İSTANBUL BİLGİ ÜNİVERSİTESİ
SOSYAL BİLİMLER ENSTİTÜSÜ
PAZARLAMA İLETİŞİMİ
YÜKSEK LİSANS PROGRAMI

Influential aspects on purchase frequency of video games among Millennials in Turkey

Türkiye'de yaşayan Millennial kuşağının video oyunları satın alma sıklığını etkileyen faktörler

Efe Shipman

113689016

Associate Prof. Dr. Emine Eser Gegez

İstanbul

2017

ACKNOWLEDGMENTS

Completing my Master's Degree was a long journey which I enjoyed every moment of it. I have been playing video games since I was a child and it was a dream come true to be able to study this passion of mine. I am indebted to several individuals who in one way or another contributed and extended their valuable assistance throughout this enjoyable and wonderful experience.

I would first like to thank my thesis advisor Associate Prof. Dr. Emine Eser Gegez for helping me to complete this wonderful journey. She always replied fastest way possible and helped me through this thesis.

I would also like to extend my appreciation to Prof. Dr. Beril Durmuş of Marmara University who also helped me in this journey. I am gratefully indebted to her for her very valuable comments on this thesis.

I would also want to thank dearly to Associate Prof. Dr. Kaan Varnalı as I could always reach him when I needed an advice. He was always there which was very valuable for me.

Finally, I must express my very deepest gratitude to my parents Dr. Dilistan & David Shipman and to my girlfriend Yasemin Bayır for providing me with great support and constant backing up throughout my study and through the process of researching and writing this thesis. This accomplishment would not have been possible without them. Thank you.

TABLE OF CONTENTS

V. CONCLUSIONS

LIST OF FIGURES

LIST OF TABLES

ABSTRACT

Video Games has become the biggest shareholder in the Entertainment Industry in the last decade. There are lots of different influential factors that affect players to purchase and play these games. Marketers of this industry should put emphasis to these factors when they are marketing the games as there are many companies competing in this field. The purpose of this thesis is to find out the factors that has an impact on the purchase intention and the purchase frequency of video games among Millennials in Turkey. Moreover, the objective of this study is to figure out whether price, self-satisfaction, self-actualization, self-esteem, brand, quality, previous experiences and socializing influence consumers' buying intention and purchase frequency on video games.

For this research, quantitative method with a questionnaire is used. The research was employed an online, self-administered cross-sectional survey method to collect the data and the Millennials who like playing online video games were the participants of this survey. Empirical findings are obtained from 227 questionnaires. A summary for qualitative findings were extracted and analysed through descriptive statistics, factor analysis, multiple linear regression and sample t- test.

Keywords: Video Games, Purchase Frequency, Millennials, Game Culture, Socialization

ÖZET

Video oyunları, son on yılda eğlence sektöründe en büyük pay sahibi durumuna gelmiştir. Oyuncuları bu oyunları almaya ve oynamaya iten pek çok değişik etkileyeci faktörler bulunmaktadır. Bu endüstrinin pazarlamacıları piyasada pek çok şirketin rekabet içinde olduğunu göz önünde bulundurarak bu faktörlere gerekli önemi vermelidirler. Bu tezin amacı, "millennial" diye adlandırılan bu genç kuşağın, bu oyunları satın almalarının nedenlerini ve sıklığını etkileyen faktörleri bulmaktır. Bu araştırma için Türkiye'de ikamet eden "millennial" kuşağı seçilmiştir. Bunun yanısıra, fiyat, tatmin olma, kendini bulma, özgüven, marka, kalite, önceki deneyimler ve sosyal entegrasyonun, bu kuşağın video oyunları satın alma niyetini ve satın alma sıklığını etkileyip etkilemediğini ortaya çıkarmaktır.

Bu araştırmada, anket uygulamalı nicel analiz yöntemi kullanılmıştır. Anket internet üzerinden, kesitsel çalışma araştırma yöntemi ile video oyunu oynamayı seven Millenniallar tarafından cevaplanmış ve analiz edilmiştir. 227 anket üzerinden bulgular edinilmiştir. Nicel analiz sonuçları, betimsel istatistik, faktör analizi, çok değişkenli regresyon ve örneklem t-test ile analiz edilip sonuçlandırıldı.

Anahtar Kelimeler: Video Oyunları, Satın Alma Sıklığı, Millennial, Oyun Kültürü, Sosyal Entegrasyon

I. INTRODUCTION

1.1 INTRODUCTION

The video game industry is growing and enlarging its share in the entertainment industry and allowing everyone with an Internet connection to access its games. Therefore, the game companies have to increase their competencies in order to gain competitive advantage. These game companies have to understand and find out what their users want, from which distribution companies the purchase these games and the reasons which lie beyond so that they can go ahead of their competitors.

As of last year, 2016 the global entertainment and media market generated revenue just over 1.8 trillion dollars, video gaming's revenue, contributed over 101.1 billion dollars, and expectation for 2017 is that this will increase by 7.8% on last year (NPD Group and Newzoo, 2016).

In accordance to studies conducted by the organization (Statista, 2016), the revenue is generated through two groups; the active video gamers and the paying video gamers. To put this into perspective locally, gamers in Turkey, in 2016 over 55% of video gamers had made at least one purchase a month, and within that 55%, over 14% had purchased over three video games in a month.

Yet this still leaves over 42% who acknowledge that they don't make a purchase, this is not considering the 2.5% who preferred not to state how many games they purchased in a month. So how can 42% of Turkey's gamers be defined as active video gamers and yet not make a purchase?

To best demonstrate the difference between an active gamer and paying gamer, this can be simply explained via the common practice of game development, specifically in the mobile gaming sector, where games are released to a wider audience as F2P (Free 2 Play), or as part of the Freemium monetization model; which will be further explained.

In basic terms, F2P means that the players can access a noteworthy part of the video game's content without having to pay. Although there are many different free-to-play games, the most mutual one used by the players is based on the freemium software model, (Torres, 2014). In the case of freemium games, although users are

granted with an admission to a fully functional game, they are asked to pay micro transactions if they want to access an additional content.

Across the globe, video gaming is now the provision of entertainment and relationship building via popular streaming platforms; where over a 100 million broadcasters, viewers and users interact (Foster, 2016). It is highlighted that the online video game market has become very competitive and diversified (Chou and Kimsuwan, 2013). Many large entertainment companies around the globe compete to get a market share as there are no borders for video games and supply new experiences to their consumers/players (White, 2009).

Different companies compete for this unique market by producing products continuously and in this product category differentiation is very important (White, 2009). Games have genres like First Person Shooter Games (FPS), Role Playing Games (RPG's), Mass Multiplayer Online Role Paying Games (MMORPG's), or Platform Level Games (PLG's) and even if two games are in the same category, their systems, modes and brand/country of origin can make a difference for their consumers (White, 2009). The strength of this point is clearer in today's video gaming market considering the diversity of platforms from which the games are launched for the end user / video gamer / video game purchaser.

2013 marked the start of the eighth generation of video gaming (Bossom and Dunning, 2016) and the available platforms to the consumer ranging from Home Video Game Consoles, Home Computer Game Consoles, Handheld Consoles, Micro Consoles (Android and IOS Set-top Boxes), Mobile Gaming (Mobile Phone, Smart Phone and Tablet), Online Gaming (Web / Server Based), Digital Gaming (Streaming / Downloadable Content) (ESA, 2013).

The console market headed by Sony, Microsoft and Nintendo, seeing the power of social networks invested heavily in including social functionality a connectivity to its products (Bossom and Dunning, 2016). The complexity and the homogeneity of the games lead the producers to launch games across different or multiple platforms using different formats, tactics and strategies to attract more consumers to stand out and beat their competitors (Wolf and Perron, 2014).

Whilst there is a lot of diversity here to identify and define, to narrow the focus of the study group, this will be geared towards video gamers identified as 'Millennials', also known as 'Generation Y' (Pollak, 2015).

This study will focus on uncovering the influential aspects on purchase frequency, to determine if there are any dominant aspects that play a part in the decision making process to purchase video games online.

Over the course of extracting data from various statistical sources, from NPD Group, Statista, Entertainment Software Association (ESA) and Newzoo, organizations who present annual worldwide marketing and analysis and specialists in the field of the gaming industry, there were clear identifiers with matching characteristics between the reports which determined the factors for this study which would have influence on purchase frequency.

What will be uncovered as possible influential factors to purchase frequency are: Price, Self-Satisfaction, Actualization, Brand, Experience, Self-Esteem Quality and Socialization (Socializing) (ESA, 2010-2016).

As a lot of the existing literature, analysis and statistical data is heavily dominant towards the American and European markets, the outcome of this study will determine if those factors are concurrent with the Turkish market and Turkish video gamers, if there are differences and whether internal influences such as localization of video games contributes.

1.2 Background

The use of technology has changed over the years and although using the internet, cell phones and computers once were thought of as luxuries, now they are most vital part of one's culture. (Adada and Styron, 2008). In the United States, youngsters use these technologies every day for about six to eight hours. It is also stated that how people live and proceed their life as well as their communication styles has changed through these new technological devices (Anderson and Escobar-Chaves, 2008).

Due to the fast development of digital age and industry, millions of people interact with others in the virtual world through different means, channels and platforms (Statista, 2016). As this industry is developing rapidly, especially younger

generations are considered comfortable with technology because they are growing up in a world which is saturated in technology.

In addition, they are very comfortable with networking on social media websites in order to socialize with others, and an avenue of this is through online games for entertainment and to a degree maintaining a relationship virtually or by an extension of an actual relationship, countless games with different play styles provide this environment (Apperley, 2006; Yee, 2006). Moreover, video gaming is not an individual effort anymore but in some instances a multi-player realm where interaction with other players is often a requirement (Pontes and Griffiths, 2014).

For a company's existence, development and continuation, discovering, understanding and promoting new products is a key issue (Kotler, 2002), the companies are trying to stimulate customers' purchase intention by adding more features, for example creating different types of items for different events to increase sales of the product (Chou and Kimsuwan, 2013). That's why analyzing customers' buying intention and finding out the known and unseen influential factors behind this is significantly important (White, 2009).

1.3 Game Culture

Video games have become more and more a part of our culture. Video games started with console-based gaming in the 1970s and the market reached new heights in the1980s with the development of the console technology eventually turning from chip based cartridges to CD-ROM and DVD-ROM disks, with the capacity to bring visually stunning, more realistic, and a greater variety of gaming genre to life.

As the technology multiplied with other key developers in the 1990s, and then with the advent of online gaming platforms in the 2000s, the gaming culture has considerably increased in size and created new genre of games that are embraced by gaming communities not limited by geography, a key example of this is the Massively-Multiplayer Online Role Playing Games –MMORPG (Lloyd, 2016). With this evolution "video game culture" has been created (Winkler, 2006).

In terms of "video game culture", (Shaw, 2010 and 2016) states that rather than defining game culture, games in culture should be looked at, and delved into the question of culture being shaped by a certain medium. On the other hand, (Winkler,

2006) defined video game culture as a subculture shaped by certain tastes and (Jenkins, 2005) it is a form of art.

1.4 Purchase Frequency

Purchase Frequency is a metric which computes how many times a consumer makes a purchase within a given time and calculates the average number of purchases. This is a very important metric because a marketing strategy is based on this purchase behavior of those consumers. Moreover, although it is very important to identify to the number of purchases, it is also vital to understand and to analyze the time interval between these purchases (McEachern, 2015).

So, what can affect the basic principle of Purchase frequency? Game developers in recent years have focused their attention on 'Monetization', (Rose, 2013) through the analyses of several contributors to Game Monetization its determined that you had to consider which parts of your game are going to make money, whether you were directing consumers the right way, whether you're balancing the monetary level with enough fun to keep the gamer onboard, and that's before the game is even on sale.

Juul (2012) highlights that the monetization of games has emerged due to the complex interaction between the technologies of gaming, the technologies of cooperation – the capacity to interact with other players and the games design itself. The video game industry entertains many diverse monetization models which can influence or alter the purchase frequency, but also other contributing factors.

1.5 Video Game Monetization Models

One of the most important issue when developing and building a game is monetization. Video Game Monetization is the procedure where the people or companies get money for their designing of a game or for their copyrights from the video game product. In different genres of games or platforms, the methods of monetization show visible differences. Moreover, these different methods of monetization can influence the development of a game and it also influences the design decisions.

Liew (2008) identified over 29 monetization models for the gaming industry, whilst more monetization models have emerged in the last ten years; more extensively

in the mobile gaming market, six models in particular are still current in today's video game market.

1.5.1 Retail Purchase

When video games are bought from brick and mortar stores, it is called a retail purchase which is a traditional way of purchase. Consumers buy the video games or game related exterior devices to play the game from these stores and pay the money in the store. Although most of the game related sales were done in these stores, recently, retail purchase went into decline due to online transactions.

1.5.2 In-game Micro-Transactions

Micro-transactions are mainly range from new playable content, cosmetic items, limited time in-game use items, in-game currencies and also unavailable modes that could be purchased. These transactions are inexpensive and enhances game visually and satisfaction in a different way. They are mostly common in mobile games and on some social ones where players play the game for free but buy these items/currencies or content to advance in-game or to look better to other players with small but many payments.

1.5.3 Digital Download

Digital download, actually is very similar to retail purchase. However, it is not completed in a brick and mortar store but from online sites. Digital download allows consumers to purchase a game online and allows them to download the game straight to their computer/console/other storage format they prefer. A third-party service distributes and sells these games through digital download like a brick and mortar store. This third party sells different game varieties from one online site. The games industry is still trying to find out diversified business models and new business models of purchase against the old standards of purchase. However, digital download model is at the moment seems to be the new standard of purchase. According to the report by ESA – Essential Facts, (2015) downloading made up 52% of all game sales in 2014 despite the new search of the industry.

1.5.4 Subscription Models

Some of the games acquire continuous payments if a gamer wants to play the game. Generally, after subscribing to play a game, a gamer can access the game for a month or more and the gamer can play the game until the subscription date ends or the gamer cancels it. These are mostly the games that involve an internet connection or service and also needs capital to run by the publisher or developer. World of Warcraft or Conan is a very visible example of this where gamers paid monthly through a credit card or automatic debit payment. Gamers want to keep their own character alive due to the hard work they've made to achieve its rank, so most of the time once they set up their credit card and they do not put a limited time to stop it.

1.5.5 Indirect Monetization

This type of monetization involves games that are cheaper than other games and sometimes are free-to-play because the money return does not come directly from the game players. Moreover, their production cost has already been subsidized. The money return is expected to come from the advertisement placement inside a game which can be in the form of a banner advertisements, placement of goods or there are some commercial breaks within a play.

1.5.6 Freemium model or Free-to-play (F2P)

F2P video game concept offers players a big part of the main game or all of it. Most common F2P PC or console game practices gives access to 2/3 of the main game and sells the rest of it in exchange of money. Other common practice is based on freemium software model, users play the full game for free but to advance further they need to either pay for in-game currency or spend a lot of time getting the substantial amount to advance.

F2P model first used in massively multiplayer online games (MMO's) targeting casual players who were willing to pay in small amounts for in-game items and content. But now most popular MMO's are using subscription models, there are a few successful ones that are still using F2P model.

Freemium software concept is widely used in Mobile Games, most of them are free to download but if the player wants to reach endgame they feel the urge to get in-game items or currencies with micro transactions.

1.6 Digital Games Market Structure & Definition

Currently online video gaming due to online distribution and online usage business models has been the most popular format for video gamers to interact in the game environment. Digital game market continuously takes share from the traditional retail.

By the end of 2017, it is forecasted in the report of Online Game Market that worldwide revenue from online games which was $19 billion in 2011, will reach up to $35 billion. According to DFC Intelligence which supplies market research reports, interactive services and consulting for the global digital gaming and entertainment industry states that believes that the console systems of the next generation will focus and emphasize more online distribution (Gaudiosi, 2012).

This is also purporting to the fact that there will be a ninth generation of video game technology and as the technology is moving in a high velocity, the industry is asking to find out if the era of console games has reached its boundary. Therefore the question about if the console market can retain its popularity with these technology demands (Allsopp, 2015).

The Digital Games market consists of Online Games, Mobile Games and Download Games: multiplayer online games (MMOG) are called online/browser games and without any installation they can be played directly on the Internet browser. They can be social or casual games. The definition includes subscription-based games or freemium browser games and purchases for additional premium contents or functionalities can be done within the game.

Many browser games are free of charge to play it and make an income within the game through micro payments for extra premium content or functionalities. Furthermore, the revenue of Online Games includes the monthly fees of subscription based games and in-game micro payments of games which need to be installed on the computer. An example of such a game, free to-play, with possible in-game micro

payments, and which needs to be installed, is the so-called multi-player online battle arena (MOBA) “League of Legends”.

“World of Warcraft” is the world's most subscribed and popular online multiplayer game. This game must be purchased first and charges a monthly fee to be played. Therefore, World of Warcraft affects both, the Online Games and the Download Games market (Statista, 2015).

There are gaming-applications of mobile games for smart devices such as smartphones and tablets. Google Play and Apple App Store as the prominent app stores offer paid single purchase app-downloads and some free to download freemium games.

Download Games (full version) refer to online sales of video games for gaming consoles or PCs/laptops via direct download of the installation file and a corresponding product key. Full version video games require an installation on a specific hardware device. Top vendors are Steam, PlayStation Store or Xbox Games Store.

Now whilst this addresses the more common and in more recent years the more popular process of purchasing video games, it still leaves it open to a few monetization models which would draw influence from one or more of the eight factors highlighted as influences of purchase frequency.

Case in point (Adams, 2014) The Fundamentals of Game Design, if a game is played partly or primarily on the Internet or another computer network is accepted as a video game. On current gaming platforms, all online games which are PCs, consoles and mobile devices, and first-person shooters, strategy games and massively multiplayer online role-playing games (MMORPG) are universal.

1.7 The Millennials

The definition, ‘What is a Millennial?’ has been widely debated, and has been in part difficult to clearly identify. In terms of a generation, Pollak,(2015) considers through the Pew Research group, that Generation Y is the group most identified with ‘Millennial’. Having said that, it is stated that only 40 percent of millennials can be identified with the word “millennial”.

Howe and Strauss (2000) coined the term “millennial” goes to Howe and in the mid-90s and wrote “Millennials Rising” in 2000. It was the extension of work they

had done before with the book called “Generations”. “Generations” was the first work to discover that groups share characteristics like beliefs, attitudes, values and behaviors due to the era- time they grew up in.

1.8 Video Game Industry

Rhode, Whaley and Langlotz (2008) describes this big industry as a producer, creator, publisher, distributor and marketer of video gaming software, devices(PC/console) and extensions of these industry. Also according to Wilson and Zackariasson (2012), video game industry has developed from entertainment industry and became a sector on its own, marketing and selling video games and devices.

1.9 Video Game Console

A minicomputer system specialized on playing games through a controller, pads or joysticks, which is connected to a video display such as TV or a Monitor which the user receives sound and video (Okada and Kojo, 1993).

1.10 Personal Computer (PC)

A personal computer is based on a motherboard, graphics card, power supply, processor and a hard disk. Most of the PC games are demanding of good hardware, game computers have more upgraded version of the listed above. There are 2 PC types gamers usually mistakes and associates each other; a gaming performance PC and a benchmark PC.

A gaming PC is built for playing PC games and achieve the optimal gameplay, a benchmark PC is used to test games to the fullest extent.

As such more powerful hardware is in demand to meet the ever-growing software requirements, especially better video cards, memory, and such, in order to satisfy the needs of state of art video games which are called PC games (Bergeron, 2006) There are many different companies, such as MSI, Alienware which manufacture gaming computers that are built already, and companies such as Logitech, Corsair, and Razer that builds gaming mouses, mechanical keyboards and gaming headsets which gamers prefer to enhance their gameplay.

1.11 Game Streaming

A recent platform for gamers to access, purchase and download games are through APIs (Application Programming Interface), predominately web-based, and more commonly known as Game Streaming the means to to transmit a live video stream to a PC or mobile device like an iPad or smart phone. Game Streams helps players buying process or just let them watch the game if they don't have time to play the full game (PC, 2016).

Twitch is the most used site for game streaming. Twitch is founded in 2011, and has become the world's best streaming and video platform for all kinds of gamers, culture and ads. Everyday Twitch is visited by over 10 million people to interact and watch streams of over 2 million streams (Twitch, 2017).

As YouTube moved into the world of video game streaming, they have made this world of game streaming difficult for Twitch because of the huge number of users who have already had knew how to admit videos. So they know what they're doing and these users are familiar with this kind of contact. According to research firm Newzoo, on a regular basis online gaming content is watched by gamers who are over 470 million. It is expected that in 2017 …. Viewers will be over 500 million people and this is nearly 56% of all gamers in America, Europe and Asia (Theringer, 2017).

Likewise, another big gaming frontier Valve allows their users to stream their games to the Steam community, PC game entertainment platform, to interact and have chats in groups through streams and cloud saved in-game footage. There are over 15million gamers play games daily and watches videos through Steam program (Valve, 2016).

1.12 NPD Group

The NPD Group provides market information and consultative services to help clients make better business decisions. That includes developing and offering the right products in the right places at the right prices for the right people to develop their businesses.

NPD has focused on Entertainment Trends in America which includes the varying entertainment categories as well as analysis of the music, film/video, and games industries. NPD prepares reports twice a year which consists of attitudes and

behaviour of multi-part consumer groups. Besides these reports, they give point-of-sale information, deliver and suggest many entertainment options and they compete for consumers' time, attention, and market share. They also make survey for the target consumers.

1.13 Entertainment Software Association (ESA)

The Entertainment Software Association (ESA) is the U.S. association which works particularly serving the business and public affairs of the entertainment world. They help to complete the needs of companies which launch computer and video games for video game consoles, handheld devices, personal computers and the Internet. They work globally. They prepare annual reports about the entertainment software companies. They also provide a global content protection program as well as connections between companies and government relations. They also provide consumer research from real life.

1.14 Statista

Statista is one of the leading statistics companies on the internet. In their team they employ analysts, statisticians, database experts, and editors, Statista provides research quantitative data, statistics and related information about the industry.

Statista specifically provides for the video gaming industry. It supplies the statistical figures that comprises returns of the major players, employment in the sector, and unit sales and market shares of several companies.

Statista provides statistics on software and hardware, console and accessory sales, gaming platforms (i.e. PC, Xbox, smartphone), and numbers of active and registered players for online and social games from companies such as Zynga.

1.15 GIT (Gaming in Turkey)

Gaming in Turkey is a Media Hub for gaming and gaming agency based in Turkey. Gaming in Turkey creates engagement among games and players, offering tactically selected services for all of its partners, which are foundational solutions that most effectively and efficiently communicate brand identity in the experiential

marketing realm. Gaming in Turkey focuses to only the gaming industry but to all platforms including PC, Mobile, Console, MMO, and Free to Play or Pay to Play.

1.16 Newzoo Marketing

In global game industry**,** Newzoo is the leader in providing market intelligence which covers global games, and mobile game markets. It supplies insights of consumers, device and app data, forecasts and the market size.

II. LITERATURE REVIEW

2.1 NPD, ESA, Statista and GIT Data Pool

Based upon feedback from Statista, NPD and the ESA, the average gamer for 2015-2016 had the following characteristics, starting with the descriptive statistics: In 2015 the ESA and Statista reported similar results that the average gamer was 35 years, and that 30% of the video gamers were in the age range of 18-35; so, in the broader sense of what a Millennial is they are the largest representation of gamers in the United States. The gender proportion is 56% Male and 44% Female (ESA, 2015 -2016).

What is interesting is that the average age of the more frequent game purchaser is 37 years, and that this is also on the basis that the purchase of video games has greater value than a movie or music purchase. The social construct and the hardware used are big factors for the next figures, where 62% of gamers are using a PC, and of those 56% are actively playing games with friends or family, and 31% are recognized as social gamers.

As for the largest contributing factors of purchase frequency, the largest factor at 22% was the basis of the premise of the game, followed by 15% the price, followed by 11% that factor in word of mouth, and finally 10% that factor in continuation of a game series or loyalty to game series.

Fast forward to 2016, and very little has changed except for a larger male demographic at 59% compared with last year. The most significant jump for 2016 is that 48% are recognized as social gamers. As for the largest contributing factors of purchase frequency, there are significant changes, however the factor of word of mouth remains at 11%, the basis of the premise of the game dropped to 16%, the sharpest rise of contributing factors was price, up to 21% and graphics quality, up to 12%.

So why the change? According to figures (NPD, 2016), the continuing trend of 'Other Delivery Format' Sales increased for the 5th year in row, and the 'Other Delivery Format' being defined as Subscriptions, Full Digital Games, Digital Game Add-on Content, Mobile Apps and Social Network Gaming. To better place this in context with the Turkish demographic, we can look to the analysis generated by GIT (Gaming in Turkey), who have conducted a market analysis for the last two years in 2015 and 2016 (GIT, 2016).

To begin with (Statista, 2012) indicated that there were 21.8 million active gamers in Turkey, and of those 11.4 million were active paying gamers (GIT, 2015 and 2016). This figure steadily climbed to 22.4 million, and then dramatically climbed to 29.3 million users as of 2016. If we consider that 50% of the active community were purchasing back in 2012, it is likely this figure would have increased significantly in 2016. To test this theory, if we were to look at the overall revenue stream, and more specifically the pc/console revenue stream from 2015 to 2016, we can determine the increase ratio.

In 2015 the PC / Console game revenue was nearly $260 million, fast forward to 2016 and this had increased to $432 million dollars; a 60% increase from last year. Therefore, it is likely to consider that of 29.3 million active gamers, 17.6 million are active purchasers of games. This is further supported by a statistical analysis (Rijksdienst Voor Undernemend, 2015 and 2016), as part of a Netherlands Turkey Trade report, indicated that up to 60% of the active gamers were actively purchasing games. So, what changed? (GIT, 2016) highlighted several factors, as Turkey is potentially one of the most valuable gaming markets for both the EMEA and MENA regions. This can be seen by Gamescom 2016 choosing Turkey as a partner country and Steam using Turkish lira as one of its operating currencies. Another key factor to this increase is the significance of Internet / Gaming Cafes available in Turkey; 20,000+ sites, attracting 7.5 million gamers a month, a viable platform to enhance and stimulate the socialization and experience variables.

Quality as a factor indirectly has been subject to the most significant changes in recent year, again purporting to the findings from the Netherlands Turkey Trade Report, as Turkey was the 17th biggest digital gaming market worldwide, now the 16th biggest as of 2016 and the local market is heavily dependent on imported games.
However, the scale of “Brand” and “Country of Origin” is further improved through the activity of localization and where using the Turkish language and local content have become more important and necessary. Game industry developing in the late 1990’s, Turkey which is still occupied by small scale companies, actually has created several internationally successful projects.

Like other sectors, entertainment industry associates estimate that 95% of the gaming content is produced abroad and many international game development

companies specially US and Korean origins launched local subsidiaries with the objective of marketing, content localization and development. Among the firms were Gamers First, Riot Games, Peak Games and Joy Game, interestingly they are all active in the online games sector of the video game industry. But more importantly the convenience of Turkish language option and local content has become vital for international game developers.

Interestingly (Valve, 2015) the largest number of online purchases in Turkey occurred for Counter Strike: Global Offensive, defined as multiplayer platform and social game, with the option for user customizations to enhance and to personalize the gaming experience. One factor of influence, not originally considered as part of this study was 'Premise', as the category itself cannot be pinned to any one of the eight factors of influence of purchase frequency, we must evaluate 'Premise' in terms of a production value in Video gaming, this is essentially supported as being a key component of the GDD (Game Design Document) (Salmond, 2016).

Therefore, as 'Premise' is considered a component of production of the product, it would be sensible to place it within the category of Quality; one of the eight influential factors of purchase frequency for this study. and the scope of 'AAA game production values' which is missing from the survey, and to a degree the category of Self-Reflection / Actualization. Briefly to emphasize this point, (Stark, 2014) highlighted to understand the importance of premise, was to look at premise in other forms of media other than games:

Copied from the theory of novel writing premise is a term which is the core of any story line and in this case it is what a game is consist of – content in which a common humanly truth is implanted in. A premise is like a plot or a setting in a movie.

In order to reach to wide scope of audience, in this case game players, strong premises are needed. Therefore, universal terms which are shared by others globally should be put in so that whoever is playing can find himself/herself in the game. The gamers may not be able to relate themselves to character which is a mutant with superpowers, but anyone can relate themselves to emotions like loneliness, struggle and isolation. So, what a game player will experience is identified in premises. Therefore, it is essential for a game designer to find a way to create and evoke such

emotions in the players using the tools of structure, character descriptions, setting, and mechanics.

Guillet (2015) described the game as a gaming masterpiece. The Last of Us doesn't offer a convoluted plot full of twists and turns. It's simply a tale about a despondent man reluctantly partnered with a young, vivacious girl in a post-apocalypse setting. But what sets 'The Last of Us' apart from the rest is a story centered on its two leads. It grabs hold of your heart from the opening sequence and leaves you no choice but to invest in the characters in this poignantly realistic world. But even during the darkest times, the game lets its breathtaking settings instill a sense of hope amidst the chaos, juxtaposing the fall of society with the perpetual beauty of nature. The banter between Joel and Ellie only increases in volume and meaning as the game progresses, strengthening a flawless story that leads to one of the best endings in gaming history.

Quality aside, the next significant factors highlighted in 2016, (ESA, 2016), Socialization and Experience would be considered as going hand in hand, the strength of this argument lies within the ESA and NPDs reports highlighting that nearly 50% of frequent gamers play social games, and again over 50% of frequent gamers play a multi-player game at least once a week. How this can be tied to experience is largely based upon the platform used by the gamer. 56% of gamer's gameplay and purchase occurs from a PC according to figures released by the NPD, making it the most popular platform, this would make sense given the upward trend of the billions sent in other delivery formats.

If we were to consider the angle that the popular source for other delivery formats particularly for the PC, you only should look at the increasing trend of digital gaming and streaming through API (Application Program Interface), i.e. Steam, Twitch and Origin, although the latter is dedicated to the catalogue of Electronic Arts games. For each of these platforms or interfaces, the gamer has the chance to access networking with friends, streaming, sharing or joining games or sites like Facebook for community integration.

2.2 Brand and Country of Origin

Looking at the best-selling games of today, the success of the games equally belongs to marketing and promoting a strong brand (Lindgren, 2010), in as much as

designing and developing a quality game to attract the video gamer. A classic example of this can be drawn from Rockstar Studio's Grand Theft Auto series of games (Wesley and Barzcak, 2010). Rockstar Studios and Take-Two Publishers invested an unprecedented $100 million in the development and promotion of (GTA) Grand Theft Auto IV, its argument was to produce and ensure the best quality for the player, this strategy posted record revenues; over $500 million in its opening week. This was then overtaken with the development of (GTA) Grand Theft Auto V, a mere one year after the release of GTA IV, and was developed over a period of four years at a record-breaking cost including marketing at $265 million dollars. Again, earning US $800 million in its first day and US $1 billion in its first three days, the game broke the industry sales records and became the fastest-selling entertainment product in the history of entertainment industry.

According to Keller (1998) a brand is not a product itself but it gives an identity to a product. Kotler (2008) states that a brand is a combination of a symbol (e.g. Nike's tick), a term, a design or a name that identifies and differentiates it from its competitors. A combination of tangible and intangible benefits are embedded in a brand which is created by the corporation and when consumers choose to buy a product actually what they select is a product which mirrors their image, attitude, and personality and they achieve this by purchasing that brand.

In video game terms a classic example of this lies with Nintendo and their leading franchise 'Mario' which over the years, and in part to its tangible success has developed its own brand identity equal to that of the Nintendo Company itself. The strength of Mario as a brand was factually lampooned when a survey in Calgary, Canada; the population could identify more with a photo of Mario than a photo of their own leading politicians and Prime Minister (CNW Group, 2007).

In monetary terms since the brand of Mario was established in 1983 upon the release of Mario Bros. it is still the no.1 best-selling franchise with a combined 528 million units sold and since 1995, more than a million copies of 31 different Mario games have been sold (Sloan, 2011). Dodds, Monroe and Grewal (1991) state that if consumers don't have a past or previous purchase experience they prefer products that are familiar with and their favorite brand which is known as brand familiarity. Brand familiarity increases a consumer's level of self-assurance and satisfaction and

moreover, time spent in the decision-making process will decrease (Park and Lessig, 1981).

Country of origin (COO) effect has been one of the most studied and researched issues in the international business (Peterson and Jolibert, 1995) and due to consumer's sensitivity to COO and the increasing competition in the international market brand marketers has become more interested in this issue (Agrawal and Kamakura, 1999). It is advocated that product evaluation is influenced by COO which is used as an extrinsic cue in consumer decision making (Verlegh and Steenkamp, 1999). Moreover, as the products in this industry are weak and complex substitutes (Nair, 2007) country of origin and brands become even more significant in purchase decision (Eroglu and Machleit, 1988).

2.3 Product Quality

In recent years Product quality, has become something of benefit and hindrance to the video game market, particularly the development of high quality games that are designed, developed, produced and marketed to the same level if not more or like a Hollywood 'Blockbuster Movie'. Even at the development stage, high quality games or AAA games like many blockbuster movies rely heavily on spectacle to wow their audiences (Skolnick, 2014).

AAA game which means and said as "triple A game" was coined in the mid-2010's and is an informal classification for video games with the uppermost growth budgets and levels of promotion like it is used in big supermarket chains. Thorn (2013) identified AAA games as one of two typical production types of video games, the other being 'Independent'. Thorn emphasized that AAA games were also subject to very expensive advertising campaigns. Gaming studios or companies often associated with AAA game production, Electronic Arts, Ubisoft, Blizzard Entertainment, and Bethesda, producing titles such as Mass Effect, Starcraft, World of Warcraft, and the Fifa series. This game development is often connected with higher sale levels and economic risk in order to get high profitability to cover extreme costs of production, marketing and promotion.

Due to the cost of production of such quality games, some game developers started creating games which are engineered to have a long tail in terms of returns from

individual consumers, similarly the way MMO games create revenue which are the subscriptions. Moreover, these comprised of season pass content such as with Destiny, Battlefield, and the Call of Duty series. Some generated revenue came from selling in-game products, such as ‘Overwatch’ or ‘League of Legends’. Titles such as these are sometimes referred to as "AAA+" (Fahey, 2016). The “+” denotes that beyond the original production of the game, additional production values of supplements, such as the ‘expansion packs’, extends not only the longevity of a game, but the potential to produce further profitability from the original shelf-life of a game.

Due to the need for extra profitability some publishers had to look at some different, alternative revenue models, where players continued to contribute to the revenue after they make the preliminary purchase, either by premium models, Downloadable Content (DLC), online passes, and other forms of subscription (Good and Kuchtera, 2012). Now whilst it could be argued why this is applicable to Quality, the chain of causation of such high production values invariable leads to game developers to consider the design implications of monetization when developing a F2P Game (Luban, 2011) and quality games (Polygon, 2012).

2.4 Socializing

Everyone is a member of a society and they should understand and accept the norms, beliefs and be responsive of the social and shared values of that society to be a part of it. On the other hand, interacting, communicating and sharing some activities with other people which can be family member, a friend or a colleague is called socializing (Little, 2014).

The best part of video games are that they are socially interactive and more people have become game players who are gaming online, with friends, family, and most interestingly complete strangers from all over the world from places where they have not even seen before. This way not only distances but also cultural boundaries, age, gender, socioeconomic differences, language barriers and generation gaps are broken (Granic, Lobel, Engels, 2013).

Over the past couple of decades several models of gamer psychology have been anticipated and discussed by scholars, marketers and many others who are in or out of this industry. Stewart (2017) in his paper stated that the Bartle Types is being the

earliest and simplest and the most referenced and most enduring one. The Bartle Types explains human personality in a game playing context. Moreover, In other words, the Bartle typology is the best one to be used to explain gamer psychology because it is explained as a subset of a general human personality.

Based on observing and examining people's behavior when playing together in a multi-user game, it can be seen that there are four different types of playing style interests, which are named as: Killers, Achievers, Explorers, and Socializers (Bartle, 1996):

- Killers: interested in how the game world functions or the play experience of other players.
- Achievers: by beating the rules-based challenges of the game world they collect status tokens.
- Explorers: They are more interested in how the operation of the game world works.
- Socializers: They are more interested in forming relationships with other game players by telling stories within the game world.

The combination of primary gameplay interests, which are referred to as Content and Control led to the four styles. In the game world, or networking more deeply with world-systems, if a player acts simply and directly on objects, it is called Content whereas Control discusses how players want to have an experience in the game world and they can either achieve this through the active behaviors of other players, or with the moderately static world of the game itself.

Interestingly it's this social aspect of identifying player type that plays an important part for game developers when looking at the starting point of monetization and the model to develop for the game. Free-2-Play (F2P) specialist Teut Weidemann, a consultant for Bluebyte and Ubisoft, explained that gamers also tend to switch types. "They might shift from socializers to killers for a short period of time. What is important to remember is that the more roles the game supports, the more traction it will achieve." These finding supported previous hypotheses, that changes in game design and development now make gamers not antisocial but through gameplay and design more social (Lenhart et al., 2008).

When gamers are not playing games, they connect to discussion boards or forums or give suggestions about games to the new gamers on game web sites and this way they can also socialize (Lenhart et al., 2008). In broader terms of technology, (Turkle and Jenkins, 2011) highlights technological devices as having an inner history. That inner history is how they shape our relationships with them and our relationships with each other.

The gamers take the role of a character they play with and in this sense video games play a social and psychological role and to be more exact, the games give a way in which game players experience different roles which are important to them psychologically. The gamers use computers as a tool to complete tasks, but also by using it as a tool computers enter our individual and social lives and in this sense it impacts one's view on the world and perception on oneself (Turkle, 1995).

2.5 Price

In every sector, the value of a product in any given currency is defined as price and it has always been one of the most significant key factors on one's purchase decisions. Although quality comes into mind as the first factor when evaluating a product, price seems to be more important than the quality when especially quality is not known, price becomes a significant factor in preferring a brand (Tellis and Gaeth, 1990).

Consumers have a subjective perception about what they receive from a product and in that sense what they pay to buy that product becomes important because they evaluate the price and the value of a product (Zeithaml, 1988). Moreover, according to Vigneron and Johnson (1999 and 2004) an expensively priced product can suggest quality in the consumer's minds and in the high-quality perception product's price can be the key cue (Groth and McDaniel 1993). On the other hand, when consumer's pay a high price they expect and want more quality (Shipman, 2016).

How the function of price evolves within the video gaming industry is now more dependent on the pricing engines or the term 'dynamic pricing' as highlighted by Jaipuria (2014). The competition in mobile games is getting so fierce and this determines the basic rules or conditions so a discount which is 'dynamic' will get a user to make the purchase.

This has been further highlighted by (Johnson, 2015) that the 'Dynamic Pricing' in as much as attaining a purchase by a video gamer, acts also as a factor for retaining a video game user to specific game, title or series, thus acting a link between pricing and retention. Johnson when reporting findings from an analytics company 'Gondola' previously a video games developer, stated that to stop the gamers from "churning out" which means "leaving the game for another one," like zapping on TV, the company changed the price of virtual items in explicit and strategic ways. To give an example, a player might hit a level that is hard to beat without a certain item that normally costs $3 whereas Gondola utilizes an algorithm which tries to calculate if cutting the price to $2 would keep that individual keep playing and may lead to more than $1 of additional sales since the player keeps on playing.

A more common strategy is the use of DLC (Downloadable Content), explored earlier as one of the more recognizable monetization models. When a gamer downloads an extra game content from the internet which is distributed by the game's official publisher or a third-party content producer, it is called DLC. For the attainment, monetization and for the retention of players in social games DLC is extremely important (Hamari and Jarvinen, 2011).

It is a very feasible model to introduce games as a service in the industry because to acquire and to engage players with good gameplay has become easier. Moreover, offering virtual goods through in-app purchases has made the users the original game experience boost (Xicota, 2014). This can work both ways in a win-win situation; games to have a longer shelf life; a bigger portion of casual player entry and better retention of hard-core gamers spending on DLC.

Continuous stream of DLC creates a greater game longevity and this helps players to get a sense of ongoing support for the game. Moreover, it reduces the dropout rate, retains player interest alive and it can attract players who stopped playing to return and see if the game has a new content.

Referring to a common model, especially in the mobile gaming sector, Free-2-Play, is by definition free, so how does F2P (Free-2-Play) incorporate price on the gamer? Konda, (2012) states that Free-to-Play (F2P) is more of a service than a product, in fact it is described as "games as a service" by some people and involving

of freemium, micro-transactions, and a virtual economy, it can be categorized them as a business model.

Luban (2011) states that there is a difference between F2P where the emphasis is both on the player's entertainment and his monetization and the Traditional Game where the player's entertainment is the only concern. Cheng, the founder of Klei Entertainment, best illustrates this difference: "Don't make people pay for entertainment. Entertain them so that they will pay." In a F2P game the major hurdle to experience a game which is the price is removed. However, if a player isn't satisfied with the game played, how can he/she be convinced to continue playing an F2P game when it's so easy to switch to another?

Generally, when players purchase a game since they have invested money in that game they bind themselves to it and they don't want to abandon it even if they feel disappointing after a few good minutes. They normally leave and drop the game after several hours of playing if they are not satisfied with the game experience. On the other hand, as in other products if the game is free that bond between the game and the player does not exist. Therefore, in order to "hook" the player to a game the first challenge is to provide immediate satisfaction through design. (Luban, 2011).

2.6 Word of Mouth and Experience

Gameplay, storyline, graphics and the multiplayer online mode are some of the important factors for a game player, but for gamers as more conscious consumers, rely on recommendations from friends and game reviews as well as game streaming sites before they purchase a game (Micallef, 2014).

Consumers are turning to online Word of Mouth (e.g. recommendations) for purchase decisions, especially on online forums and WOM has also been accepted as an effective means for spreading of information as people like sharing information and experiences (Jalilvand and Samiei, 2012).

More recent studies in Electronic Word of Mouth have further highlighted this effectiveness, customers are increasingly using social media in their purchase decisions. Customers complain or talk about their positive experiences but which one has more impact on the others. Scholars have proven that greater negative impact is achieved by negative electronic word of mouth that of positive electronic word of

mouth has a positive effect on purchase intention (Nasiruddin, Hashim and Yusof, 2016).

2.7 Self-Satisfaction

Giese and Cote (2000) defined satisfaction as an emotional response towards the important aspects of a product after purchasing or consumption. As satisfaction is a good indicator of customer loyalty (Yi and La, 2004) and purchase behavior and it plays a vital role in marketing (McQuitty, et al., 2000). Pooler (2003) considers this from the point of purchase intention, answering the question of why a person purchases something that is private or for one self. When the purpose is for self-satisfaction and stimulation, purchasing or shopping becomes a part of the personal experience and an element of the human psyche.

Customer satisfaction is based on the core product's perceptions and additional services that a product has and direct or indirect predictors of game satisfaction can be achieved through some game attributes and the glory when one passes to higher level (Brady, et al., 2001). Further studies conducted by (Klimmt, et al. 2009) focused more with the connection of performance, satisfaction and video game enjoyment. However, the impact of loss within the video gameplay as an individual or socially, we may think of video games as being "fun," but (Juul, 2013) argues that this is a mistake after all. In his paper, it is stated that players have rarely have happy or delightful facial expressions. Instead, they we frown, and shout in frustration as they lose, or die, or fail to pass to the next level of the game. Generally, people have an ultimate desire to succeed and feel competent although some claim they don't but it is in human nature to win.

Gamers prefer games that are challenging, therefore there is the likelihood of a paradox that gamers like to fail, but not all the time. Similarly, game developers have a balancing act of their, design games that are not too easy nor too hard. This is something predicated within Self-Esteem as opposed to Self-Satisfaction, discussed further. Koster (2004) shows that games are all essentially "edutainment", because they teach people the expertise that can be needed in safe, low-stake environment in real life situation and everything that game has to offer should be taught before the player stops playing if it is a good game.

If the individual identifies her-/himself as successful positive feelings follow and the feeling of "pride" arises through the self-attribution of the success (Weiner, 1985). Self-esteem is the important key factor that connects satisfaction with the game enjoyment (Seery, et.al., 2004) and pride and joy, and positive performance feedback increases the level of self-esteem (Higgins, 1987). In the video games, players are confronted with a lot of challenges and experience their own competence by resolving the tasks given. Resolving these tasks are the key components to game enjoyment and enjoyment lifts one's state self-esteem (Vorderer, Hartmann, and Klimmt, 2003) which leads to self-satisfaction.

2.8 Self-Esteem

Vorderer (2000) states games' interactivity gives gamers a chance to participate in the activities and entertainment of the games which makes them different than other entertainment forms such as movies and TV shows. Taking a step back for a moment to consider the gamer's retail need (Pooler, 2003) People like to feel good about themselves and their station in life, and nothing says more about oneself than the things one owns. Purchases do not need to be expensive nor extravagant in order to raise awareness of self or to create the feeling of 'self-esteem'. The purchase dynamic can be so varied, and however you look at it, people can achieve feelings of self-esteem through the things they own and purchase.

According to Rosenberg, (1967), self-esteem is defined as an individual's behavior towards him/herself and how positive or negative this behavior can be accepted. To improve and to keep a high self-esteem and its key role in one's motivation and its impact on social communications has always been an important subject for psychologists, writers, scholars and philosophers (Bénabou and Tirole, 2005).

It is stated that when an individual has a high self-confidence it improves his/her motivation and when one is motivated his/her performance builds up his/her self-esteem (Ryan, 1994) and it can be concluded that performance affects self-esteem. As motivation is intangible, when one is motivated, it stimulates and initiates one's behavior (Wlodkowski, 1999). Csikszentmihalyi (1992) identifies concentration and involvement of the activity as two characteristics of the flow experience. Flow theory

also can explain the immersion in some games. Flow is the state of optimal happiness gamers have when actively participating in tasks (Ferdig, 2009).

In online games, players engage in social interaction with other players and this interaction becomes an autotelic activity, in turn there is the affirmative self-awareness leading to self-esteem as a reward. This continuous self-esteem increases the sense of flow in online players (Ferdig, 2009).

Most digital games have the element of competition, in which players compete either against the machine or other players (Williams and Clippinger, 2002). To increase motivation and experience of positive gaming in entertainment games competition is one of the most important and most used mechanism, (Vorderer, Hartmann, and Klimmt, 2003) and a player can achieve self-esteem mostly through competition (Colwell, et al., 1995) by succeeding the tasks in the competitive output of the game.

Game design must have the balance so a gamer can complete a task in several stages and the player will take actions to complete these tasks either by success or failure. If the player is successful there will be "high arousal" (Zillmann, 1996) which will give high motivation and high self-esteem to the player (Seery, et.al.,2004) and if the player fails although he/she most probably be frustrated and angry he/she may be more motivated to try the task again and but may not feel as entertained as before (Grodal, 2000). It can be then concluded that there is an entertainment if the player is successful in a completion environment (Vorderer, 2003).

2.9 Self- Actualization

The Hierarchy of Needs, a motivational model (Maslow, 1970) states the principle that the needs of people are satisfied in a hierarchal manner; physiological needs, like food and shelter, which are at the bottom of the pyramid model, and form the foundational needs for survival. However, as it goes to the higher levels of this diagram it becomes sort of intangible and triggered towards mental satisfaction, starting with safety needs, then belongingness and esteem, and finalized with self-actualization.

Pooler (2003) Emphasizes that purchasing at a level of hierarchy is essential to personal well-being and is important for creating a sense of self-respect, prestige and success. Self-actualization and purchasing is also about purchasing for self-fulfillment, personal growth and personal satisfaction. Purchasing at the self-actualization level also involves the purchase of an experience; a holiday for example, or in gaming terms to be immersed in a new gaming world. Waters (2014) concurred that whilst this does not mean that video games are necessary to satisfy these needs, they can be introduced as an alternative form of satisfaction.

This is important because when someone completes all their needs, the need for self-actualization begins. According to Maslow (1970) people who are self-actualizing are individuals who are highly creative, who live experiences at its peak point, and who are able to resolve the dichotomies in opposite reverses such as those established by "freedom and determinism", "the conscious and the unconscious", as well as "intentionality and a lack of intentionality. This is indeed supported from a gaming point of view (Faltot. 2012) Self Actualization is the point that people strive for, yet few ever achieve, (Wilson, 2016) states that video games are marketed towards the needs of the players and the 'goal' of self- actualization of the gamer.

Indeed, others have explored Maslow's model from a design perspective. But what happens if the physiological, safety, love/belonging, esteem, and self-actualization levels of Maslow's pyramid is adapted to game development cycles? A captivating pattern occurs (Grainer, 2013). Grainer digresses with the pyramid model where basic questions are asked of the game designers / developers. Starting with 'Survive' – Can the player go through the game world and continue surviving? Next 'Progress' – Can the player progress through gear, practice or talent? Next 'Socialize' – Can the player share the game experience with other players? Next 'Achieve' – Does the player feel satisfied by the game and feel respected by others? Finally, 'Created' – Can the player impact the world of the game world? Do their actions make a permanent and lasting impression? And can they tell new stories in the game world?

2.10 Localization

Localization also referred to as GILT (Globalization, Internationalization, Localization and Translation) is the process of adapting a product or content to a

specific locale or market. According to (O'Hagan and Mangiron, 2013) there are two main localization models; the 'out-sourcing' and the 'in-house' model, from this point the games are either released as the original and localized versions simultaneously or released post the original release date.

GILT processes have contributed significantly to the worldwide success of the gaming industry in recent years and have been vital to success of certain game titles. As most games are produced in English and Japanese, the high production cost and values, particularly of the AAA games, previously discussed in Quality, game companies as a standard now tend to publish their games in several languages to maximize their return on investment (Dietz, 2006)

Besides translation, the localization process consists of adjusting graphics to the desired target markets, changing the content to match the tastes and consumption habits of other markets, changing to local necessities, adapting design and layout to appropriately show translated text and using suitable local formats for dates, addresses, and phone numbers. O'Hagan (2013) has described this as the different levels of localization from which the game's 'Assets' are subject to change or conversion.

The need for maximizing return especially with spiraling costs of production, has led to the ever-increasing demand for localization, and this is expected to continue in the future (Chandler and Deming, 2012). Even nearly ten years ago, (Melnick and Kirin, 2008) had identified that many games were being predominantly sold in over 30 countries, and requiring translation in over twelve languages.

The aim of localization, regardless of their language, culture, or location, is to provide a product which will look and feel of having been created precisely for a target market (GALA, 2016). A classic example of this is exemplified through Electronic Arts FIFA football series, sales of the games in Poland had increased five-fold, after the release of the localized versions of the game. Then there is the consideration that Turkey's localization works for other popular games for other regions, take for instance MENA (Middle East and North Africa). MENA mobile gamers are probably familiar with Netmarble, the game developer and publisher of such successful titles as "Traveling Millionaire" ("Paramanya" in Turkey), "Marvel Future Fight" and "Seven Knights".

Through the course of localization in Turkey, Paramanya quickly became the top grossing game in Turkey (and later in Saudi Arabia). Today it exceeds 100 million downloads globally, with 250,000 active daily users (600,000 monthly).

Netmarble's global success is considered and attributed to Localization, "To become the number 1 mobile game company globally, you have to be the number 1 in each region," explained Baris Ozistek, CEO at Netmarble EMEA. Turkey and the MENA may speak different languages, but they present enough cultural similarities to fall under the same marketing strategy (Baghdadi, 2016). From the perspective of mobile gaming, Saudi Arabia is the most attractive MENA market with almost 100% smartphone penetration, followed by the UAE, Kuwait, and Bahrain. By contrast, smartphone penetration in Turkey is only at around 50%, but Netmarble enjoyed a strong start in that market in 2013 when it acquired JOYGAME. The company was the leading developer and publisher of PC games in Turkey, with a strong foothold in the MENA.

2.11 Purchase Intention, Online Purchase Intention & Repeat Purchase Intention

Purchase intention as an outcome of a methodical process, that customers will make purchase decision after collecting information by following their own experience, preference, external environment and evaluating alternatives (Zeithaml, 1988; Dodds, 1991; Schiffman and Kanuk, 2000; Yang, 2009).

Purchase intention measures the likelihood of a consumer to purchase a product and the higher the purchase intention, the higher a consumer's readiness to purchase a definite product (Schiffman and Kanuk, 2000). A simple model often approached by marketers is the Marketing Mix Model (Kotler, 2008). The Marketing mix is the set of controllable tactical marketing tools, the combination of four elements, Product, Price, Promotion and Place, also called 4Ps. The 4Ps marketing mix has the objective of meeting customer's needs and providing values by creating a desired marketing strategy (Kotler, 2008). These aspects can influence purchase intention in changeable degrees.

Online purchasing behavior is specific to internet and consumers' intention to buy online needs determining consumers' intention to be undertaken (Salisbury, Pearson, Pearson, and Miller, 2001). Moreover, according to the reasoned action

theory, consumer behavior may be projected through intentions which can be perceived in terms of actions, objectives and the context of this behaviour Ajzen and Fishbein, (1980) suggests that consumer behavior may be predicted. According to Van der Heijden, Verhagen and Creemers, (2003) consumers should perceive four facets; trust, perceived risk, easiness to use, and perceived usefulness so that their willingness to purchase online is triggered.

Purchase intention is an element of a consumer's cognitive behaviour in the way an individual is planning to buy a certain brand (Huang and Su, 2011). As for the online purchasing intention, a customer needs to have readiness to take on an online transaction (Ling, Chai, and Piew, 2010). Erbil (2016) concluded that in part, localization played an important part towards digital purchase intention of video games, though not significant enough to be a moderating variable.

Per Reichheld and Teal (1996) on repeat purchase intentions, satisfaction has a direct impact and this happens through the familiar and accustomed expectations (Yi and La, 2004). An example of this repeat purchase mechanism is within a game developers model for creating, maintaining and renewing a game franchise or series (EA's Fifa football series and Yukes and 2K's WWE wrestling series). The latter has provided a staple series that rewards previous and existing game players of previous titles with pre-order rewards for the next game of the series.

Czarnecki (2013) 2K's strategy is to issue a list of downloadable content and a season pass that would be available for the new WWE game in the series. The season pass would contain all the downloadable content a consumer needs. However, if the users didn't want every part of (DLC) Downloadable Content, then they can buy a specific content or parts one by one individually.

This is further enhanced with the pre-order mechanism and group discount; i.e. a season pass priced at $19.99 (highlighting a saving around 25% compared to if you purchase all the content groups separately) and would include: The Season Pass Program Exclusive Themed Superstars; i.e. exclusive characters not part of the basic package of the game or its basic content. Usually indicating or confirming a release date of the new title in the series, if the game is pre-ordered before the given date, you would also receive a one-time only bonus character (Czarnecki, 2013). It could be argued that this would be seen more as an elaborate loyalty scheme as opposed to a re-

purchase model, but as it is in the context of a retaining the gamer within a gaming series, the latter view is more accurate.

2.12 Purchase Behavior

Levy (1959) states that consumption goods are bought to consume but they also signify one's need for self-presentation and/but some certain goods or services are bought not only for the physical characteristics they have but also for the message they convey and communicate. In this sense reference groups that provides image associations, branding and advertising become very important when connecting a symbolical meaning and image utility to products (Eszter, 2008).

The ability to sell at high appraisal towards "hardcore gamers" primarily, and to cut down prices over time to sell to wide range of consumers - the "mass market", reveals discrimination of price incentives. But due to the volume of product within the video games industry, and those products being intricate and weak substitutes for each other (Nair, 2007), therefore the decision-making process to purchase a video game becomes very important (Rickwood and White, 2009).

2.13 Millennials the Dominant Group

Throughout the marketing analysis and surveys conducted via, ESA, NPD and Statista, over the years the reports have all highlighted one thing, the group of individuals known as the 'Millennials'. So why are 'Millennials' so important? In the United States, for example, there are about 80 million millennials, being the largest group when compared with other demographic groups in the USA (Speier, 2016).

Millennials haven't reached their top purchase potential as they are still young and have to pay back their loans such as student loans and in this sense they are the long-term purchase potential (Nielsen, 2017). Brands grasp the significance of this group and try to get in front of them early. But marketers should take care in making sure that they aren't alienating other groups of consumers in the process. To better understand this, the surveys conducted in America annually have found that the Millennials to be the most influential and the most significant group of video gamers for the video game industry, a trend which may surpass with the increase of Generation Z video gamers (Statista, NPD, ESA, 2015-2016).

Defining or rather identifying the Millennials as a group has been something of dispute and controversy particularly in America, when well-known publications 'The New York Times' and 'Slate' waded into the debate (Bump 2014). Bump emphasized that to further understand who 'Millennials' were as a generation, would require acknowledgement of the previous generations and the general recognition of the timeframes of the group's year of birth to determine their generation. As a starting point and officially acknowledged by the Census Bureau, the group defined as the Baby Boomers, are individuals born between the years and including 1946 – 1964. This has been further supported by (Diprete, 2014) Columbia University who indicated that defining a generation, such as the 'Baby Boomers', it "had specific characteristics," and happened in a timeframe which was observable.

Following the Baby Boomers, came the Generation X and Masnick (2012) put this generation between the years of 1965 to 1984 and called it the "baby bust", mocking pundits in the media that called the group Generation X. This then places Generation Y or the 'Millennials' as follows within a timeframe of 1985 to 2004, however this is where the timeframe has been convoluted and subject to debate as various sources and media agencies have alternating theories.

Though demographers disagree, the consensus of the age range agreed by Pollak – and the one that Pew Research refers to, is that 'Millennials' are aged between 18 and 34 in 2015. However, there is a minority of demographers and researchers who believe that the start of this generation is in the mid-to-late 1970s. For example, Synchrony Financial defines Millennials as born in 1976 and onwards. Mobilize.org states the years between 1976–1996 and Nielsen Media Research states the years between 1977–1995.

On the other hand, according to most of the researchers and demographers, the start of the generation is in the early 1980s. Many demographers say that the generation end in the mid-1990s. Pew Research Center defines Millennials as being born from 1981 onwards, with no chronological end point set just yet.

Demographers William Strauss and Neil Howe describe Millennials as born 1982–2004. However, Howe described the separating line between Millennials and the

following Generation Z as "uncertain" saying, "you can’t be sure where history will someday draw a cohort dividing line until a generation fully comes of age."

In his 2008 book “The Lucky Few”: Between the Greatest Generation and the Baby Boom, author Elwood Carlson defined this cohort as born between 1983–2001 based on the increase in births after 1983 and finishing with the "political and social challenges" that occurred after the September 11 terrorist acts. In 2016, U.S Pirg described Millennials as those born between 1983 and 2000. On the American television program Survivor, for their 33rd season, subtitled Millennials vs. Gen X, the "Millennial tribe" consisted of individuals born between 1984 and 1997.

Whilst there is no right or wrong answer regards to the age range of the millennial, you only have to look at the data collection from the surveys which has been conducted, indicating the average age of the gamer and frequent game purchaser in 2016 to be between 35 and 38, taking this into account would offer a year of birth of 1978 and 1981. Even when there are other theorists that denote the earliest point for a Millennial, individuals born in 1975, and with the general consensus unable to agree to any one specific timeframe for Generation Y / Millennial, the age parameter for many research models and surveys, often fall within the wider scope of age 18-41.

III. RESEARCH MODEL AND METHODOLOGY OF THE RESEARCH

3.1 RESEARCH MODEL

As per the literature review, it is expected that price, self-satisfaction, actualization, brand, experience, self-esteem, quality and socializing either on their own or combined have influences on purchase frequency. The conceptual terms and model of this research is put together through the analysis of the literature review.

Having identified the contrast of purchase intention, online purchase intention and repeat purchase retention and the monetization more commonly associated with online gaming, we now need to ascertain if the dynamics of Millennial gamers in Turkey are similarly identifiable to those in the US and Europe. As there are strong arguments raised in the literature review, and in part links between the factors of purchase frequency, it is hypothesized that:

H_1: Price of a game influences purchase frequency.

H_2: Self Satisfaction influences purchase frequency.

H_3: Actualization influences purchase frequency.

H_4: Brand of a game influences purchase frequency.

H_5: Experience influences purchase frequency.

H_6: Self-esteem influences purchase frequency

H_7: Quality of a game influences purchase frequency.

H_8: Socializing influences purchase frequency.

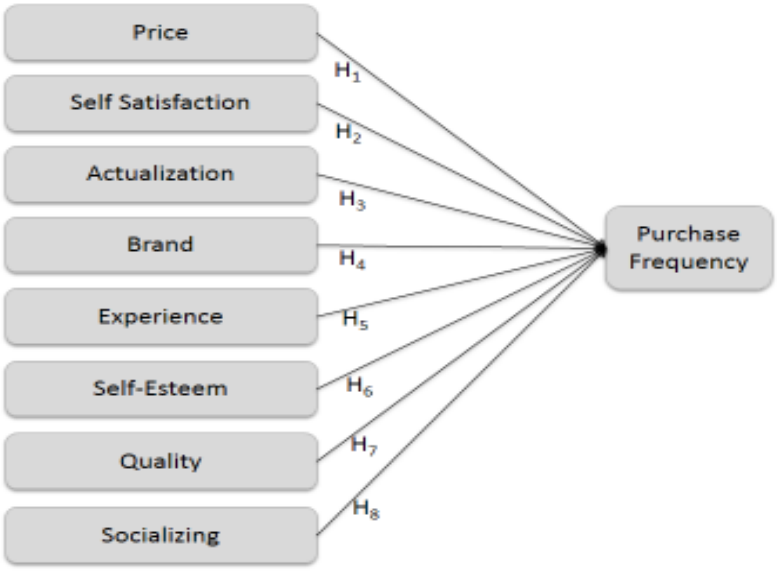

Figure 1. Research Model

3.2 Methodology

The aim of this research is to explore the influencing aspects on the purchase intention and frequency of online video games. The research objective, research instrument and data collection are presented under methodology section.

3.3 Research Objective

The main objective of this research is to measure the influential factors on purchase frequency and intention of online video games among Millennials in Turkey.

3.4 Research Instrument

Online questionnaire was used. Questions are answered on a Likert-type scale, ranging from ‘strongly agree’ to ‘strongly disagree’. The scale is one-dimensional, alternates between positive and negative direction to reduce reply sets.

3.5 Data Collection

This study was employed an online, self-administered cross-sectional survey method to collect the data. Due to low costs, instant access to a wide audience, short response times, and wider geographic reach both academic researchers, scholars and practitioners from many different disciplines have used online data collection techniques (Ilieva, Baron, and Healey, 2002).

Data for the study were collected from participants who play online games. The questionnaire was sent first to my gamers and it was sent later to their game players. It was a snow-ball sampling. Approximately 300 questionnaires were distributed, 283 responses were collected and 227 usable questionnaires were used. The sample consisted of 73 women and 154 men. Age of the sample ranged between 18 to 41+ and respondents' education level were mostly "undergraduate".

IV. ANALYSES AND RESULTS

SPSS 21 (Statistical Package for the Social Sciences) program was used for the analyses of the primary data collected. With demographic data, descriptive statistical analysis was conducted. For comparison of two nations depend on brand personality of global brands Independent sample t tests were conducted.

4.1 Descriptive statistics

After sorting and removing duplicate submissions, a net sample of 227 usable questionnaires remained. As seen from the Table 1.

Table 1. Descriptive statistics for demographic variables

		N	**%**
Age	*18-25*	134	59.0
	26-30	67	29.5
	31-35	12	5.3
	36-40	8	3.5
	41 +	6	2.6
Gender	*Female*	73	32.2
	Male	154	67.8
Income Level	*0- 500 TL*	3	1.3
	500-1000 TL	6	2.6
	1001-1500 TL	10	4.4
	1501-2000 TL	74	32.6
	2001 +	134	59.0
Education Level	*Primary School*	-	-
	High school	-	-
	College	13	5.7
	Associate Degree	7	3.1
	Undergraduate	167	73.6
	Graduate	39	17.2
	PhD	1	0.4

A summary of demographic characteristics of the respondents is provided as follow; most of the participants at 59% were early millennials who are at the age of 18-25 yrs. The contribution of the age group 26-30 was 29.5% and 5.3% of the participants were at the age of 31-35 yrs. Age group of 36-40 yrs. were 3.5% and the age group of 41+ was only 2.6%. Male participants with 67.8 were more than the female participants with 32.2%.

The income level of 134 participants (59%) was the most with 2001+ TL and the income level of 74 participants (32.6%) was the second. 10 (4.4%) participants had the income level of 1001-1500 TL, 6 (2.6%) participants had the income level of 500-1000 TL and 3 (1.3%) participants had the income level of 500-1000 TL.

Among all the participants, most of the participants (167) with 73.6% were undergraduates and second highest group (39) with 17.2% were graduates. College graduate participants were 13 with 5.7% and the associate degree participants were 7 people with 3.1%. There was only one participant with PhD which is 0.4%. There were no high and primary school graduates as participants.

How often do you play games?

Table 2. The frequency of playing games

	N	%
Once a week	19	8.4
More than once a week	196	86.3
Once a month	4	1.8
More than once a month	4	1.8
Once a year	2	0.9
More than once a year	2	0.9

How often do you purchase games?

Table 3. The frequency of purchasing games

	N	%
Once a week	3	1.3
More than once a week	5	2.2
Once a month	102	44.9
More than once a month	48	21.1
Once a year	18	7.9
More than once a year	51	22.5

4.2 Validity Tests for Scales

The purpose of the factor analysis is to find out the sets of variables that are highly interrelated, known as factors (Hair et al. 2006). Factor analysis is generally carried out to examine the relationship between the judgmentally developed content categories and the empirically derived constructs' (Durmuş et al., 2011) or to figure out whether with different sets of data, the same constructs derived in the previous studies can be derived too. Therefore, in this study, factor analysis is done to find out how many different dimensions the respondents perceive in the constructs and whether they perceive them the same as in the original data with which the scale was developed.

But also, to see whether the derived constructs in this study confirms the existence of theoretically developed content categories. At the beginning of each factor test, the measure of sampling adequacy is calculated to see if the data is appropriate to apply the factor analysis (Durmuş et al., 2011). Statistics that can represent this adequacy are Kaiser- Meyer-Olkin (KMO) and Bartlett's test of sphericity. KMO shows that the data used in the analysis is a homogenous collection of variables and that there are correlations between variables. The lower limit for KMO that is generally agreed upon is 0.50 (Hair et al., 2006, p.115). Bartlett's test on the other hand gives the statistical significance of the inter-correlation between variable (Hair et al., 2006),

and the upper limit for the value of p in Social Sciences that is generally agreed upon is 0.05. KMO and Bartlett's tests in this study are found to be satisfactory for all six constructs in the study and tables for each factor analysis for the studied concepts are exhibited in the following sections.

4.2.1 Factor Analysis for Price

Before testing the hypothesis, to identify and test the underlying structure of the scale, exploratory factor analyses (EFA) with Principle Component Factoring and Varimax Rotations was conducted to 6 items. Kaiser-Meyer-Olkin measure of sampling adequacy and Bartlett test of sphericity tests were performed to test the appropriateness of data for conducting factor analysis (Sharma, 1996).

Table 4. Factor Analysis for Price

Factor Name	Factor Items	Factor Loading	Reliability
Price	The most expensive game is the best game	0.883	0.780
	I would like to buy a game without considering the price	0.832	
	If I can't find the game I want I buy another game	0.817	

Result of the tests (KMO=0.689, χ^2Bartlett test (3) =216.355, p=0.000) were satisfactory. The diagonals of the anti-image correlation matrix were all over 0.50, supporting the inclusion of each item in the factor analysis. Factors with eigenvalues over one were retained and items with factor loadings below 0.50 and items with high cross loadings were excluded (Hair et. al., 1998). Because of the analysis, a unidimensional was found (See Table 4).

4.2.2. Factor Analysis for Self Satisfaction

To identify and test the underlying structure of Self Satisfaction scale, exploratory factor analyses (EFA) with Principle Component Factoring and Varimax Rotations was conducted to 7 items. Kaiser-Meyer-Olkin measure of sampling adequacy and Bartlett test of sphericity tests were performed to test the appropriateness of data for conducting factor analysis (Sharma, 1996).

Table 5. Factor Analysis for Self Satisfaction

Factor Name	Factor Items	Factor Loading	Reliability
Self-Satisfaction	When I purchase a game, I feel happy	0.925	0.912
	Purchasing a game reduces my stress	0.911	
	It gives me pleasure to purchase a game	0.891	
	When I'm unhappy purchasing a game makes me feel better	0.884	
	To award myself I purchase a game regardless of the price	0.803	
	Even if I don't need it I purchase a game that I like	0.709	
	I purchase I game to make myself happy not the others	0.504	

Result of the tests (KMO=0.852, χ^2Bartlett test (21) =1324.714, p=0.000) were satisfactory. The diagonals of the anti-image correlation matrix were all over 0.50, supporting the inclusion of each item in the factor analysis. Factors with eigenvalues over one were retained and items with factor loadings below 0.50 and items with high cross loadings were excluded (Hair et. al., 1998). As a result of the analysis a unidimensional was found (See Table 5).

4.2.3. Factor Analysis of Actualization

To identify and test the underlying structure of Actualization scale, exploratory factor analyses (EFA) with Principle Component Factoring and Varimax Rotations was conducted to 7 items. Kaiser-Meyer-Olkin measure of sampling adequacy and Bartlett test of sphericity tests were performed to test the appropriateness of data for conducting factor analysis (Sharma, 1996).

Table 6. Factor Analysis for Self- Actualization

Factor Name	Factor Items	Factor Loading	Reliability
Actualization	The game I buy should reflect me	0.845	0,830
	I buy games related with my character	0.836	
	It is important the game I buy gives me pleasure, it is not important that others play it or not.	0.769	
	When I'm buying games my opinion is important not others'	0.766	

Result of the tests (KMO=0.728, χ^2Bartlett test (6) =348.801, p=0.000) were satisfactory. The diagonals of the anti-image correlation matrix were all over 0.50, supporting the inclusion of each item in the factor analysis. Factors with eigenvalues over one were retained and items with factor loadings below 0.50 and items with high cross loadings were excluded (Hair et. al., 1998). As a result of the analysis a unidimensional was found (See Table 6).

4.2.4. Factor Analysis for Brand

To identify and test the underlying structure of Brand scale, exploratory factor analyses (EFA) with Principle Component Factoring and Varimax Rotations was conducted to 4 items. Kaiser-Meyer-Olkin measure of sampling adequacy and Bartlett test of sphericity tests were performed to test the appropriateness of data for conducting factor analysis (Sharma, 1996).

Table 7. Factor Analysis for Brand

Factor Name	Factor Items	Factor Loading	Reliability
Brand	It is important that the game I'll buy is well known.	0.910	0,870
	COO and brand is important when I purchase a game	0.907	
	I avoid buying unknown games	0.831	
	Upon purchasing the producer of the game is important	0.770	

Result of the tests (KMO=0.797, χ^2Bartlett test (6) =519.961, p=0.000) were satisfactory. The diagonals of the anti-image correlation matrix were all over 0.50, supporting the inclusion of each item in the factor analysis. Factors with eigenvalues over one were retained and items with factor loadings below 0.50 and items with high cross loadings were excluded (Hair et. al., 1998). As a result of the analysis a unidimensional was found (See Table 7).

4.2.5. Factor Analysis of Experience

To identify and test the underlying structure of Experience scale, exploratory factor analyses (EFA) with Principle Component Factoring and Varimax Rotations was conducted to 3 items. Kaiser-Meyer-Olkin measure of sampling adequacy and Bartlett test of sphericity tests were performed to test the appropriateness of data for conducting factor analysis (Sharma, 1996).

Table 8. Factor Analysis for Experience

Factor Name	Factor Items	Factor Loading	Reliability
Experience	I give suggestions to my friends regarding the games	0.853	0.724
	I understand what kind of a game it is from the information on the game	0.800	
	I consult my friends regarding the games	0.769	

Result of the tests (KMO=0.663, χ^2Bartlett test (3) =148.887, p=0.000) were satisfactory. The diagonals of the anti-image correlation matrix were all over 0.50, supporting the inclusion of each item in the factor analysis. Factors with eigenvalues over one were retained and items with factor loadings below 0.50 and items with high cross loadings were excluded (Hair et. al., 1998). As a result of the analysis a unidimensional was found (See Table 8).

4.2.6 Factor Analysis for Self-esteem

To identify and test the underlying structure of Image scale, exploratory factor analyses (EFA) with Principle Component Factoring and Varimax Rotations was conducted to 9 items. Kaiser-Meyer-Olkin measure of sampling adequacy and Bartlett test of sphericity tests were performed to test the appropriateness of data for conducting factor analysis (Sharma, 1996).

Table 9. Factor Analysis for Image (Self-Esteem)

Factor Name	Factor Items	Factor Loading	Reliability
Self-Esteem	I don't buy games which are not fashionable	0.908	0,740
	The social status of the game is not important	0.904	
	I buy the game if it is fashionable	0.780	
	My knowledge and my game culture leaves a positive impact on my circle	-0.686	

Result of the tests (KMO=0.736, χ^2Bartlett test (6) =468.971, p=0.000) were satisfactory. The diagonals of the anti-image correlation matrix were all over 0.50, supporting the inclusion of each item in the factor analysis. Factors with eigenvalues over one were retained and items with factor loadings below 0.50 and items with high cross loadings were excluded (Hair et. al., 1998). As a result of the analysis a unidimensional was found (See Table 9).

4.2.7. Factor Analysis for Quality

To identify and test the underlying structure of Quality scale, exploratory factor analyses (EFA) with Principle Component Factoring and Varimax Rotations was conducted to 9 items. Kaiser-Meyer-Olkin measure of sampling adequacy and Bartlett test of sphericity tests were performed to test the appropriateness of data for conducting factor analysis (Sharma, 1996).

Table 10. Factor Analysis for Quality

Factor Name	Factor Items	Factor Loading	Reliability
Quality	The type of the game I purchase is important	0.811	0.651
	The content and the modes of the game is important	0.790	
	Pre-purchase I assess and read about the game	0.705	
	The production year of the game is important	0.581	

Result of the tests (KMO=0.720, χ^2Bartlett test (6) =161.690, p=0.000) were satisfactory. The diagonals of the anti-image correlation matrix were all over 0.50, supporting the inclusion of each item in the factor analysis. Factors with eigenvalues over one were retained and items with factor loadings below 0.50 and items with high cross loadings were excluded (Hair et. al., 1998). As a result of the analysis a unidimensional was found (See Table 10).

4.2.8. Factor Analysis for Socializing

To identify and test the underlying structure of Socialization scale, exploratory factor analyses (EFA) with Principle Component Factoring and Varimax Rotations was conducted to 6 items. Kaiser-Meyer-Olkin measure of sampling adequacy and Bartlett test of sphericity tests were performed to test the appropriateness of data for conducting factor analysis (Sharma, 1996).

Table 11. Factor Analysis for Socializing

Factor Name	Factor Items	Factor Loading	Reliability
Socializing	Playing games give meaning to life	0.855	0.893
	Before I purchase a game, I find out which games will impress others	0.812	
	My friends and I prefer the same games	0.808	
	I prefer to play the games with my friends	0.803	
	I follow others' preferences on games to find out about the popular games	0.799	
	Playing games helps people to evolve culturally	0.796	

Result of the tests (KMO=0.844, χ^2Bartlett test (15) =830.466, p=0.000) were satisfactory. The diagonals of the anti-image correlation matrix were all over 0.50, supporting the inclusion of each item in the factor analysis. Factors with eigenvalues over one were retained and items with factor loadings below 0.50 and items with high cross loadings were excluded (Hair et. al., 1998). As a result of the analysis a unidimensional was found (See Table 11). In addition, the factor analyses items decreasing reliability were eliminated and factors of scales were found.

4.3 Multiple Linear Regression

Based on literature survey and previous discussions we expect antecedent constructs (price level of game, socializing, quality, self-esteem, brand, actualization, experience and self-satisfaction) to influence purchase frequency. To test the research model, we conducted multiple regression analysis.

When we conducted multiple regression analyses for purchase frequency (See Figure 2), we obtained three significant results that supported our assumption (See Table 12).

Table 12. Multiple Regression Analysis result of Research Model

Independent variables:	**Beta**	**t-value**	**p-value**
Socialization	-0.544	-4.640	0.000
Quality	0.239	2.695	0.008
Experience	0.259	2.122	0.035

Socializing, Quality and Experience explained purchase frequency at 99% confidence interval (F=2.990 p=0.00; R=0.308; R2=0.101) β coefficient for Socializing, Quality and Experience were β=-0.544, β=0.239 and β=0.259 respectively.

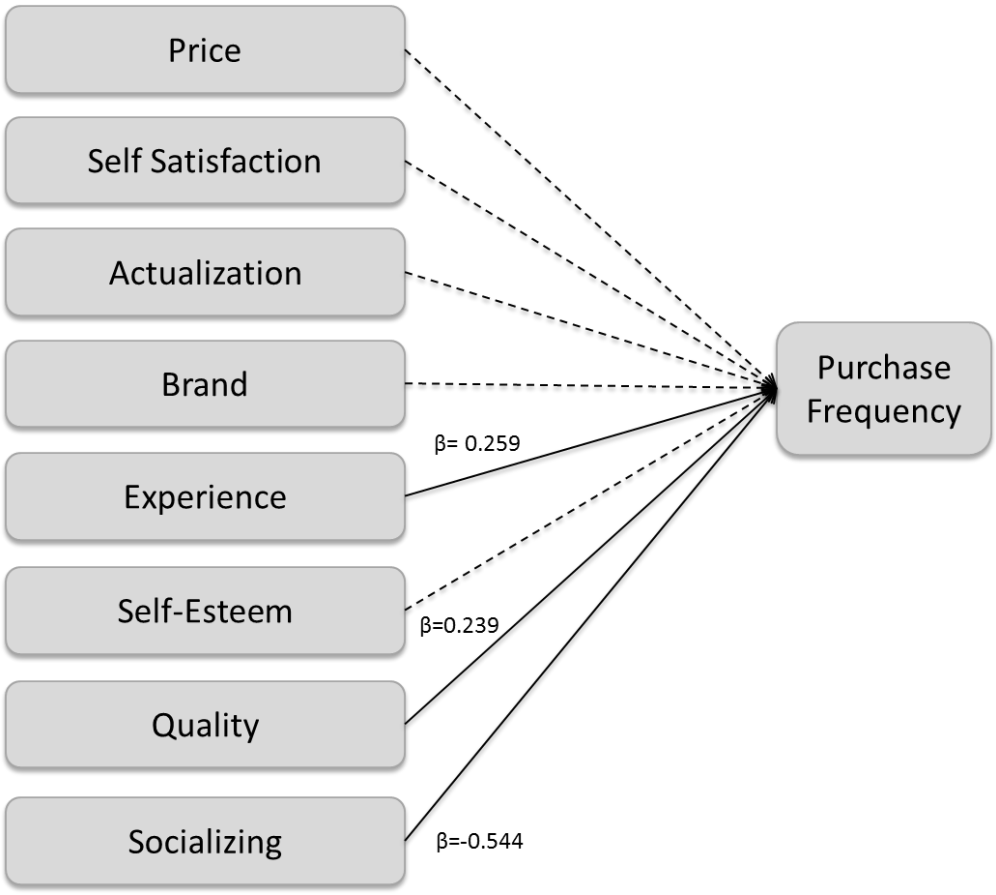

Figure 2. Multiple Regression Analysis Result

As a result, H_5, H_7 and H_8 were supported

4.4 Independent Sample t test for Gender Variable

Although not the main aim of this research, it was still important is to explore a difference between the antecedents of purchase frequency factors between gender. Not forgetting that gender is inherent in the survey analysis from Statista, NPD and ESA, with what can be argued as consistent results year on year between Male and Female gamers since 2010. We apply Independent t test for Gender to find out the difference. A t-test is any statistical hypothesis test in which the test statistic follows a Student's t-distribution under the null hypothesis. It can be used to determine if two sets of data are significantly different from each other.

A t-test is most commonly applied when the test statistic would follow a normal distribution if the value of a scaling term in the test statistic were known. When the scaling term is unknown and is replaced by an estimate based on the data, the test statistics (under certain conditions) follow a Student's t distribution.

Significant results of the t-tests were given in Table 13.

Table 13. Independent sample t tests for factors

	Gender	Mean	Std. Dev.	t value	Df	p value
Price	Male	3.34	1.08	-2.539	225	0.012
	Female	3.72	0.95			
Self-Satisfaction	Male	4.24	0.93	-2.037	225	0.043
	Female	4.50	0.83			
Actualization	Male	4.51	0.75	-3.320	225	0.001
	Female	4.81	0.32			
Brand	Male	3.63	1.08	-3.421	225	0.001
	Female	4.11	0.74			
Quality	Male	4.36	0.58	-1.872	225	0.062
	Female	4.50	0.45			
Self-Esteem	Male	3.32	0.74	-1.973	225	0.050
	Female	3.52	0.60			
Experience	Male	4.30	0.78	-1.691	225	0.092
	Female	4.47	0.66			
Socializing	Male	4.23	0.87	-1.864	225	0.063
	Female	4.00	0.86			

As a result of the independent sample t test no significant differences were found between the factors of ‘Quality’, ‘Self-Esteem’, ‘Experience’ and ‘Socializing’. However, there is a significant difference in the factors of ‘Price’, ‘Self-Satisfaction’, ‘Actualization’, and ‘Brand’.

There is a difference between Female and Male consumers depend on the Price of games. It can be commented that Male consumers (μ_{Male}=3.34) are less price sensitive than Female consumers (μ_{Female}=3.72).

There is a difference between Female and Male consumers depend on the Self-Satisfaction of games. It can be commented that Male consumers (μ_{Male}=4.24) are less self-satisfied than Female consumers (μ_{Female}=4.50).

There is a difference between Female and Male consumers depend on the Actualization. It can be commented that Male consumers ($\mu_{Male=}$4.51) are less Actualization than Female consumers (μ_{Female}=4.81).

There is a difference between Female and Male consumers depend on the Brand. It can be commented that Male consumers ($\mu_{Male=}$3.63) are less Brand than Female consumers (μ_{Female}=4.11).

Table 14. Independent sample t tests for "how often do you purchase games"

	Gender	Mean	Std. Dev.	t value	Df	p value
how often do you purchase games	Male	2.19	0.91	-2.700	225	0.007
	Female	1.95	0.42			

There is a difference between Female and Male consumers depend on how often you purchase games. It can be commented that Male consumers ($\mu_{Male=}$2.19) purchase more than Female consumers (μ_{Female}=1.95).

Table 15. Independent sample t tests for “how often do you play games”

	Gender	Mean	Std. Dev.	t value	Df	p value
“how often do you play games”	Male	4.26	1.36	-2.160	225	0.032
	Female	3.87	1.22			

There is a difference between Female and Male consumers depend on how often you play games. It can be commented that Male consumers (μ_{Male}=4.26) play games more often than Female consumers (μ_{Female}=3.87).

V. CONCLUSIONS

5.1 Limitations of Study

The first stems from the diversity of gaming platforms; or in other words the device used to purchase and play the purchased game, which for simplicity of the questionnaire, was left wide open for the participant to address when asked the questions: How often do you play games? & How often do you purchase games?

Considering the different monetization models of video games, and particularly online games, it is likely to have had an impact on the result and the scale of the results where game purchases were more significant; once a month and more than once a month.

Even though the research model was narrow from the point of view of online gaming it's still left the questionnaire participant open to interpretation. For instance, whether the online purchase of an expansion pack or a DLC would be considered towards the count of a video game purchase for the month?

5.2 The F2P (Free 2 Play), P2P (Pay 2 Play), Micro Transactions and Pay to Win Debate

The classification of Free 2 Play, within its own right as a gaming purchase is open to debate. In 2014 the prominence of the FTP (Free 2 Play) or Freemium video game monetization model, which is now the forefront of mobile gaming, has been largely debated and discussed particularly amongst video game developers and its overall impact on the video gamer.

The consideration here is anticipating whether the questionnaire participant or indeed video gamers in general can recognize the access, download or installation of a F2P game as by definition a video game purchase.

And it is from a purchase point of view, if it is not recognized as a purchase even as a monetization model, the limitation here would be whether or not this impacts on the result of what is officially recognized as a purchase frequency, i.e. 'How frequently do you buy games'.

Let's not forget from an online perspective a free to play game is made available in an online store for example, and upon selection, even though the monetary transaction is nil, the main content of the game is made available to download onto to the selected device or platform.

Distortion of the game seems to be the main complaint related to the free-to-play model. The value of the game play by core gamers is reduced when games with loose purse strings or more available funds can also provide just as much advancement with a slight effort courtesy of micro transactions, which again could be either counted or discounted as part of purchase frequency.

Although for the game creators it seems easy if a lot of purchase prompts are given to the users until they pay up for their invincibility, it is not that simple because freemium games only works if there is a large player base. If unfair game trick mechanics and unbearable purchase prompts are used as strategy tactics for return then the users will be isolated and most probably leave and the monetization model will fail.

5.3 Conclusions of Study

Factor analysis shows that the derived constructs in this study approves the presence of theoretically developed content categories which are self-satisfaction, socialization, brand, actualization, price, self-esteem, experience and quality respectively. Self-satisfaction and socialization has almost the same direct effect on purchase intentions and purchase frequency (Table 5 and 11). This is a typical Millennial character as explained before.

Quality, whilst is a slightly less reliable result compared with other effects; the two strongest factored items, 'The type of the game I Purchase is important' and 'The content and the modes of the game is important', would indicate that quality of a game, as far as style and content is of greater importance than production value. This has been considered as a possible limitation of this study, as it has been largely assumed the participant's awareness of a quality games in terms of AAA production values. For future research, it would be important to relate to the gamers awareness and knowledge of 'AAA games' and if they purchase games from the perspective that

the game provides additional content and modes over time that extend the shelf-life and the playing longevity of the game.

Surprisingly, apart from the factors for Actualization and Self-Esteem, all the other factors came out strongly as an effect of purchase frequency. Based upon the factor analyses it is reasonable to consider that 'word of mouth' both directly and indirectly is a strong contributing factor towards purchase frequency and could be considered the link between more than one or several of the research model effects for purchase frequency.

It is reasonable to consider that brand to the extent of localization, socialization and experience also had a concurrent effect on purchase intention, scalable in terms of 'Word of Mouth'. The limitation here is the accuracy of localization as a dominant factor or sub factor to the other influences. In hindsight, the questionnaire could have been open to obtaining quantifiable data by way of listing localized games popular in the Turkish Market, or from the leading online game developers who are based here, and listing their top five titles. However, what is interesting here is that the results in general, fall within the same parameters as those conducted by the three largest marketing groups that regularly assess and report on the behavior of video gamers and the video gaming industry.

If we refer to Table 1. Age; the mean average age based on the combined figures from 18-25, 26-30 and 31-35. There is a higher proportion of 18-25 year olds, and when quantifying the 31-35-year-old category, at 5.3% indicates that the average age of the video gamer in Turkey is more likely to be in their mid-20s. Now whilst it could be debated that the data pool from the questionnaire would be biased towards the age groups, the 11% of the participants over the age of 30, is significant to raise the mean average of the 18-35 category highlighted in the ESA and Statista marketing surveys.

There is a significant disproportion in gender, the gamers are mostly male and the difference is greater than in the American result from 2015 to 2016 by 3%. The gender proportion difference is much greater in Turkey almost a 3:1 split of male gamers to female gamers.

According to the factor analysis of price (Table 4), responses to questions 'The most expensive game is the best game', 'I would like to buy a game without considering price' and 'If I can't find the game I want I buy another game' would indicate that price is not a significant factor on its own to influence buyer behavior or purchase frequency.

Next, Word of Mouth, the factors that could relate to 'Word of Mouth', are spread across different effects on purchase frequency, both directly and indirectly as shown below has a direct impact on the purchase behavior and purchase frequency.

Experience / Recommendation

I consult my friends for game advice

I give advice to my friends about games

Self-Esteem

My knowledge and culture about a game gives a positive image to those around me

Socialization

I will follow-up recent games by tracking purchases of others

Before buying games, I will find out which games impress people the most

Self-Reflection / Actualization

When I'm buying games my opinion is important not others

Looking further at the antecedent constructs, the results as highlighted in Table 2 and Table 3, the gamers play more than once a week and purchase games once a month. The three significant results as highlighted in Table 12, socialization, quality, and experience are very much a true reflection of trend and the existing habits of gamers and game purchasers. As the research model and purpose of study had been narrowed to online gaming, and with the acknowledgement that in Turkey the volume of Internet / Gaming Cafes available particularly in the major cities; 20,000+ sites, attracting 7.5 million gamers a month, a viable platform to enhance and stimulate the socialization and experience variables. It is reasonable to conclude that this has a strong impact on this result.

As to quality, the participants consistently and greatly consider the longevity of game based on the answers provided. It is reasonable to consider that the gaming developers have indeed reached out to their consumers when demonstrating the importance of monetization in as much as the design and high production values of the game is concerned. It is also reasonable to assume that the three strongest factors of quality demonstrated by the participants are inherent of AAA game production values, and AAA+ values. Game type, Game Content and Modes; expandable when considering DLC, expansion packs and micro-transactions, Pre-Purchase information, which has become a significant part of AAA games strategy to market promote and inform the consumer of the up and coming game. It is also reasonable to consider that game content as a strong factor here, making a connection with quality.

5.4 Future Research & Study

Unless there are any significant game development trends which may advance with the next generation of devices, consoles, or PC technology, it is fair to assume that the existing influences will still have an impact on the next generation of users, i.e. Generation Z within the next 10 years unless there is any further development on the ninth generation of video gaming from the usual suspects - Nintendo, Sony Corporation and Microsoft. Further research and analysis would be recommended in the areas that have been highlighted as limitations in this study.

Firstly, proceeding with an in-depth look at "AAA game" development, production and release, and how through production and quality, the financial consideration of generating a profit from significant costs, the tangible links with existing or new monetization models for video gaming to extend the shelf life of the game to bring profitability, but also how that might impact the purchase frequency and influence the gamer's purchase decision.

Although narrowing the field of study to such parameters, for the gamers locally to Turkey, and focusing on a specific group the "Millennials", this has met with certain defining issues, and even narrowing the study further to online video gaming purchases, has implicated the lack of focus to a given platform from which the online video game purchase is made. Referring to online leave thr scope wide open to PC API's, Console API'S and Mobile/Tablet game stores and API's.

A dedicated section of a questionnaire, the chosen methodology of data collection, should ask the participant of the frequency of activity and purchase for each of these platforms; as it has been previously highlighted that users / gamers embrace or are active on multiple platforms, and often for the same game titles.

It would be interesting to study further if these influences have contributing factors to the popularity of certain monetization models that game developers and publisher use to promote their games. Bearing in mind that at the point of this study, over 29 different monetization models had been recognized, within the video gaming industry and a much wider array of monetization exists now in the mobile gaming market.

After looking at the results of this research, for future study it would be interesting to analyze the significance of internet cafes in Turkey and how often they are accessed by the participants due to the significant factor being socialization. Moreover, during these socializations in these sites whether the users are influenced by the other users when they think of purchasing a game.

Finally, if this study was to be considered, ten years down the line, it would be interesting to see if the focus group would be that of Generation Z, and if would be better defined amongst theorists, sociologists, media and marketing bodies /groups. But also, to consider the possible decline of the ‘Millennial’ as the target group for promotion in the video game industry, and to see if those same influential aspects on purchase frequency have changed significantly or if the outside factors of AAA game production, or the continuing trend of F2P Free 2 Play vs Pay 2 Play will have more impact on the next generation of gamers.

REFERENCES

Adada, N. N. and Styron, R. A. Jr. (2008). The role of technology in professional development. *Journal of Education, Informatics and Cybernetics*, 1(3), 1-8.

Adams, E. (2014) *The Fundamentals of Game Design – Third Edition*. Retrieved from - http://ptgmedia.pearsoncmg.com/images/9780321929679/samplepages/0321929675.pdf

Agrawal, J., & Kamakura, W. A. (1999). Country of origin: A competitive advantage?. *International Journal of Research in Marketing*, *16*(4), 255-267.

Ajzen, I. and Fishbein, M. (1980*). Understanding attitudes and predicting social behavior*. Englewood Cliffs, NJ: Prentice-Hall.

Allsopp, J. (2015). Ninth Generation Console Gaming: Nintendo, Sony and Microsoft. Retrieved from – http://www.gamerbolt.com/9th-gen-console-gaming-nintendo-sony-and-microsoft/

Anderson, C. A. and Escobar-Chaves, S. L. (2008) Children and Electronic Media: Media and Risky Behaviors, *The Future of Children*, 147-180.

Anderson, Craig A., Escobar-Chaves, Soledad L. (Spring, 2008) Children and Electronic Media: Media and Risky Behaviors, *The Future of Children*, *18*(1), 147-180.

Apperley, T.H. (2006). Genre and game studies: Toward a critical approach to video game genres. *Simulation and Gaming*, 37(1), 6-23.

Baghdadi, A. (2016). The Growth of the Gaming Industry in Turkey and the MENA. Retrieved from - http://news.arabnet.me/gaming-development-publishing-turkey-mena/

Balnaves, M. and Madden, G. (2012). Social, Casual and Mobile Games: The Changing Gaming Landscape. Bloomsbury Academic.NY.

Bartle, R. (1996). Hearts, clubs, diamonds, spades: Players who suit MUDs. *Journal of MUD research*, *1*(1), 19.

Bergeron, B. (2006). Developing serious games (game development series).

Bénabou, R. and Tirole, J. (2005). Self-confidence and personal motivation. In *Psychology, Rationality and Economic Behaviour* (pp. 19-57). Palgrave Macmillan. UK.

Bossom, A. and Dunning, B. (2016). Video Games: An Introduction to the Industry. Retrieved from: http://www.gamejournal.it/salvador-industry/

Brady, M.K. and Cronin, J.J. (2001). Some new thoughts on conceptualizing perceived service quality: A hierarchical approach. *Journal of Marketing*, 65(3), 34–49.

Bump, P. (2014). Here Is When Each Generation Begins and Ends, According to Facts. Retrieved from - https://www.theatlantic.com/national/archive/2014/03/here-is-when-each-generation-begins-and-ends-according-to-facts/359589/

Chandler, H. and Deming, S. (2012). *The Game Localization Handbook*. Jones & Barlett Int., London.

Chou, C. and Kimsuwan, A. (2013). Factors Affecting Purchase Intention of Online Game Prepayment Card-Evidence from Thailand. *Journal of Internet Banking and Commerce*. *18*(3), 1-3.

CNW Group. (2007). "Italian Plumber More Memorable Than Harper, Dion".

Colwell, J. Grady, C. and Rhaiti, S. (1995). Computer Games, Self-Esteem and Gratification of Needs in Adolescents, *Journal of Community and Applied Social Psychology*, 5 (3), 195-206.

Consalvo, M. (2007). *Cheating: Gaining Advantage in Video Games*. Cambridge (MA): The MIT Press.Montreal.

Csikszentmihalyi, M. (1990). Flow: The Psychology of Optimal Experience. Harperperennial. NY.

Csikszentmihalyi, M. (1992). Flow: The Psychology of Happiness. Harperperennial. NY.

Czarnecki, J. (2013). WWE 2K14 Season Pass and Content program announced. Retrieved from - http://gamingtrend.com/2013/10/21/wwe-2k14-season-pass-content-program-announced/

Dietz, F. (2006). Issues in localizing computer games. *Perspectives on localization*, *13*, 121.

Dodds, W. B. Monroe, K. B. and Grewal, D. J. (1991). Effects of price, brand, and store information on buyers' product evaluations. *Journal of Marketing Research*, 28(3), 307. Retrieved from - http://dx.doi.org/10.2307/3172866

Durmuş, B. Yurtkoru, S. and Çinko, M. (2011). "*Sosyal Bilimlerde SPSS'le Veri Analizi*", 4.Baskı, İstanbul, Beta, 2011.

Erbil, M. (2016). *Video Game Localization Factors and Impacts on Digital Purchasing Behavior*. Bilgi University.İstanbul.

Eroglu, S. and Machleit, K. (1989). "Effects of individual and product-specific variables on utilizing country of origin as a product quality cue." *International Marketing Review*, 6(6), 27.

Eszter, T. (2008). The Role of Reference Group Influence in Consumer Behaviour. Theses of Doctoral Dissertation. Széchenyi István University. Multidisciplinary Doctoral School of Social Sciences. Retrieved from - http://rgdi.sze.hu/files/Ertekezesek,%20tezisek/Tezisfuzet_Angol.pdf

Fahey, R. (2016). Weak AAA launches are a precursor to industry transition. Retrieved from -http://www.gamesindustry.biz/articles/2016-11-25-weak-aaa-launches-are-a-precursor-to-industry-transition

Faltot, J. (2012) Epiphanies, Theories, and Downright Good Thoughts Made While Playing Video Games - pg.51.

Ferdig, R. (2009). Handbook of Research on Effective Electronic Gaming in Education, *Pedagogy of Digital Games*, 1029.

Foster, L. (2016). Effects of Video Game Streaming on Consumer Attitudes & Behaviour. Retrieved from - http://dc.etsu.edu/cgi/viewcontent.cgi?article=4451&context=etd

GALA. (2016). What is Localization? Retrieved from - https://www.gala-global.org/language-industry/intro-language-industry/what-localization

Gaudiosi, J. (2012). New Reports Forecast Global Video Game Industry Will Reach $82 Billion By 2017. Retrieved from - https://www.forbes.com/sites/johngaudiosi/2012/07/18/new-reports-forecasts-global-video-game-industry-will-reach-82-billion-by-2017/

Giese, J. and Cote, J. (2000). Defining Consumer Satisfaction. Retrieved from - http://www.proserv.nu/b/Docs/Defining%20Customer%20Satisfaction.pdf

Grainer, S. (2013). What happens when you look at the history of game design through the prism of Maslow's Hierarchy of Needs? Retrieved from - http://www.gameskinny.com/xflt8/maslows-hierarchy-of-game-design

Granic, I. Lobel, A. and Engels, R. (2013). The Benefits of Playing Video Games: First Publication. Retrieved from - https://www.apa.org/pubs/journals/releases/amp-a0034857.pdf

Grodal, T. (2000). Video games and the pleasures of control. In D. Zillmann and P. Vorderer (Eds.), *Media entertainment: The psychology of its appeal* (pp. 197-212). Mahwah, NJ: Lawrence Erlbaum Associates.

Groth, J. and McDaniel, S.W. (1993). Hedonic consumption: emerging concepts, methods and propositions. *Journal of Marketing*, 10, 10-16.

Guillet, R. (2015). The 10 Best Video Game Storylines of All Time.

Hair, J. F. Black, W. C. Babin, B. J. Anderson, R. E. and Tatham, R. L. (2006). *Multivariate data analysis* (Vol.6). Upper Saddle River, NJ: Pearson Prentice Hall.

Hamari, J. and Jarvinen, A. (2011). Building Customer Relationship through Game Mechanics in Social Games.

Higgins, E. (1987). Self-Discrepancy: A Theory Relating Self and Affect. Retrieved from-
http://persweb.wabash.edu/facstaff/hortonr/articles%20for%20class/Higgins.pdf

Holt, D. (2016). Branding in the age of social media. Harvard Business Review. Retrieved from -https://hbr.org/2016/03/branding-in-the-age-of-social-media

Huang, X. and Su, D. (2011). Research on Online Shopping Intention of Undergraduate Consumer in China-Based on the Theory of Planned Behavior. *International Business Research*, 4(1), 86-92

Ilieva, J. Baron, S. and Healey, N. M. (2002). Online surveys in marketing research: Pros and cons. *International Journal of Market Research*, 44(3), 361.

Jalilvand, M.R and Samiei, N. (2012). "Electronic word-of mouth: challenges and opportunities", PCS, 3: 42–46.

Jaipuria, U. (2014). Lattice Labs - Simple Dynamic Pricing for Mobile Games and Apps. Retrieved from: http://latticelabs.com/blog/2014/07/simple-dynamic-pricing-mobile-games-apps/

Jenkins, H. (2005). Games, the new lively art. *Handbook of computer game studies*, 175-189.

Johnson, E. (2015). "What Can the Video Game Business Learn from Airlines and Uber?" Retrieved from - https://www.recode.net/2015/4/2/11561072/what-can-the-video-game-business-learn-from-airlines-and-uber

Johnson, K. Simchi-Levi, D. and Wang, H. (2015). Online network revenue management using Thompson Sampling, Retrieved from - Dynamic Pricing with Demand Covariates - http://web.stanford.edu/~bayati/papers/dpdc.pdf

Juul, J. (2012). *A Casual Revolution: Reinventing Video Games and Their Players*. MIT Press. London.

Juul, J. (2013). *The Art of Failure: An Essay on the Pain of Playing Video Games (Playful Thinking)*. MIT Press. London.

Keller, K. L. (1998). *Strategic brand management* (Vol. 256). Upper Saddle River, NJ: Prentice Hall.

Klimmt, C. (2009). Player Performance, Satisfaction, and Video Game Enjoyment. Retrieved from - https://link.springer.com/chapter/10.1007/978-3-642-04052-8_1

Konda, A. (2013). An Exploration of Monetization in Free-to-Play Games. Retrieved from: http://alexkonda.com/wp-content/uploads/2016/03/An-Exploration-of-Monetization-in-Free-to-Play-Games-Alex-Konda.pdf

Koster, R. (2004). *A Theory of Fun for Game Design*, O'Reilly Media Inc.,CA.pg.46.

Kotler, P. (2002). *Market Management*. 10th Ed. New Delhi, India: Prentice Hall of India.

Langlotz, A. C. Rhode, M. and Whaley, C. (2008). Video Games Industry Overview. An Analysis of the Current Market and Future Growth Trends. *International Business Project*. Retrieved from: http://holgerlanglotz.de/downloads/BU4510_VideoGamesIndustry_LanglotzEtAl.pdf

Lenhart, A. Kahne, J. Middaugh, E. Macgill, A. R. Evans, C. and Vitak, J. (2008). Teens, video games, and civics: Teens' gaming experiences are diverse and include significant social interaction and civic engagement. Pew Internet & American Life Project. Retrieved from – Pew Research Center - http://www.pewinternet.org/2008/09/16/teens-video-games-and-civics/

Levy, S. J. (1959). Symbols for Sale. *Harvard Business Review* 37. 117-124.

Liew, J. (2008) Think Big. Move Fast. 29 business models for games. Retrieved from - http://lsvp.com/2008/07/02/29-business-models-for-games/

Lindgren, H. (2010). Factors Contributing to the buying decision of PC and video games – and their weight in the buying decision process. *International Business Management Marketing*. Retrieved from - https://www.theseus.fi/bitstream/handle/10024/21183/Henri_Lindgren_.pdf?sequence=4

Ling, K.C. Chai, L.T. and Piew, T.H. (2010). The Effects of Shopping Orientations, Online Trust and Prior Online Purchase Experience Toward Customers' Online Purchase Intention. *International Business Research*, 3(3), 63-76.

Lipson, S. A. and Brain, R. D. (2009). *Computer and Video Game Law – Cases, Statutes, Forms, Problems & Materials*. Carolina Academic Press, p. 54.

Little, W. (2014). *Introduction to Sociology* – 1st Canadian Edition. Retrieved from - https://opentextbc.ca/introductiontosociology/chapter/chapter5-socialization/

Lloyd, C. (2016). Retrieved from: http://cultureandyouth.org/video-games/

Luban, P. (2011). The Design of Free-To-Play Games: Part 1. Retrieved from - http://www.gamasutra.com/view/feature/134920/the_design_of_freetoplay_games_.php

Maslow, A. H. (1970). *Motivation and Personality*, (2nd. ed.), New York, Harper & Row.

Masnick, G. (2012) Defining Generations. Retrieved from - http://housingperspectives.blogspot.com.tr/2012/11/defining-generations.html

McEachern, M. G., & Warnaby, G. (2008). Exploring the relationship between consumer knowledge and purchase behaviour of value-based labels. *International Journal of Consumer Studies*, *32*(5), 414-426.

McQuitty, S. Finn, A. and Wiley, J.B. (2000). Systematically varying consumer satisfaction and its implications for product choice. *Academy of Marketing Science Review*. Retrieved from - http://www.amsreview.org/articles/mcquity10–2000.pdf.

Melnick, Lloyd and Dimitri Kirin 2008. "Localization: a Key Element in Successful Casual Games". Casual Connect Magazine, winter 2008.

Micallef, A. (2014). The consumer buying behaviour of a gamer when purchasing a first-person shooter video game. Retrieved from - https://www.um.edu.mt/library/oar//handle/123456789/9502

Nair, H. (2007). “Intertemporal price discrimination with forward-looking consumers: Application to the US market for console video-games.” *Quantitative Marketing and Economics*, *5*(3), 239.

Nasiruddin, K. Hashim, H. and Yusof, R. (2016). Electronic Word of Mouth: Exploring the Consumer Perspective. Retrieved from - http://www.ftms.edu.my/journals/IJABM/Nov2016/19-25.pdf.

Nayak, M. (2013). Take Two's GTA V starts strong with $800 mln in first-day sales. Retrieved from - http://www.reuters.com/article/us-taketwo-gta-idUSBRE98H0Z720130918

Nielsen. (2017). Nielsen Unveils First Comprehensive Study on the Purchasing Power and Influence of the Multicultural Millennial. Retrieved from - http://www.nielsen.com/us/en/press-room/2017/nielsen-unveils-first-comprehensive-study-on-the-purchasing-power-of-multicultural-millennial.html

O'Hagan, M., & Mangiron, C. (2013). *Game localization: translating for the global digital entertainment industry* (Vol. 106). John Benjamins Publishing.

Okada, S., and Kojo, S. (1993). *U.S. Patent No. 5,184,830*. Washington, DC: U.S. Patent and Trademark Office.

Park, C. Whan and C. Parker Lessig (1981), “Familiarity and Its Impact on Consumer Decision Biases and Heuristics,” *Journal of Consumer Research*, 8 (September), 223–30.

PC Mag. (2016). Definition of: streaming video games. Retrieved from - http://www.pcmag.com/encyclopedia/term/64601/streaming-video-games.

Peterson, R.A. and Jolibert, A.J.P. (1995). A meta-analysis of country of-origin effects. *Journal of International Business Studies* 26 Ž. 4, 883–899.

Petkov, M., & Rogers, G. E. (2016). At Issue: Using Gaming to Motivate Today's Technology-Dependent Students. *Journal of STEM Teacher Education*, *48*(1), 4.

Plante, C. (2016). Your Life Will Be a Video Game. Retrieved from - http://www.theverge.com/a/verge-2021/ea-ceo-andrew-wilson-interview-virtual-video-games

Polygon. (2012). The State of Games: The State of AAA. Retrieved from - http://www.polygon.com/2012/10/1/3439738/the-state-of-games-state-of-aaa

Pollak, L. (2015). What is a Millennial? Everything you've always wanted to know but were afraid to ask. Retrieved from: https://www.lindseypollak.com/what-is-a-millennial-everything-youve-always-wanted-to-know-but-were-afraid-to-ask/

Pontes, H. and Griffiths, M. D. (2014). The assessment of internet gaming disorder in clinical research. *Clinical Research and Regulatory Affairs*, 31(2-4), 35-48.

Pooler, J. A., & Pooler, J. (2003). *Why we shop: Emotional rewards and retail strategies*. Greenwood Publishing Group.

Ramos, A. Lopez, L. Rodriguez, A. Meng, T. and Abrahams, S. (2013). The Legal Status of Video Games: Comparative Analysis in National Approaches. World Intellectual Property Organization. Retrieved from - http://www.wipo.int/export/sites/www/copyright/en/activities/pdf/comparative_analysis_on_video_games.pdf

Reichheld, F.F. and Teal, T. (1996). *The Loyalty Effect*. Harvard Business School Press, Boston, MA.

Rickwood, C. and White, L. (2009). "Pre-purchase decision-making for a complex service: retirement planning," *Journal of Services Marketing* (23:3), 145-153.

Rijksdienst Voor Ondernemend. (2015). Digital Gaming – Turkey. Retrieved from - http://www.hollandturkeytrade.com/static_files/7/ BO_Digital_Gaming.pdf

Rose, M. (2013) Understanding the realities of video game monetization. *Gamasutra.*Dec.22. Retrieved from: http://www.gamasutra.com/view/news/205412/Understanding_the_realities_of_video_game_monetization.php

Rosenberg, M. (1967). *Society and the adolescent self-image*. NJ: Princeton University Press.

Ryan, R. M. Stiller, J. and Lynch, J. H. (1994). Representations of relationships to teachers, parents, and friends as predictors of academic motivation and self-esteem. *Journal of Early Adolescence, 14*, 226-249.

Salmond, J. (2016). *Video Game Design: Principles and Practices from the Ground Up.* Bloomsbury Pub.NY.

Salisbury, W. Pearson, R. Pearson, A. and Miller, D. (2001). Perceived Security and World Wide Web Purchase Intention. *Industrial Management & Data Systems, 101*(4),165-177.

Seery, M. D. Blascovich, J. Weisbuch, M. and Vick, S. B. (2004). The relationship between self-esteem level, self-esteem stability, and cardiovascular reactions to performance feedback. *Journal of Personality and Social Psychology*, 87, 133-145.

Sharma, S. (1996). *Applied Multivariate Statistical Analysis*. New York, NY: John Wiley & Sons, Inc.

Schiffman, L.G. and Kanuk, L.L. (2000). *Consumer Behavior*.7th Ed. NJ: Prentice Hall Int.

Shipman, D.Z. (2016). *Measuring luxury value perception: An empirical study of Turkish consumer's wine consumption*. İstanbul. ISBN: 978-605-83065-0-9.

Skolnick, E. (2014). *Video Game Storytelling: What Every Developer Needs to Know about Narrative*. Watson-Guptill Pub.NY.

Sloan, D. (2011). *Playing to Win: Nintendo and the Video Game Industry's Greatest Comeback.* John Wiley& Sons. Singapore.

Speier, K. (2016). Why Are Marketers So Obsessed with Millennials? Retrieved from - http://www.socialmediatoday.com/marketing/why-are-marketers-so-obsessed-millennials

Stark, L. (2014). Game Design: Finding the Premise from - http://leavingmundania.com/2014/06/23/game-design-finding-premise/

Statista. (2015). Number of World of Warcraft (WoW) subscribers from 1st quarter 2005 to 3rd quarter 2015 (in millions). Retrieved from - https://www.statista.com/statistics/276601/number-of-world-of-warcraft-subscribers-by-quarter/

Statista. (2016). Turkish Gaming Revenue: 2015-2016. Retrieved from - https://www.statista.com/statistics/566417/turkey-survey-video-games-purchased-by-gamers-monthly/

Stewart, B. (2017). Personality and Play Styles: A Unified Model.Retrieved from: https://blog.appodeal.com/blog/2017/04/05/gamers-and-gameplay-beyond-the-genre/

Strauss, W. and Howe, N. (2000). Millennials Rising: The Next Great Generation. Vintage Books.NY.

Tellis, G. and Gaeth, G. (1990). Best Value, Price-Seeking, and Price Aversion: The Impact O. *Journal of Marketing*; 54, 2; pg. 34.

Theringer (2017). https://theringer.com/video-game-streaming-youtube-twitch-on-demand-week-d911a7ebf510

Thorn, A. (2013). *Game Development Principles*. Cengage Learning. Boston.

Torres, M. (2014). App Monetization Statistics: Freemium vs Premium vs Paymium. Retrieved From - http://thinkapps.com/blog/post-launch/paid-vs-freemium-app-monetization-statistics/

Turkle, S. and Jenkins, H. (2011). 'Does This Technology Serve Human Purposes?": A "Necessary Conversation" with Sherry Turkle (Part One)

Turkle, S. (1995). *Life on the Screen: Identity in the Age of the Internet.* Touchstone. NY.

Twitch (2017). https://www.twitch.tv/2017

Valve (2016). http://www.valvesoftware.com/

Van der Heijden, H. Verhagen. T. and Creemers, M. (2003). Understanding Online Purchase Intentions: Contributions from Technology and Trust Perspectives. *European Journal of Information Systems, 12*(1), 41-48.

Verlegh, P.W.J. Steenkamp, J. (1999). A review and meta-analysis of country-of-origin research. *Journal of Economic Psychology* 20, 521–546.

Vigneron, F. and Johnson, L. W. (2004). Measuring perceptions of brand luxury. *Journal of Brand Management*, 11(6), 484-506.

Vorderer, P. Hartmann, T. and Klimmt, C. (2003). Explaining the enjoyment of playing video games: The Role of Competition. Retrieved from: https://www.researchgate.net/publication/220851167_Explaining_the_enjoyment_of_playing_video_games_The_role_of_competition

Waters, J. (2014). Linked—Why Do You Play Video Games? Retrieved from - http://www.ericrettberg.com/datacultg2/longer-essays/linked-why-do-you-play-video-games/

Weiner, B. (1985). An attribution theory of achievement motivation and emotion. *Psychological Review*, 92, 548-573.

Wesley, D. and Barczak, G. (2010). Innovation and Marketing in the Video Game Industry: Avoiding the Performance Trap. Routledge. NY. pg. 191.

White, K. C. (2009). "Is There Country-of-Origin Bias in the Video Game Market?" Honors Projects. Paper 16. Retrieved from - http://digitalcommons.macalester.edu/economics_honors_projects/16

Williams, R. B. and Clippinger, C. A. (2002). Aggression, competition and computer games: Computer and human opponents. *Computers in Human Behavior, 18*, 495-506.

Wilson, M. and Leaver, T (2016). *Social, Casual and Mobile Games: The Changing Gaming Landscape.* Bloomsbury Academic. London.

Winkler, W. K. (2006). The business and culture of gaming. *Gaming as culture: Essays on reality, identity, and experience in fantasy games. Jefferson, NC: McFarland and Company.*

Wlodkowski, R. (1999). *Enhancing adult motivation to learn*. (Revised) San Francisco: Jossey-Bass

Wolf, M.J.P. and Perron, B. (2014). The Routledge Companion to Video Game Studies. Routledge. New York. Chapter 20.

Xicota, D. (2014). What Does DLC Mean for Your Games?

Yang, Y. (2009). The impact of brand awareness on consumer purchase intention: The mediating effect of perceived quality and brand loyalty. *Journal of International Management Studies*, 4(1), pg. 135-144.

Yee, N. (2006). Motivations for play in online games. *Cyber Psychology & Behavior*, 9(6), pg. 772–775.

Yi, Y. and La, S. (2004). What influences the relationship between customer satisfactions and repurchase intention? Investigating the effects of adjusted expectations and customer loyalty. *Psychology and Marketing*, 21: pg. 351–373.

Zackariasson, P., & Wilson, T. L. (2012). *The video game industry: Formation, present state, and future* (Vol. 24). Routledge.

Zeithaml, V. A. (1988). Consumer perceptions of price, quality and value: a means-end model and synthesis of evidence. *Journal of Marketing*, 52, pg. 2-22.

Zillmann, D. (1996). Sequential dependencies in emotional experience and behavior. In R. D. Kavanaugh, B. Zimmerberg, and S. Fein (Eds.), Emotion: Interdisciplinary perspectives, pg. 243- 272. Mahwah, NJ: Lawrence Erlbaum Associates.

APPENDIX A

Questionnaire

1. Gender?

o Male

o Female

2. Age group?

o 18-25

o 26-30

o 31-35

o 36-40

o 41 +

3. Education?

o Primary School

o High School

o College

o Associate Degree

o Undergraduate

o PhD

4. Income Level?

o 0-500 TL

o 501-1000 TL

o 1001-1500 TL

o 1501-2500 TL

o 2501 TL +

Buying Frequency

q1 How frequently do you play games?

q2 How frequently do you buy games?

Price

q3 I would like to buy the game I want without considering the price.

q4 I can buy the game I want

q5 If I can't buy the game I want, I will purchase another

q45 Price of the game must be equivalent to the game's quality

q46 Price is a decisive factor for purchasing

q48 Most expensive game is the best one

Brand

q28 It is important which company produced the game

q84 Upon purchasing the producer of the game is important

q53 I avoid buying unknown games.

q51 It is important that the game I'll buy is well known.

q50 Country of origin and brand is important when I purchase a game

Quality

q8_ Type of the game is important

q27 Content and mods are important

q87 It is important that this game is not on sale

q30 Before buying the game, I read reviews

q22 Production year is important

Experience / Recommendation

q40 I consult my friends for game advice

q57 I give advice to my friends about games

q88 Few people would understand the quality of this game

q85 Before buying this game, I will look at its contents

q49 I can understand which type this game is just by looking on cover information

Self-Esteem

q35 Image of a game that I buy is important

q36 What my friends think of the game I bought is important

q37 I won't buy a game if it is not popular

q38 What people will think when I buy an expensive game is important.

q39 Social status of a game that I bought is not important

q42 My Knowledge and culture about a game gives a positive image to those around me

q44 If a game is famous, I will buy it.

q43 To be different from others, I would buy an expensive game

Socialization (Socializing)

q18 Playing games gives meaning to life

q19 I follow up recent games by tracking purchases of others.

q20 Before buying games, I will find out which games impress people the most.

q59 My friends and I prefer the same games

q60 I prefer to play games with my friends

q17 Playing games effects cultural development

Self-Satisfaction

q8 When I feel down, buying games makes me better

q16 I would buy a game no matter the price to reward myself

q10 Buying games reduces my stress

q11 Even if it is not necessary, I buy the game I like

q12 When I buy a game, I feel happy

q14 It gives me great pleasure to buy games

q83 It gave me great pleasure to have this game

q31 When I buy games to pleasure myself not others

q81 This shopping experience was marvelous

q82 I am completely satisfied with this shopping experience

Self-Reflection/Actualization

q13 I buy games which I know I'll play

q21 When I'm buying games my opinion is important not others

q23 It is important the game I buy gives me pleasure, it is not important that others play it or not.

q25 I buy games that suits my character

q26 The game I buy needs to reflect who I am

q33 What others think of the game I bought is important

q32 Even if a game is played by many if it doesn't fit me I won't buy it

APPENDIX B

ESA (Entertainment & Software Association) Essential Facts 2016

http://isfe.eu/sites/isfe.eu/files/attachments/esa_ef_2016.pdf

ESA (Entertainment & Software Association) Essential Facts 2015

http://isfe.eu/sites/isfe.eu/files/attachments/esa_ef_2015.pdf

ESA (Entertainment & Software Association) Essential Facts 2014

http://isfe.eu/sites/isfe.eu/files/attachments/esa_ef_2014.pdf

ESA (Entertainment & Software Association) Essential Facts 2013

http://isfe.eu/sites/isfe.eu/files/attachments/esa_ef_2013.pdf

ESA (Entertainment & Software Association) Essential Facts 2012

http://isfe.eu/sites/isfe.eu/files/attachments/esa_ef_2012.pdf

ESA (Entertainment & Software Association) Essential Facts 2011

http://isfe.eu/sites/isfe.eu/files/attachments/esa_ef_2011.pdf

ESA (Entertainment & Software Association) Essential Facts 2010

http://isfe.eu/sites/isfe.eu/files/attachments/esa_ef_2010.pdf

NPD Group Digging into PC & Video Game Purchasing for DLC & Micro Transactions 2016

https://www.npd.com/wps/portal/npd/us/news/infographics/2016/digging-into-pc-and-video-game-purchasing-for-dlc-and-microtransactions/

NPD Group Latest Report from the NPD Group Provides Insight into Gamers' Purchasing, Usage, and Perceptions of Additional Gaming Content 2016

https://www.npd.com/wps/portal/npd/us/news/press-releases/2016/latest-report-from-the-npd-group-provides-insight-into-gamers-purchasing-usage-and-perceptions-of-additional-gaming-content/

NPD Group Digital Gamers: Who They Are, What They Want 2016

https://www.npd.com/wps/portal/npd/us/news/infographics/2016/digital-gamers-who-they-are-what-they-want/

Statista Video Games Are Getting as Expensive as Movies 2014

https://www.statista.com/chart/2713/video-games-are-getting-as-expensive-as-movies/

Statista The Most Important Gaming Platforms 2017

https://www.statista.com/chart/8525/most-important-gaming-platforms/

Statista Compete or Complete? Gender Differences in Gaming 2016

https://www.statista.com/chart/7350/compete-or-complete-gender-differences-in-gaming/

Statista Super Mario The Timeless Best Seller 2016

https://www.statista.com/chart/5764/best-selling-super-mario-games/

Statista GTA V is the Fastest-Selling Entertainment Product Ever 2013

https://www.statista.com/chart/1501/most-successful-entertainment-products/

Statista Digital Media: Video Games Outlook 2016 -2021

https://www.statista.com/download/outlook/whiterpaper/Video_Games_Outlook_1116.pdf

Statista Statistics and facts about the Video Game Industry

https://www.statista.com/topics/868/video-games/

Statista Gaming Monetization Dossier

https://www.statista.com/study/41424/gaming-monetization-statista-dossier/

Statista Statistics and facts about the Online Gaming Industry in the United States 2016

https://www.statista.com/topics/1551/online-gaming/

GIT Turkish Game Market 2016 Report – Gaming in Turkey

http://www.gaminginturkey.com/en/turkish-game-market-2016

GIT Mobile Game Revenue Grew %53 to 11.9 billion in Q1 2017

http://www.gaminginturkey.com/en/mobile-game-revenue-grew-to-11-9-billion-in-q1-2017

Newzoo Turkey Video Gaming Insight 2017

https://newzoo.com/insights/countries/turkey/

Newzoo Turkeys Games Market 2015

https://newzoo.com/insights/infographics/newzoo-summer-series-20-turkish-games-market/

Newzoo 2016 Global Games Market Report – An Overview of Trends and Insight

https://cdn2.hubspot.net/hubfs/700740/Reports/Newzoo_Free_2016_Global_Games_Market_Report.pdf

Newzoo The Global Games Market Will Reach $108.9 Billion in 2017 With Mobile Taking 42%

https://newzoo.com/insights/articles/the-global-games-market-will-reach-108-9-billion-in-2017-with-mobile-taking-42/