case of the selected research question, one method would not be sufficient to present any findings without the other. There may be cases and arguments for using either one or the other, but it was felt that this research was the perfect example of where both methods could be used in tandem." For qualitative research, the outlining of knowledge attained during the literature review would be used to better understand the topic as a whole. The review comprised of the study of articles, research papers, seminal books, and other resources available to aid the establishment of the research question. For quantitative research, a survey would be used to quantify the changes in the female gaming market in the last few years. Subsequent numerical analysis of the responses was used to describe the opinions and attitudes of the responding females; the basis that those surveyed would indicate the prevailing situation of the population.

## Survey

To conduct this research, surveys will provide the most realistic and accurate data, because by targeting end users with a survey, it provides an opportunity to discuss key topics with the target population. This provides a ‘ snapshot' of the population, and using a web survey targets a population that mostly consists of Internet users. A survey also gathers a larger variety of female gamers than interviews of small groups or interviews of games industry employees would.

## A brief description of the survey

(See attached Survey Questions document)The survey has been designed to ask users what they think have been important factors in the growth of female gaming, and to give opinions on different factors as described above. It will also allow for users to provide their own feedback for some questions through comments. Each question is optional, and responders have the option to exit the survey without submitting. There first three questions ask for age, location and year of birth, so we can distinguish other answers based on gender, age group, or where they are in the world. The survey then asks the responder why females play games more than three years ago before giving any examples, and goes on through the survey giving some examples and their importance to the growth. The survey also asks questions based on finding out: What kind of games females playHow long the user plays different types of games and compare this to three years agolf mobile gaming has been a factor in the growth by asking how many games they have on their devices, and how often they play themHow a user finds out about video gamesIf playing together as a family is a factor by
judging how much they play them togetherlf Facebook or social gaming has grown, and what influenced players to play these gamesHow socially acceptable several forms of gaming are for femaleslf ' female targeting' games have improved in quality and if many females play these gamesif users think that there will soon be more female players than male players.

## Distribution of the online survey

The survey will be distributed via social networking and through gaming communities (see Social media sites and Games Community Sites document). This includes large online communities such as Reddit, Twitter and Facebook, and online gaming communities. These posts or messages will ask the public to take an anonymous online survey, and will include a link to its online location. These users were selected because the target audience would be tech savvy, and so able to take an online survey without issue. This distribution will take place across five days to ensure enough responses are received. The aim is about 200 responses or more. Since this is an online survey being distributed online, there is no way to guarantee the sample size, but by consistently distributing the survey as explained above for five days, this should allow for a large enough sample.

## Survey hosting

The survey will be deployed over the space of five days, and will be hosted via FluidSurvey. The results will be analysed using software available through Fluid Survey. (See Section 5. How I Propose to Develop the Findings)

## Survey testing

The survey has been tested on four different females, to be understand what questions received better results. Three rounds of testing was done to find out what the best way to ask questions was and how to display these questions and possible answers to the public.

## Analysis

Once collected, the data from surveys will be used to analyse what factors have influenced the growth of female video gaming since 2010. These results were analysed for error, subjected to an assessment of sampling error on the assumption that each sample was representative of a normally distributed set of possible samples. On this basis the standard error of the proportions attributed to answers to each question was calculated as follows: Where $P$ is the proportion of the responses attributed to one possible answer (agree, strongly agree etc.) and n is the sample size. In this study there is no way to measure the potential bias of the results but it is important to note that response bias may exist and is a limit to the validity of the assertions made regarding the findings. These results will yield information and data that can be combined to answer several points. What types of games played by females now, and compared to three years ago. This will reveal if growth in different genres have been a factor, such as Facebook video gaming, console gaming, etc. (See Survey Questions for more.) This can be combined with age groups and location to show where the most common genres are and who is playing. If there is an increase in the smartphone or tablet games market. By asking about the devices that users play on, if tablet or mobile games rank highly, this could explain that these devices have been popular
with females to play games. What, if any, are the most popular types of games to play with families and is this a factor. If female users play particular games with their families, this could be how they got into gaming. It could be seen as a good social activity, and it would be interesting to find out how they have found the influence of video games in a family environment. If ' Designed for women' games have been a factor. This research aims to find out if the ' designed for women' games are played by many people, and if the quality of games targeting this market has improved, and if that had influenced them to play a video game. How females find out about video games. Different types of games could have several levels of public exposure, such as sharing through social media, online games communities, advertisements, word of mouth, and others. This will vary across different type of games, devices, age groups and location. How socially acceptable it is for females to play different types of video games. Different types of games may have different levels of social acceptance across the general public. By seeing what games are considered ' common' with reference to type of game, gender, age group and location, this research will find different levels of social acceptance towards particular types games have made that type of game grow more than other types of games. Combined with the research learned about in the literature review, comparisons can be drawn from this survey to that research, and can possibly reveal new factors that have led to the increase in the last three years.

## Findings and Results

## Introduction

The survey was distributed to the public over three days, distributed as outlined above, and collected a total of 236 responses. There were 182 total completed responses, from both males and females of all age groups. All responsesThere were responses from a total of 19 countries, with the three largest being the US (41\%), Ireland (30\%) and United Kingdom (7\%). The rest of the world makes up the remaining $22 \%$. Figure 4. 1. Location of responsesFor the purpose of this research, these locations have been broken down into regions. ' Other' comprises of South Africa and Mexico. Figure 4. 2. Regional locations of responseslt was interesting to see if regions gave different answers. However, due to the amount or responses, this can only be performed on the UK \& Ireland and United States markets.

## Response rate and total female responders

The total responses totalled 236 responses, with 177 completed responses, giving a $75.85 \%$ completion rate. A total amount of 177 respondents gave their gender, breaking down to a $76 \%$ representation of females vs. $24 \%$ males. Note this does not mean that 76\% of females play video games, but is a representation of how willing the population were to answer a survey about the female games industry. A side note to be made as well, is that of the 59 uncompleted responses, 22 of these were male compared to 8 that had selected female (29 did not select a gender). Figure. 4. 3. Gender of responsesTo examine the data for females only, the survey had 134 completed female responses. This allowed for a large enough sample to be taken to better understand what females thought were important factors to
their video gaming, what kinds of games they play, and what they thought about other factors that were identified through the literature review.

## Important factors within the female games industry

After identifying several factors through the literature review, users were asked what they thought were the most important factors for growth in the games industry. Users were asked to select either 3 or 4 of these options, specifying which they considered were the most important factors to why the female games industry has grown. Both males and females could answer this question. Question in survey: What do you think were the most important Factors on the Growth of Female Video Gaming since 2010? Select 3 or 4 only. Results: Figure 4. 4. Survey Result - All responses - Importance of factors in the growth of female gamingRemoving the male responses, we are left with the following for female responses: Figure 4. 5. Survey Result Female responses - Importance of factors in the growth of female gamingRemoving the male responses, we are left with the above results for female responses. The graphs are very similar, but by removing the 43 male reports, there is a small increase in the reports that think that females playing video games are more common these days. One could extract from this that males still do not see the average female as a person that would play any video games, while a female knows themselves that they play a lot of video games. In Figure 4. 5., the graph shows the amount of times that each option was checked. Surprisingly, the most selected option was an exact tie; " Increased use of the Smartphone/Tablet" and " Increased use of Facebook games" both received 88 responses out of a possible 134 female responses (65\%). Changing this data into a pie chart, we can demonstrate
what the most selected answers were for females: Figure 4. 6. Survey Result - Female responses - Important factors in the growth of female gaming - Pie Chartlt can be determined that the female audience that responded to the survey believed that the Facebook gaming platform had been very important to the increase in female gaming. It can also be determined that the increase in the mobile market has had an impact on Female video gaming.

## Changes in how games are being played

The changes over the last few years are evident from even shallow research into the video games industry. The video games industry embraces new technology with great speed, and often looks to bring a new experience to the consumer throughout the years, as can be seen through the success of the Nintendo Wii and the Kinect. However, the video games industry is so much more than these once off innovations; it is an industry with so many ways to play a video game. There are video games for touch screen devices, games specifically designed for that form of input and it has been hugely successful; the framework of Facebook allow you to have social games with your friends, and allow designers to potentially reach thousands if not millions of players; and video games can also be the graphics heavy ' AAA' title released by big name publishers. The innovations and changes in the last number of years, as well as throughout the history of the video games industry, have helped drive the growth of the industry, helping it become more mainstream and growing from the traditional view of ' males only' towards a view where all people are gamers in some form. To begin with, the survey asked users what particular devices they play games on. This question aimed to get an idea on how females spend their time playing
games in 2013, and could show if there is a good representation of what kind of gaming is being played by the general population. The question did not say that they had to own the device, and the user could select as many devices they wanted. Question: Which of these types of these games do you play? Results: Figure 4. 7. Survey Result - Devices and platforms females play games onThe popularity of Facebook is unquestionable in today's society, with 80 of the 134 female responses (60\%) saying that they play Facebook games. The laptop and PC is clearly still the gaming device of choice for females to play games on, whether it be their own device or someone else's. PC and Laptop games can comprise of such a large amount of video games styles, from Solitaire to Singstar to Starcraft and everything in between. The most popular games after Facebook and PC gaming are console based, represented by the Microsoft Xbox 360 and the Nintendo Wii and Wii U, which are both marketed as family consoles. A surprise to the researcher was high numbers of the Nintendo DS, a handheld device, which 38 of the 134 (28.3\%) responders played games on. This may also be due to the fact that this device is marketed better than other handhelds by Nintendo, and can be seen to release more ' female friendly' or ' gender neutral' games on their devices. Sony's PlayStation 3 comes in at 35 selections, or $26.1 \%$, trailing its rival's Wii and Xbox consoles, which were selected by $35.8 \%$ and $39.6 \%$ of responders. The Apple iPhone and iPad series were both well represented, with 37 and 29 selections each, or $27.6 \%$ and $21.6 \%$ of all responses from females. This is very close to the Android smartphone and tablet markets, which 34 and 22 selections, or $25.4 \%$ and 16. $4 \%$. These are good numbers for the mobile market as a whole and for the Android vs. iOS battle in both smartphone and tablet markets, both of https://assignbuster.com/the-growth-of-the-mobile-markets-media-essay/
which are quite close, even in this survey, and this is suggested to be the same as outlined in the literature review above. Users were also asked which forms of gaming were considered more common today than was three years ago. This helped understand if there have been changes in the types of games females are playing in the last three years, and more importantly, what are considered more ' socially acceptable' for females to play. Both male and female replies were used. Question: How much more/less common do you think these forms of video gaming are for females compared to three years ago? Result: Figure 4. 8. Survey Result - Games common for females to playThe previous graph (Figure 4. 6) shows the how common respondents thought each type of gaming was for females. Facebook gaming (64\%) and smartphone (60\%) gaming lead the way for ' Much more common', with respondents thinking that these types of gaming are much more common forms of gaming than two years ago for females. PC gaming is seen to be about the same as it was three years ago with some increase, which can be seen as well by the graph about where the respondents were asked when they last purchased a laptop. This has been holding steady for the last three years. Meanwhile, the console gaming market us seen to be about the same or somewhat more common in terms of females playing these types of games when compared to three years ago. The exception here is the Wii/Wii U, which has a high amount of ' Much more common' responses. This could be because the Wii/Wii U is seen as a very family friendly console and many of the games for the Wii can be seen as ' gender neutral', something that the Xbox 360 and PS3 have not been able to manage with their portfolio of games.

## Access to new technology

As was noted in the previous section, users believe that the ability to play games through platforms such as Facebook games, and through smartphone and tablet devices, have had an influence on their decision to play video games. This data is supported by research in the literature review, as the mobile market has hugely increased in the last few years (ESA, 2012), with a huge amount of games available on both the Android and iOS platforms, and many games now use Facebook Connect to make social-games through mobile. To better understand how many users played games through smartphones or tablets, the female users taking the survey were asked when they last bought specific games devices, or if they plan to buy ones in the next 6 months. They also had the option to note that they did not want this device. Question: When did you last buy or receive a new smartphone, laptop/PC, tablet, or console on which you play video games? Results: Figure 4. 9. Survey Result - Device purchase historyAs can be seen from these results, the console market has steadily declined for the female population, with $30 \%$ of responses stating they have not purchased a new games console in the last two years, and steadily decreasing over time. This is most likely due to the fact that the current generation of consoles are nearing their final phase, as new consoles from Microsoft and Sony are expected in 2014. An alternative to this could be that females do not find consoles as inviting as other methods of gameplay, which may be due to limited titles available on the consoles, or because gaming on a console is not deemed ‘ common' for females to play. Other factors for this could be the global depression, yet growth or stability is seen in all other gaming devices at the moment. Of the 134 women surveyed, 93 , or $69 \%$, owned or planned to buy https://assignbuster.com/the-growth-of-the-mobile-markets-media-essay/
their own console to play games on. The laptop/PC purchase history has been more stable, though $27 \%$ of all laptops of machines owned by responders were purchased over two years ago. This is most likely due to the global recession, once again because laptops and PCs experienced great growth through the 2000's, and have slowed in a global recession. However, it is important to note, that of the 134 women surveyed, 120 , or $90 \%$, owned their own laptop or PC that they play games on. The smartphone market and the tablet market have been by far the two most improved markets for female responders. Both smartphones and tablets have experienced their growth within the last two years. Smartphones have the biggest growth of all devices that were surveyed, with $30 \%$ of smartphones being purchased within the last six months, and $54 \%$ of these are within the last year. However, both markets also appear to have some non-adopters, with the smartphones not being wanted by $21 \%$ of respondents, while this figure is a huge $39 \%$ for tablets. Of the responses, 88 out of 134 women owned their own smartphone, or $65 \%$. Tablets were owned by just 58 of the 134, or $43 \%$. The expectations for the next year are for consoles to make a good comeback, with the release of the next generation Microsoft games devices (as yet unnamed) and the Sony PlayStation 4. The smartphone market will be the fastest growing platform for gaming in the world, as found in research within the literature review. The smartphone and tablet market is currently the largest platform for games in the world, and is expected to continue to grow in the future. As was noted in 4. 3., smartphones and tablets were revealed to be the joined most-selected factor from responses. To further investigate the status of mobile gaming, the survey asked users how many games they play on both their tablets and smartphones. Question: How https://assignbuster.com/the-growth-of-the-mobile-markets-media-essay/
many games do you have on your Smartphone/Tablet that you play regularly? Results: Figure 4. 10. Survey Result - Female responses - Games on mobile devicesThis pie chart shows that more females own a smartphone than tablet. 122 females replied how many games they have on their devices, but only 57 (47\%) of these respondents own a tablet. Smartphones, on the other hand, heralded 131 responses, with 107 ( $81.6 \%$.) of these owning a smartphone. The smartphone market is more prevalent with female users it seems, with more females owning a smartphone than tablets. This could be because the smartphone market is more accessible than the tablet market, and offers the benefit of being both a phone and a computing device for a lesser cost. However, for the purpose of this research, we shall remove the ' Do Not Own' option, which reveals more about the gaming that is done on both types of devices: Figure 4. 11. Survey Result - Female responses - Games on mobile devices (with ‘ Do Not Own' removed)As can be seen, there is not a lot of difference between the two graphs now that " Do Not Own' has been removed. Responders seem to play 2 to 3 games on the smartphones and tablets regularly, but tied into the next question, which asks about how much time is spent on these games per week, this becomes even more interesting. Question: How often do you play these Smartphone/Tablet games? Think about where you would play them! Results: Figure 4. 12. Survey Result - Female responses - Time spent on games for mobile devicesThe previous graph shows that most female users that took this survey play for about 1 hour a week, with $35 \%$ and $31 \%$ on smartphone and tablet respectively. However, near half ( $46 \%$ ) of all the female respondents play smartphone games for more than 3 hours a week, and a huge $16 \%$ would play more than 11 hours a week on their
smartphones. Tablets are similar, even though they have a smaller audience, but over half (53\%) play tablet games for over 3 hours a week, and 17\% play for more than 11 hours a week. If we constitute that 6 hours or more constitute a ' gamer', then the smartphone and tablet markets are increasingly becoming a platform for females to play on. As more females purchase smartphones and tablets, and are exposed to the 'App Store' markets, this will increase the amount of games played by females, and the amount of hours that they play these games for. Question: How do you find out about Smartphone or Tablet video games? Results: Figure 4. 13. Survey Result - Female responses - How they find out about smartphone/tablet video games. Users were allowed to select as many of these options as they wanted. From this, the use of app stores is the highest method how females find out about video games, though the same amount of people selected ' friends playing the game' as well, which would be a combination of ' word of mouth' and ' social media sites', so duplicates would be present between . This graph really shows the impact of built in app-stores on mobile devices and how this outlet has allowed for thousands of games to be developed for the mobile market. In particular female-targeting games may benefit from the use of app stores more than other types of games, because the particular genre of female targeting games could be more difficult to find than other games.

## Current time spent gaming compared to three years ago.

The results from the survey also help show how females play either the same, more, or less video games than they did to three years ago. This finds out which device or method of gameplay is the most popular amongst
females, and also with males. Question: Compared to three years ago, how much do you play each of these types of games per week? Results: Figure 4.

## 14. Survey Results - Female responses- Time differences by gaming

 platformThe results show some growth in the Facebook video games, with $37 \%$ of players playing more Facebook games than in 2010 , and $20 \%$ of the females surveyed play four hours or more than in they did in 2010, which shows that there has been some take up of Facebook gaming in the last few years. However, there is a note of decrease here as well, as $13 \%$ of responses said they now play 2-4 hours less compared to 2010, and 10\% said they play over four hours less than in 2010. The lure of Facebook gaming as a new platform may have worn off for some respondents, or that they may not have time for Facebook any more. Some of the comments to this question from users stated that " Facebook gaming is not real video gaming", and shouldn't be categorised as such. However, Facebook gaming is definitely a market in which games development companies create specific games for, and Zynga, which started out and continues to make Facebook games, is one of the largest video games companies in the world. The ESA reports also take into account the statistics of Facebook and online social gaming since 2010, so Facebook gaming certainly seems to be a platform that will continue to be classified as ' video gaming'. The survey also asked users how many social networking games they played. Social gaming grew significantly in the last few years and many companies have stated that much of their audience is female based. By identifying some factors for joining these games were over the last three years, it is possible to find if these kinds of games had an impact on the growth of female gaming. Question: How many online social video games, like Facebook https://assignbuster.com/the-growth-of-the-mobile-markets-media-essay/games, have you played over the last three years? Results: Figure 4. 15. Survey result - Female responses - How many social online games have been played in the last three years. As can be seen, there has been a lot of Facebook gaming over the last three years the female population, and it would be interesting to see how this stacks up against the male audience (though numbers were not good enough from this particular survey). The online social network market is still strong and a lot of females play video games through online social networks, with $29 \%$ playing 6 or more hours on the platform. The smartphone market also shows good growth, with $47 \%$ of people playing smartphone games more often than they did in 2010. The tablet market shows a similar trend, though a lot less people that were surveyed owned a tablet than smartphones. This is the fastest growing market today for games devices, so by finding out if there is much gaming being done on these devices, it could be determined if these are popular modes of playing games for users. Question: How many games do you have on your Smartphone/Tablet that you play regularly? Figure 4. 16. Survey Result - Amount of games on devices for mobile marketAs can be seen here, many people only have two or three games on their gaming tablet. This materialises the possibility that tablet or smartphone games are seen as casual enough that users change games they play on tablet and smartphones very quickly. This could leads to challenges for games companies trying to develop for these platforms, as they try to retain consumers of their games. This is reinforced when users were asked how many hours they play on these platforms: Figure 4. 17. Survey Result - Time spent on mobile gaming per week.

## Games played within the family

As was outlined through the literature review, the role of video games in a child's development is very important, and it was interesting to find out if females played particular types of video games with their families. Figure 4. 18. Survey Result -Female responses - How often respondents play games with their familyThe majority of responses said that they did not play any types of games with their families. However, of those that had a slightly higher response rate, consoles are the most played type of game, followed by PC. The popularity of console games seems to be amongst younger responders, so it is possible that younger generations introduce older generations to games on the console. A variety This is seen more with the likes of the Nintendo Wii or the Xbox Kinect, where a physical activity is virtualised to play a game through either of the games consoles, promoting exercise and enjoying the activity amongst family members. Nintendo also benefits from family-friendly titles such as Mario, Wii Sports, and others, and the types of games being played in family situations would tend to be Other forms of gaming are also popular, though less so, with the Facebook games being played amongst a few of the family members. The survey also asked if video gaming was seen to a good family activity. Question: Do you think video games are a good family activity? Result: Figure 4. 19. Survey result Females responses - Do you think video games are a good family activity? Video games are a common place in the household today, and there are so many ways to interact with your family through video games. From the data gathered, I expect video games to play a larger part of family activity in the coming years as the population ages. Video gaming is seen as a positive family activity for so many, yet there are those that may not wish to play https://assignbuster.com/the-growth-of-the-mobile-markets-media-essay/
video games with their family. This could be due to skill levels of family members not being good enough, thus resulting in frustrating.

## Female targeting games

To establish if there have been improvements in the quality of female games, the survey asked users if they have ever played any ' female targeting' games, such as Diner Dash, Top Girl, etc. A larger list of femaletargeting games are attached (See " 7. 3. A list of female-targeting games"). This was interesting to find out, as there has been a larger focus from games companies in recent years to grab the female market as it has increased. To find out if these are popular games, users asked the following: Question: Some video games are specifically designed to target female gamers, such as fashion, baking or cute animals. Have/Do you played any FemaleTargeting Video Games? E. g. Diner Dash, Top Girl, Smurfs Village, etc. Result: Figure 4. 20. Survey Result - Females responses -Female Targeting GamesWhile there are a number of females that have not played these particular types of games, there are also a considerable amount of females that have at least tried them, and 20\% of the females surveyed say they play a lot of these games. This, combined with new access to technology, could generate more female-targeting games to be developed, as it is clear that there is a market for them amongst the gaming population. The quality of these games are also a point of question; as outlined in the literature review, some of these games could be given less effort or time to design properly. To find out if the audience thought this as well, the survey asked the respondents if they thought that the quality of these games is now better or worse than three years ago. Both genders were able to answer this
question. Figure 4. 21. Survey Result - All responses - Quality of Female Targeting GamesOver half of the responses thought that the quality of these games have improved beyond what was available three years ago. Very few thought that the quality of these games has deteriorated, though some reasons stated for this were because they felt the quality of female-targeting games were shallow, that become boring after a couple of weeks/months; this can be because the market is still in its growth stage, and more games of these nature will need better design in order to capture the female market. Furthermore, some other responses felt that ' female-targeting' games were a negative outlook -I don't find them particularly appealing. If anything, I often find them quite the opposite. I don't want to play 'special' female-targeted games, I just want to play games that allow me to take part without being distracted by constant objectification of the female characters, which basically tells female players that the game in question is meant for the 'boys club'. And this was mentioned in two other text responses from users as well. This is where games companies must tread carefully, else they fall into being branded as ' girl games companies' and may lost credit with the audience as a whole. It will be interesting to see how the development of future female-targeting games will embrace new parts of culture, or put female spins on traditional video games to make them more appealing to the female gaming population.

## Conclusions and Future Research

## Summary of conclusions

To conclude this research, an analysis of the findings and results must be made to understand which factors were important in the growth of female
gaming, and which were not. However, it must be noted that this is a small research study into female gaming, so broad generalisations about the female gaming industry could seem careless. However, through study of previous literature as outlined in the literature review, the data gathered from surveys can give guidance to what factors may have led to the growth of female gaming since 2010. The growth of Facebook and social networking has been a huge benefit to the female gaming industry. As found within the survey, Facebook are the most popular kind of games that are played by females; $60 \%$ play them currently, and is deemed the most common form of gaming for females today, closely followed by the smartphone market. Facebook gaming also has a lot of dedicated players, with 64\% of respondents believing that it is a ' much more common' way for females to play games today compared to three years ago. The growth of smartphones and tablets have certainly helped contribute to the growth of female gaming over the last three years. The huge growth experienced on the Android and iOS platforms have helped put gaming into the hands of thousands of females, many of which would not have played games before, or at least not often. This personal device, which has the power to deliver quality gaming, was deemed by $60 \%$ of respondents to be a ' much more common' form of video gaming for females than three years ago. Families playing video games together does not seem to be have been a considerable factor in the growth of females playing, but it does hold a more common-place within the family than it did three years ago. The console market is the most popular within family gaming, followed by other Laptop/PC games, and then followed by Facebook according to the data provided from the survey. This is interesting, as the smartphone and tablet platforms are not popular amongst https://assignbuster.com/the-growth-of-the-mobile-markets-media-essay/
families. Perhaps in the future, as tablets and smartphones become more integrated with our own lives, that these types of games will become more popular within the family setting. Female-targeting video games are mixed in popularity; both with the female gaming audience, who do both enjoy these types games, but also hold a certain animosity towards gender-specific titles. An understanding of the ' female gamer', and the characteristics that female gamers have that are unique to females, needs to be had in order to improve the quality of titles released for the female market. Females prefer role-play games that use creature based characters instead of highly gendered characters, with causal ' sandbox' game features that allow for freedom of exploration of their virtual settings with these characters. Violent games are generally less popular as well with females, as are sports games. These casual games for females are also becoming more popular due to the Facebook platform and through mobile devices. Female-targeting games are being benefitted by the integration of females into the games development process, as the design and development of these games by females for females could help increase the amount of female gamers.

## Limitations of the research

From the start, the research for this topic has changed significantly, eventually being refined into the results that you see above. The factors that were outlined and examined were revealed during the initial exploratory research into the topic as well as part of the literature review; a better understanding of previous literature could help benefit this research with limitations, and get a better understanding of the female games industry. This particular type of research could have benefited from a large amount of
results from around the world, so that cultures to be examined to see if there were differences in the female population in different regions in the world. The project itself was a huge area to cover, thus remaining focused on the main question and maintaining relevant research that was relevant to the main research question was a challenge at times. As always and with all projects, more time would be of benefit to analyse the results from the survey to see if there are more interesting facts to be revealed than just those listed above. However, for the purpose of this research dissertation, the cited literature as well as the analysis performed should give a good indication of the female gaming market today, and the factors that have led to its growth in the last three years.

## Areas of future research

Video games is a very large area of research; just entering ' video games' into Google Scholar brings up over 265, 000 results. For the purpose of future research into why female gaming has increased in the last three years, an examination into the cultural differences between female gamers around the world would be of benefit to better understand if the growth of female gaming is apparent worldwide, compared to just Western society as is outlined by the ESA reports released each year. Case studies of popular female titles could be done to better understand what gameplay mechanics exist that do not exist in gender-neutral games or in male-targeting games, and what drives their popularity amongst females. Interviews could also be conducted with games industry professionals, to gather thoughts on how games companies target female gamers and how developing a femaletargeting game can have its own challenges compared to gender-neutral or
male-targeting games. There is no doubt that female gaming will continue to rise over the next few years, so it will be good to monitor how females are spending their time playing video games; if it is through the Facebook platform on $\mathrm{PC} / l a p t o p s$, if gaming is more common through smartphones or tablets, or if the release of new consoles will attract more female gamers. This is an area of research that is constantly changing and adapting, so future research will be important to best understand the female video gaming market and how they will continue to grow over the next few years.

