BACHELOR THESIS

FASHION ADVERTISING IN DIGITAL GAMES:

An experiment on brand recall and purchase intention after watching a let's play video

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Abstract

Purpose: The popularity of digital games and let's play videos is increasing every year. As a matter of fact, fashion industry has been doing the first attempts of entering the digital game market by placing advertisements within the games. For this reason, the purpose of this study is to examine the effects of fashion advertisements in let's play videos on brand recall and purchase intention, depending on the placement of advertisement.

Methodology: The experiment was 2 (no advertisement in environment versus advertisement in environment) x2 (no advertisement on avatar versus advertisement on avatar) between-subjects design. The study was an online experiment involving tests of 4 different advertisement placements. Study consisted of 218 participants, in the age range from 18 to 61 years (M = 26.16, SD = 7.31). The respondent gender ratio consists of 65.1% male (N = 142), 32.1% female (N = 70), 1,4% non-binary / third gender (N = 3), and 1.4% (N = 3).

Findings: The results showed that brand recall is higher when advertisements are displayed in the game environment, compared to avatar or no advertisements. It is possible to significantly increase brand recall by combining both environmental and avatar advertisements. No significant effect of advertisement placement on purchase intention was found.

Value: This paper is one of the first attempts to research interaction between digital game and fashion industries from an advertising perspective. It provides an insight on how to implement advertisements in let's play videos to achieve the highest brand recall rates.

Keywords: Fashion advertising, Digital games, Let's plays, Brand recall, Purchase intention, Advergames

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1. Introduction

Nowadays everyday life revolves around technology and digital media. Young people have been growing up while being surrounded by digital media and the internet has become an integral part of daily life and it has affected their way of perceiving information and learning (Oblinger, 2004). Digital games are perceived as a mean of entertainment and this market keeps growing and attracting more people each year. The approximate number of people playing video games in 2021 has reached 3.24 billion worldwide, of which 715 million are located in Europe and almost 1.48 billion in Asia (Clement, 2021). Currently, in the year 2021, the value of the digital game market worldwide has reached 178 billion U.S. dollars and estimations suggest that it will reach 268.8 billion U.S. dollars in 2025 (Clement, 2021). However, not only gaming is popular - the amount of let's play video viewers or, in other words, people watching content with gaming videos in 2020 has reached 1.2 billion (Clement, 2021). The most popular platforms for let's play videos are Twitch and YouTube.

Digital games can be used for education, bringing awareness about specific subjects and talking about sensitive topics, such as mental health (Anastasiadis, Lampropoulos, & Siakas, 2018). However, after looking at the previously mentioned information, there is another aspect that needs to be explored. What are the other fields that can benefit from digital games? This study focuses on researching what could be the outcomes of implementing fashion brands in digital games.

Fashion is a crucial part of life for every member of society. Every day people pick their clothing based on their activities, this can be a dress code for office, clothing that fits the weather outside or activities person is going to perform. In a daily life everyone makes conscious or unconscious fashion choices. For example, when picking a fashion store to shop from. Brand that fits specific persons' criteria, either based on preferences of the visual aspects, price category, brand values, sustainability, or any other aspect. Additionally, fashion industry is a

market that keeps producing great revenues each year. The estimated revenue of the apparel industry produced in 2020 is 1.46 trillion U.S. dollars and the prediction is that in 2025 it will reach approximately 2.25 trillion U.S. dollars (Shahbandeh, 2021). By looking at both digital game and fashion market revenues, it is possible to suggest that those markets could complement one another, but has there been an attempt to do so?

Recently, Riot Games have announced collaboration with the clothing brand UNIQLO by offering an opportunity to sell clothing both within the game League of Legends environment and also its merchandise in their online store (Barton, 2021). In the blog article on fashion industry entering digital games Barton (2021) reveals that luxury clothing brands, such as Marc Jacobs and Valentino placed their items in game Animal crossing, Burberry has created its own gaming platform with product placements and many more.

When it comes to fashion brand advertisements within digital games, their placement is crucial. For example, where would it be more effective - on the character or within the environment? Since this topic is brand new and yet unexplored, this research is focusing on combining fashion advertisement and digital games and the aim of it is exploring how the audience perceive it. GTA San Andreas by Rockstar games was used for inserting the advertisements in the digital game. For testing purposes let's play videos will be created and used to compare different effects of environmental advertisements and advertisements placed on the avatar. The additional factors of in-game fashion advertisements, such as brand recall, purchase intention, effects of familiarity will be explored.

To summarize, after concluding all the previously mentioned factors a research question has been established and this paper will try to find an answer to it.

RQ: What are the effects of in game character and environmental advertising on fashion brands recall and attitudes among let's play viewers?

2. Theoretical framework

Fashion advertising in digital games is a new and yet unexplored practice. For this reason, it is necessary to analyse several literature sources with an aim of gaining insights in various aspects of this type of advertising. In the following paragraphs the research topic will be considered from a theoretical perspective. To be more specific, the following concepts will be discussed - advertising in general, digital games, let's plays, in game advertising, identification, product and brand familiarity, purchase intention, and brand recall. The findings will be used to predict possible effects of fashion advertisements within digital games and based on them and four hypotheses for this research paper will be established. A conceptual model for this research has been created and is represented in Figure 1.

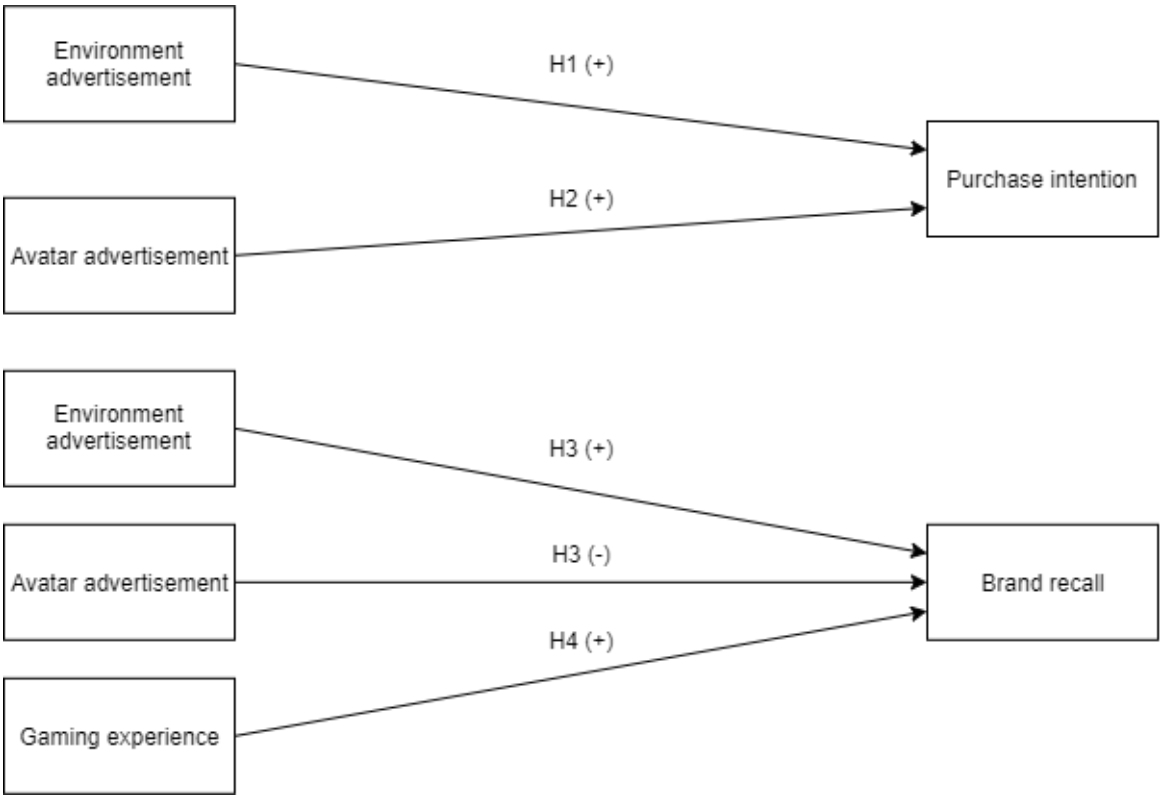

Figure 1. Conceptual model of the conducted study

2.1. *Digital games and let's plays*

Names such as "digital games", "video games", "computer games", and many more are used very frequently. Subsequently a question appears, what is the definition of those concepts? For

this research purpose it is important to define not only the concept of games, but also of let's plays. In the next paragraphs already existing definitions of those concepts will be discussed and the most suitable definition for this research purposes will be established. More importantly, the relation of the digital games, let's plays and this study will be drawn.

2.1.1. *Digital games*

While looking at video games it is important to take into account that there are several different types of them. Such as simulation games, action games, multiplayer games, shooting games, sports games, and many more. Considering the broad scope of various types of video games, finding a clear definition of what exactly a video game is, is quite challenging. Research on defining games suggests that one of the ways of describing video games is "new forms of media and storytelling" (Crawford, 2015).

In study performed by Kiili (2004) the non-educational games are described as an entertainment involving behaviour that has no other benefits than entertainment. Overall, the entertainment and fun aspect in the games is crucial, but the statement on lacking other benefits can be perceived differently. When looking back at the definition provided by Crawford (2015) the video games involve storytelling or a story as a whole. By looking from this perspective, the end goal or, in other words, the result of playing a video game can be becoming familiar with the main character of the game, the game environment, which helps for understanding the story line.

Another definition that is important for this study is gaming. It can be described as a practice of playing video games. It can be done either for entertainment purposes or professionally by following the gaming career path. The estimated number of people playing video games in 2021 has reached 3.24 billion worldwide (Clement, 2021). The large amount of gamers can be an estimator that other markets could benefit from becoming a part of gaming industry.

By concluding all the previously discussed theories, digital games can be described as entertaining media that consists of graphical elements and involves a storyline. For the purposes of the current study, digital games are seen as being interactive and involving the player, so that the player immerses in the artificially created virtual reality.

2.1.2. *Let's plays*

It is important to look into the concept of let's play videos to understand the focus of this research. Since in this research fashion advertisements are being tested in the let's play videos of a modified video game. A let's play is a video capture of a video game, where a player narrates the game process and in most of the cases is seen within the video. Usually, the video capture of the narrator is placed in one of the corners of the game capture. Those videos are used for entertainment purposes; however, a few fashion brands have tried implementing their brands in the video games. A different way of describing let's play is a game video content with a narrator. A term used for describing the let's play content creator and game narrator is streamer.

An important aspect about let's plays that Glas (2015) discussed in his research on let's plays is that the viewer perceives the game from the standpoint of the LP creator. This means that the perception of the game viewer watches strongly depends on the perspective the creator is presenting. Additionally, (McKitrick, 2020) points out that most of the research on let's plays focus on YouTube as the main let's play sharing platform and YouTube influencers. While thinking about the advertisements in let's plays and combining YouTube influencers and creation of a specific perspective on the video games the concept of let's play influencers can be brought to attention.

YouTube offers a chance of publishing a pre-edited let's play content, however it has a strong competitor - the leading let's play live-streaming platform Twitch (Gillette & Sopper, 2015). Statistics on Twitch suggest that this platform has 140 million active users every month

of which 65% are male and the approximate number of active streamers is 9.2 million (Dean, 2021). Twitch and YouTube represent different types of let's play video, nonetheless both platforms can be described as very successful at attracting large audiences. Those factors can possibly open an opportunity to the gaming and fashion industry of using let's play influencers to draw attention to fashion brand placement. This can be done by commenting or pointing out the specific advertisements or products in the game during the let's play videos. By applying this method, a large and relevant target group could be reached. Especially if the let's play creators with an established image and good reputation are involved in this process, since their viewers possibly would have previously formed a positive attitude towards the content displayed.

2.2. *Advertising in general*

Words such as advertising or advertisements are used very frequently. For this research it is important to define the term advertising. This will be done in the following paragraphs by analysing various scientific papers. Richards and Curran (2002) conducted research with an aim of defining advertising. The final definition was stated as follows: "Advertising is a paid, mediated form of communication from an identifiable source, designed to persuade the receiver to take some action, now or in the future" (Richards and Curran, 2002, p. 74).

In another study on defining advertising Dahlen & Rosengren (2016) suggests that advertisement should be defined by looking at the new media, new formats and also the new customer behaviour. After combining those factors, a new definition of advertising they suggest is "brand-initiated communication intent on impacting people" (Dahlen & Rosengren, 2016, p. 1).

A study about redefining advertising that was conducted in the year 2020 suggests a new definition for advertisement. "Advertising is paid, owned, and earned mediated

communication, activated by an identifiable brand and intent on persuading the consumer to make some cognitive, affective or behavioural change, now or in the future" (Kerr & Richards, 2020, p. 16). This definition takes into consideration a factor of media not only being owned, but also earned. This includes online media, content creation, technology-based content and many more.

To conclude, the definitions created by Dahlen & Rosengren (2016) and Kerr & Richards (2020) are the most suitable for this research on advertisements in let's play videos. The reason for that is that the advertisement method involves online media, which can be applied to digital games. Additionally, this research aims to find effects on behavioural change in the future based on the displayed advertisements within a let's play video. Thus, it is possible to suggest that it creates a long-term impact on the person watching it.

2.3. *In game advertising*

In the previous paragraphs advertisements in games were mentioned several times. Importantly, there are unanswered questions in this study - what is in game advertising and when did it become a part of the game industry? By taking a walk back on the history line, the first appearance of advertisements in digital games began decades ago. First game where in-game advertisement appeared was "Adventureland" in 1978, where the next part of the game was promoted (Soebandhi & Andriansyah, 2017). However, other sources disclaim that the in-game advertisement had its first appearance in the late 1980s, when Sega placed a Marlboro banner in its arcade racing game (Reuters, 2002). Based on those findings, it can be claimed that in-game advertisements started appearing in the late 70's, but they began to be marketed only in 1991 (Soebandhi & Andriansyah, 2017). Several decades have passed by and until this day not all the aspects of it have been explored. For example, subject of this research paper – fashion advertisement in digital games. Fashion elements have always been appearing in digital games in such simple forms as clothing of the game characters. However, advertising specific fashion

brands within the game has been brought to attention only in the past years. This study offers to ways to implement fashion brand advertisements in the game environment. One of the options would be placing an advertisement on the clothing of the main game character. Another option would be inserting fashion advertisement within the game environment, for example, in a store the player can see within the game environment and enter.

In a publication of Journal of Advertising in-game advertising is described as "inclusion of products or brands within a digital game" and the goal of it is proving an entertaining experience to the player (Terlutter & Capella, 2013). For example, Toh and Leng (2014) state that "the majority of sports video gamers are also consumers of a wide range of sports activities and products. As such, sports video games allow sports brand owners access to a common target market" (p. 189). This can lead to an assumption that fashion advertisements could be more effective in a game that involves fashion industry and the target audience has a genuine interest in fashion industry. Nevertheless, according to findings from research performed by Chang et al. (2014) an in-game advertisement is more effective if it is harmoniously implemented in the game. In other words, the visual compatibility with the game environment is a crucial point for achieving positive result of in game advertisement. The only concern while looking from this perspective is the manner of presenting the advertisements in an entertaining manner, so that they would stay in the memory of the player.

2.4. *Influences on and effects of in-game advertisements*

One of the aims of this research is also finding the reasons for effectiveness or failure of the fashion advertisements within the digital games. Also, it is important to find out what the effects of those advertisements are. Firstly, it is important to explore two different influential factors of in game advertisements – identification and product and brand familiarity. Secondly, the effects of in game advertisements will be discussed. Specifically, the effects on purchase intention and brand recall.

2.5. *Product and brand familiarity*

This research includes brand placement in a let's play video of a digital game. A factor that is worth exploring is whether brand familiarity might affect the results of this research. Moreover, another aspect that this research will attempt to explore is whether familiarity with other aspects involved in this research will influence the results. Such as general familiarity with video games or fashion industry, and specifically familiarity with the game GTA San Andreas.

The first step of trying to predict the possible effects of those factors is defining what exactly brand familiarity is. A study conducted by Alba & Hutchinson (1987) proposes that brand familiarity can be described as a person, who has previously experienced some kind of exposure to the items – directly or indirectly. By trying to put this definition in other words and connecting it with brands, it is possible to establish a new description for it. If a person has had any experiences with the brand or a product, and has obtained a first impression of it, they are familiar with it.

In study on effects of brand familiarity, experience and information on online apparel purchase Park & Stoel (2005) have found that "brands that are perceived to be familiar by consumers are more likely to be purchased" (p. 157). By interpreting this statement and the context of it, it is possible to propose a new theory related to the topic of this study. There is a possibility that fashion advertisements in digital games that display popular brands, might increase the number of online sales of those brands. The results of another research on product placement in video games also supports the previous theories. It states that more popular brands will stay in players memory easier and will need to be repeated fewer times than less popular ones to achieve the same effect (Martí-Parreño et al., 2017). To rephrase it, brands that players are more familiar with can be placed in a digital game less, but they will stay in memory equally to less popular brands that appear in the game more frequently.

2.6. *Purchase intention*

Purchase intention is a plan to buy specific services or products in the future (Kasemsap, 2017). It's the willingness to purchase a service/product under certain conditions (Usman, 2019). It is often measured through surveys questioning consumers on how likely they are to buy a certain product and the answer often ranging on a scale from "definitely will buy" to "definitely will not buy" and more options in between (Morwitz, 2012). Several studies have investigated the impact of different factors such as price, quality, brand identities, packaging, brand awareness... on customers purchase intention (Mirabi, 2015; Arslan, 2010; Azhini, 2012; Tariq et al., 2013; Tih and Lee, 2013). The linkage between brand congruity, prominence, integration and purchase intention is investigated in multiple works (Soebandhi, 2017; Gross 2010; Gupta 1998).

According to Ghosh (1990) purchase intention is an effective tool to predict the buying process. Moreover, internal or external motivations have an effect on consumers during the buying process (Gogoi, 2013). As suggested by Hernández and Küster (2012) purchase intention is highly affected by consumers' attitude toward the brand. Product quality has a significant impact on assessing purchase intention (Tariq et al., 2013). Chi et al. (2008) suggest that consumers will be more inclined to purchase products with higher quality. Purchase intention is also shown to be linked with perceived value, as influenced by perceived price and perceived quality, which is suggested by multiple conceptual models (Zeithaml, 1988; Dodds and Monroe, 1985). Although purchase intention assumed to be an imperfect indicator of sales in the future, the correlation between the two cannot be rejected and therefore purchase intention is used to estimate demand for existing or future products (Namias, 1959; Morwitz 2014; Sheeran, 2007).

2.7. *Brand recall*

Another important aspect of this research is brand recall after it is displayed in a let's play video. This definition sometimes is also associated with the brand awareness which will also be explored. To begin with, brand awareness is defined as the degree to which the brand identities serve their function. Particularly, brand name awareness is the likelihood that a brand name will come to mind and how easily it does so. Brand recall and brand recognition are the two dimensions of brand awareness (Keller, 1993). When reviewing the literature, according to Prashar et al. (2012), brand recall refers to how well a respondent recalls a brand in a given situation. It is defined as the extent to which consumers recalls brand advertising and messages. It is a type of brand awareness where the consumer, using information from memory identifies or recognizes a brand. Brand recall is reproduction of an item or brand for which the consumer already has prior knowledge or experience (Bagozzi & Sailk, 1983). Brand recall, i.e., unaided recall, relates to consumer's ability, when given the product category but no cues about the brand itself, to remember the brand from memory, hence unaided. It differs from brand recognition in that it does not originate from external incentive. Brand recognition on the other hand is the respondent remembering the brand given the brand as a cue (Baumann, Hamin & Chong, 2015; Keller, 1993).

In accordance with another definition recall can be aided or unaided. When a consumer is given a brand name as advertisement, it indicates to aided recall. A consumer, subject to unbranded advertisement, knowing the name of the brand, refers to unaided recall. The dual-process theory states that brand recognition is a sub-process of brand recall (Anderson & Bower, 1972). The role of memory is significant when we consider recalling a brand as some elements thereof help in retrieving the brand plus the other competing ones and thus making a consideration set for the consumer's final purchase decision (Nedungadi, 1990). As another definition when the consumer retrieves the target item from memory when a cue is provided to

them, that is a brand recall (Aaker 1996). For current studies purposes brand recall will be defined as let's plays viewers ability to remember the fashion brand after watching a let's play video.

2.8. *Hypotheses and sub-research question*

H1: Brand advertisement on the character's clothing has a positive effect on the brand purchase intention

Quite frequently gamers identify themselves with a game character, by customizing their appearance, either by seeing a resemblance between themselves and the character or by trying to create their ideal self. Noticeably, "players who customize their character and fantasize about it so that it more closely fits their ideal self-image should also identify more strongly" (Looy et al., 2012, p. 215). According to that, it is possible to assume that identification with the game character can lead to a positive attitude towards the advertisements placed on the character's clothing. Anothr scientific paper supports it by stating "if consumers form a positive attitude on the advertisement, the consumer's willingness to buy the product or brand advertised will also be formed" (Noor, Sreenivasan, and Ismail (2013), as cited in Soebandhi & Andriansyah, 2017, p. 267).

H2: Brand advertisement in the game environment has a positive effect on the brand purchase intention

There are already several confirmed aspects from literature sources which aim to improve the in-game advertisement effectiveness. Such as making the brand advertisements more noticable, strategically picking the location for them and connecting them with game play, this can lead to establishing non-verbal player-advertisement communication (Toh & Leng, 2014).

In a research on product brand placement Martí-Parreño et al. (2017) advice marketers to communicate the purchasing process itself within a game, for example, by inserting a merchandized shop in the game environment. Which will also be tested in this research. In other

words, placing an advertisement in the game environment can lead to more interaction with the advertised brand. In case of this study, entering a fashion brand store. It can give both a realistic feeling and provide an interaction with the advertised brands.

H3: Brand recall is stronger when advertisement is placed in the game environment than when it is placed on the main character's clothing

"Findings indicate that large size brands placed in a racing game are recalled and recognised significantly better than smaller size billboards" (Chaney et al., 2018, p. 18). Within the context of specific let's play videos the environmental advertisements are noticeably bigger than the advertisements placed on game characters clothing. This can lead to environmental advertisements being recognised and recalled better.

According to a research conducted by Lee & Faber (2018) focal item placement led to much higher recall and recognition rates of brands compared with peripheral placement. For this reason it is possible to suggest that environmental advertisements that are placed focally in the specific let's play videos will have a higher recall rate than the advertisements that are located on the characters clothing.

H4: People with gaming experience will recall brands better than people with no to little gaming experience

When experienced gamers play a game they are focusing on the game much more than on the side factors, such as advertisements. However, if the player is new to gaming then the focus is spread over the game environment and pays more attention to the details, including advertisements. A research about focal and peripheral advertisements in the game suggests that when engagement with the game is high, game playing will take all the attentional resources and reduce ability to notice secondary brand placements. This can lead to cognitive overload and person fully ignoring every single brand placement (Lee & Faber, 2007). After looking at

this theory, it is possible to suggest that experienced players most likely will notice more details, since they will be more used to the game process.

Sub-RQ: What are the effects of combining environmental and character advertisements in a let's play on the brand recall?

After analysing effects of character and in game advertisements and various sources that suppport both theories a new question appears. What happens if environmental and character advertisements are combined? For this reason a sub-research question has been established to find out, whether combination of environmental and avatar advertisements results in higher brand recall rates.

Table 1

Hypotheses and sub-research question

Hypothesis 1	Brand advertisement on the character's clothing has a positive effect on the brand purchase intention
Hypothesis 2	Brand advertisement in the game environment has a positive effect on the brand purchase intention.
Hypothesis 3	Brand recall is stronger when advertisement is placed in the game environment than when it is placed on the main character's clothing.
Hypothesis 4	People with gaming experience will recall brands better than people with no to little gaming experience
Sub-research question	What are the effects of combining environmental and character advertisements in a let's play on the brand recall?

3. Methods

3.1. *Design*

The aim of this study was to investigate the effects of fashion advertisement placement on the brand recall and purchase intention within a let's play video. The study was designed as an online experiment in the form of a survey. The data collected for this study was analysed by use of a 2 (no ad in environment versus ad in environment) x2 (no ad on clothes versus ad on clothes) between-subjects design. Each participant was exposed to one out of four different conditions. Those conditions were represented in a form of a let's play video and were distributed as equally as possible (see Table 1). The conditions were:

1. Nike advertisement on the character's shirt (avatar advertisement)
2. Nike store (environmental advertisement)
3. Nike advertisement on the character's shirt and Nike store (avatar and environmental advertisement)
4. No advertisements

After being exposed to one of the conditions, participants had to answer questions about the brand they saw and its placement. Brand recall was tested in two ways: open recall and cued recall. It was followed by questions on purchase intention, identification with the game character and the streamer. To test the possible effects of those factors, the last set of questions covered the following familiarity aspects of the displayed conditions - familiarity with the displayed brand, the displayed game, gaming, and fashion in general.

Table 2.

Distribution between conditions

	No ad on clothes	Ad on clothes
No ad in environment	N = 54	N = 49
Ad in environment	N = 56	N = 59

3.2. *Stimuli*

Although this research focuses on let's plays, the crucial aspect of creating one is finding a suitable game and modifying it for the research purposes. Therefore, the process began with finding a video game that matches two criterions. The first criterion was that it must have a space for inserting fashion advertisements on the character and within the game environment. The second criterion was that it does not block two mods - modified assets that can be inserted in the game environment - that are inserted at the same time. To achieve those requirements games such as NBA, The Sims, GTA V and many more were taken into consideration. However, all of the previously mentioned games either had a very strong protection system and required a developer's code to modify it in any way or were not compatible with two mods at the same time.

Finally, the game Grand Theft Auto (GTA): San Andreas was used for creating let's play videos. It was published by Rockstar Games in the year 2004 and is an action-adventure game developed by Rockstar North. ("Grand Theft Auto: San Andreas", 2021). The game is running on RenderWare engine. The game environment is created similarly to real life environment. The made-up state of U.S. San Andreas consists of three cities - Los Santos, San Fierro and Las Venturas ("Grand Theft Auto: San Andreas", 2021). The main character is Carl Johnson (CJ), who is a criminal that has returned to his hometown. The aim of the game is completing missions related to life of crime, which allows to unlock new locations and introduces new characters within the game environment. GTA San Andreas was picked due to its older security system and ability to modify it for research purposes.

3.2.1. *Game modding*

The first step of modding the game GTA San Andreas was obtaining the official version of it from the Rockstar Games Launcher. This was necessary to avoid any unoriginal game formats

that are available for sale. Then the game had to be played for several hours to unlock the whole map and gain the possibility to visit the specific store, where a modified advertisement was inserted.

Secondly, already existing game mods were found on websites that are created for sharing and discussing the subject. Specifically, the mods used for this research were found and taken from online sources. To continue, the incapability of those mods was an issue. For this reason, the software "OpenIV" was used and both mods were converted into the compatible format.

3.2.2. *Let's play*

For this research purposes four let's play videos were created, so that they would fit the research conditions. To guarantee the similarity of each of the let's plays a script with description of each movement was created. By following the script and using the necessary versions of the modified game the videos were recorded. The "Xbox Game Bar" was used for capturing the video.

After the successful video capture, the first video editing was done by using "Open shot video editor", so that all the extra time would be cut off and the duration of all 4 videos would be the same. Afterwards one voice over version was recorded that was used for all conditions. Finally, by using "Adobe Premiere Pro" software the videos and voice over were combined, the streamer frame was inserted and let's plays were finalized. Afterwards those videos were published on YouTube.

Figure 1: No ad on the character (left) and ad on the character (right)

Figure 2: No ad in the environment (left) and ad in the environment (right)

3.2.3. *Pre-testing*

Before the survey was shared publicly, a pre-testing of it was conducted. There were 11 participants in total with different nationalities – Latvian (N = 6), Turkish (N = 2), Dutch (N = 1), German (N = 1), Indonesian (N = 1). Each test participant was asked to not participate in the final version of the survey once it is published. The age of respondents ranged between 21 and 46 years.

The aim of pre-testing was to identify whether the data set projected the collected data as intended, whether the survey needs some improvements and whether the questions are fully understood. Last, but not least the collected results were analysed in SPSS to measure the reliability between the items of 5-point Likert scale.

The first issue that came across during the pre-testing was that people tend to skip the questions that are not mandatory, since there were empty replies in open-ended questions (N

=4). The survey was adjusted accordingly, and questions required to fill out an answer, therefore it was impossible to skip open ended questions without leaving the survey. As the next step, the responses were manually examined to see whether the displayed video conditions match with the responses of participants to the cued and open-ended recall questions. There was only one exceptional case, where the answers did not match with the criterion.

3.3. *Procedure*

The data collection took place in an online survey platform "Qualtrics". At first respondents were introduced with the aim of the research and asked to give a consent for participating in the specific research and confirm that they are at least 18 years of age. If the participant was below the age of 18, they were automatically transferred to the end page of the survey. The first section consisted of general questions about demographics, such as age, gender and nationality. Then respondents were forwarded to the next section and informed about watching a let's play video for less than four minutes. Afterwards one out of four let's play video versions was displayed - with no advertisements, with advertisements on the character, with advertisements in the game environment or with advertisements on the character and in the environment.

After finishing the video, the participants were informed about the follow up questions. At first open ended questions about brands in the video and their location were asked. Then the same questions were asked with cued recall. Furthermore, multiple choice questions about brands in the video and their location were asked. Then a set of statements about brand recall, purchase intention, identification with the game character, identification with the streamer (person playing the game), attitude towards Nike, familiarity with the displayed game and gaming in general, and fashion industry followed. All of those statements were rated with 5-point Likert scales from "Strongly disagree" to "Strongly agree". Each scale was presented in a separate block. Finally, the full responses were exported to statistical analysis software "SPSS version 27" and analysed.

3.4. *Participants*

The participants for this research were collected by use of snowball sampling method. The survey was shared on various social media channels, such as Instagram, Facebook, LinkedIn, Reddit and WhatsApp. On Facebook and Reddit, the survey was shared on the gaming related channels. Additionally, sharing it on Reddit required permission of group moderators. They were provided with a short description of the aim of the study and the name of educational institution, where the study was held. In total *(N = 518)* responses were collected. Many respondents dropped out of survey in the question which involved watching a let's play video or at the follow up questions regarding the let's play video. The responses were analysed by the percentage of finished questions. A criterion was set that at least 94% of the survey questions must be answered for response to be included in the further data analysis. In cases where the let's play video was skipped the response was removed from the data set. Also the responses that contained inappropriate and not relevant answers were removed. In the end *(N = 218)* responses were picked for the final data analysis based on the sufficiency and relevance for data analysis.

The age of participants ranged between 18 and 61 years (*M = 26.16, SD = 7.31).* The ration between genders was strongly dominated by 65.1% male respondents (*N = 142*), 32.1% female (*N = 70*), 1,4% non-binary / third gender (*N = 3*), and 1.4% (*N = 3*) of the respondents preferred to not enclosure their gender. There were 4 dominant nationalities – Latvian (19.3%), American (14.2%), German (12.4%), and Dutch (7.3%). Additionally, there were respondents from 37 other nationalities.

Table 3.

Characteristics of the respondents

Variable	Category	Total % (N)
Gender		
	Male	65.1% (*N = 142*)
	Female	32.1% (*N = 70*)
	Non-binary / third gender	1.4% (*N = 3*)
	No response	1.4% (*N = 3*)
Nationality		
	Latvian	19.3%
	American	14.2%
	German	12.4%
	Dutch	7.3%
Age*	Years	18 – 61 (*M = 26.16*)

*Since the age cannot be expressed in percentages, the age range and mean are reported.

3.5.*Measures*

As previously mentioned, in this survey data was collected in a form of survey. Each topic had a separate survey section. Each scale item was measured with a 5-point Likert scale ranging from "*Strongly disagree*" to "*Strongly agree*". In the data analysis process those ranges were relabelled according to the questions. For each scale a reliability test was performed and each one of them showed good to excellent Cronbach's Alpha score. In other words, all the items were found to be sufficient, which allowed to proceed with the research. The purchase intention scale consisting of 5 items (α = .66) was found to be reliable. Similarly, also identification with Avatar (α = .82)., identification with the player (α = .88), familiarity with GTA (α = .89),

familiarity with gaming (α = .92), familiarity with fashion (α = .84). The Cronbach`s Alpha score of familiarity with Nike was negative in the pre-testing stage (α = .27). For this reason, the scale item wording was adjusted, and the reliability analysis was performed once again after the date collection and showed good Cronbach's Alpha score (α = .78). In the following paragraphs each measurement will be described one by one.

3.5.1. *Open recall and cued recall*

The brand recall was measured in two ways – by open recall and with cued recall. The aim of it was measuring success rate of recalling the brands between subjects. The answers to open recall questions were manually recoded in a new variable, so that they would fit the context and be ready for analysis. Changes of the data set, such as correcting grammar mistakes and writing the brand name in the same manner were implemented. Lastly, other brands that appeared in the responses, but were not displayed in the let's play videos were labelled as "*Other".* For each recall type, open and cued, new dichotomous variables "*Successful_Brand_Recall*" and "*Successful_Cued_Brand_Recall*" were computed. The two possible values of each variable were "Successful" or "Failed". The aim of those variables was displaying whether the brand recall was successful.

3.5.2. *Purchase intention*

The purchase intention scale consisted of five items "I want to buy a Nike clothing item", I would buy a Nike clothing item over other brands", "I am considering buying Nike brand products", "If I see a Nike product I like, I would consider buying it", and "I plan on buying Nike brand products". All the items were measured with a 5-point Likert scale ranging from "strongly agree" to "strongly disagree". The performed reliability analysis showed that the Cronbach's alpha value proved high internal consistency (*α = .87*).

3.5.3. *Familiarity with CJ*

The familiarity with CJ, the main character of the game scale consisted of six items. “I feel like I am similar to CJ”, “I have positive feelings towards CJ”, “CJ and I have the same interests”, “CJ and I have similar personalities, “CJ and I have the same goals”, and “I want to be like CJ”. All the items were measured with a 5-point Likert scale ranging from “strongly agree” to “strongly disagree”. The performed reliability analysis showed that the Cronbach’s alpha value proved high internal consistency ($\alpha = .82$).

3.5.4. *Familiarity with Mike*

The familiarity with Mike, the person playing the game in the let’s play video, scale consisted of six items. “I feel like I am similar to Mike”, “I have positive feelings towards Mike”, “Mike and I have the same interests”, “Mike and I have similar personalities, “Mike and I have the same goals”, and “I want to be like Mike”. All the items were measured with a 5-point Likert scale ranging from “strongly agree” to “strongly disagree”. The performed reliability analysis showed that the Cronbach’s alpha value proved high internal consistency ($\alpha = .88$).

3.5.5. *Familiarity with Nike*

The purchase intention scale consisted of five items “I am familiar with the Nike brand”, “I can recognise the Nike logo easily”, “If I hear the word "Nike", “I can imagine what the brand's items look like”, “I would recognise a Nike item among items of other brands”, and “I have heard a lot about Nike”. All the items were measured with a 5-point Likert scale ranging from “strongly agree” to “strongly disagree”. The performed reliability analysis showed that the Cronbach’s alpha value proved comparably high internal consistency ($\alpha = .78$).

3.5.6. *Familiarity with GTA San Andreas*

The familiarity with GTA San Andreas, the game in which advertisements were inserted and tested, consisted of five items. “I am familiar with the game GTA San Andreas”, “I have played GTA San Andreas before”, “I know the main character of GTA San Andreas”, “I know the

storyline of GTA San Andreas", and "I have watched videos about GTA San Andreas". All the items were measured with a 5-point Likert scale ranging from "strongly agree" to "strongly disagree". The performed reliability analysis showed that the Cronbach's alpha value proved high internal consistency ($\alpha = .89$).

3.5.7. *Familiarity with gaming / gaming experience*

The familiarity with gaming, in other words gaming experience, consisted of five items. "I have played video games before", "I like video games", "I follow news about video games", "I have video games on my electronic devices", and "I like playing video games in my free time". .All the items were measured with a 5-point Likert scale ranging from "strongly agree" to "strongly disagree". The performed reliability analysis showed that the Cronbach's alpha value proved excellent internal consistency ($\alpha = .92$).

3.5.8. *Familiarity with fashion*

Similarly, the familiarity with fashion scale consisted of five items. "I pay attention to fashion", "I follow the latest fashion trends", "I care about fashion", "I know many popular fashion brands", and "Fashion is important to me". All the items were measured with a 5-point Likert scale ranging from "strongly agree" to "strongly disagree". The performed reliability analysis showed that the Cronbach's alpha value proved excellent internal consistency ($\alpha = .93$).

4. Results

The data collected was modified and analysed by use of 27th version of statistical analysis software SPSS. The following analyses were performed to analyse the collected data - Reliability analysis, Cross tabulation, UNIANOVA, Chi-Square tests, T-tests and Logistic regression.

4.1.*Relation between ad placement and brand purchase intention*

In this research the effect of two different advertisement placements was analysed (H 1& H2). One advertisement was placed on the game character's clothing (avatar) and another in the environment of the game. Importantly, for the reliability of the results a test with no advertisement placement and one with both placements were included in this research. For testing those hypotheses two-way Univariate Analysis of Variance was performed.

Findings showed that placing the ad on the character`s clothing has no significant effect on purchase intention ($F(1,214) = .678$, $p = .411$, partial $\eta 2 = .003$). Similarly, there was no significant effect found of placing advertisement in the environment on the purchase intention ($F(1,214) = 3.713$, $p = .055$, partial $\eta 2 = .017$). Finally, interaction effect was found regarding purchase intention when the advertisement was placed both in the environment and on the character`s clothing ($F(1,214) = .893$, $p = .346$, partial $\eta 2 = .004$).

To sum it up, the H1 claiming that the placement of advertisement on character`s clothing has a positive effect on brand purchase intention was rejected. Similarly, the H2 explains that the placement of advertisement in the environment of the game has a positive effect on brand purchase intention. This hypothesis was also rejected (see the Table 4).

Table 4.

Results of two-way ANOVA for purchase intention depending on brand placement

Brand placement	F	Mean	Error df	Sig.	Partial η2
Avatar	.678	3.00	1	.411	0.03
Environment	3.713	2.64	1	.055	.017
Environment * Avatar	.893	2.63	1	.346	.004

4.2. *Brand recall*

This study attempted to explore the effects of ad placement on brand recall. The established hypothesis suggested that brand recall is stronger when advertisement is placed in the game environment than when it is placed on the main character's clothing (H3). For testing purposes one advertisement was placed on the game character's clothing and another in the environment of the game in a let's play video. Additionally, the effect of gaming experience on brand recall was addressed. The H4 suggested that people with gaming experience will recall brands better than people with no to little gaming experience. For testing H3 crosstabulation analysis was performed, but for testing H4 logistic regression and t-test analysis was used.

In a scenario with open recall, findings showed that placing the ad on the character`s clothing or in the environment as opposed to no advertisements at all, has a positive effect on recall. In the test condition with no advertisements the success rate was only 50.9% where respondents confirmed that they did not see them. When respondents were displayed a condition with an advertisement on characters clothing the success rate of open brand recall ($p = .012$, $N = 73$) was 67.6%. The placement of an advertisement in the environment resulted in a 67.8% success rate with open recall ($p = .006$, $N = 78$). A significant positive effect was found by combining environmental and character advertisements. The success rate in this condition with open recall ($p = .001$) was 71.2%. Additionally, the results of logistic regression on open recall can be found in Table 5.

Table 5.

Logistic regression: Variables in the Equation of open recall

	B	S.E.	Wald	df	Sig.	Exp(B)

Step 1[a]	Brand in Environment (1)	.761	.285	7.153	1	.007	2.140
	Brand on Avatar (1)	.694	.285	5.921	1	.015	2.002
	Constant	-.350	.242	2.094	1	.148	.705

a. Variable(s) entered on step 1: Brand in Environment, Brand on Avatar.

In the second scenario with cued recall, findings showed that placing the advertisement on the character`s clothing or in the environment as opposed to no advertisements at all, did not have significant differences in the results. In the test condition with no advertisements on the avatar the success rate was 82.7% (p = .275). When respondents were displayed a condition with an advertisement on avatar the success rate of brand recall was 88%. The placement of an ad in the environment resulted in 89.6% success rate (p = .061). However, although p-value was insignificant a positive effect was considered by combining environmental and character advertisements. The success rate in this condition with cued recall (p = 0.96) was 94.9%. The results of logistic regression on cued recall can be found in Table 6.

Table 6.

Logistic regression: Variables in the Equation of cued recall

		B	S.E.	Wald	df	Sig.	Exp(B)
Step 1[a]	Brand in Environment (1)	.715	.395	3.283	1	.070	2.045
	Brand on Avatar (1)	.402	.392	1.055	1	.304	1.495
	Constant	1.244	.298	17.429	1	.000	3.469

a. Variable(s) entered on step 1: Brand in Environment, Brand on Avatar.

The H3 claims that the brand recall is stronger when advertisement is placed in the game environment, compared to when it is placed on the main character's clothing. This hypothesis was confirmed, since the environmental advertising showed slightly higher and significant results. Moreover, after looking at the results of open and cued recall of combining environmental and avatar advertisements an answer to sub-research has been found. The results showed that combing both advertisement types can lead to a significant increase in brand recall rates.

The H4 suggests that people with gaming experience will recall brands better than people with no to little gaming experience. A logistic regression and t-test was performed to test this hypothesis. This hypothesis was rejected, since no correlation between gaming experience and brand recall could be found. Logistic regression ($p = .751$) and t-test ($p = .578$). For this reason, H4 was rejected.

4.3. *Identification and familiarity*

This research attempted to test the effects of identification and familiarity with certain research aspects on the brand recall by performing crosstabulation analysis. The tested subjects for identification were “Identification with CJ”, the main game character, and “Identification with Mike” - the let’s play streamer. Similarly, to gaming experience, no significant effect identification with CJ ($p = .885$) or identification with Mike ($p = .629$) and brand recall was found, since the average successful brand recall scores were very similar.

The tested subjects for effects of familiarity or identification on purchase intention analysed by performing crosstabulation analysis had slightly different results. There were no significant differences among levels of identification with Mike ($p = .868$) or CJ ($p = .072$) on the purchase intention. The tested subjects “familiarity with Nike” ($p = .397$) and “familiarity with GTA San Andreas” ($p = .547$) also had no significant effect on purchase intention. However, significant results were found in “familiarity with fashion” and purchase intention ($p = .044$). The results

showed that people who are not familiar with fashion also have no intention to purchase items (25%). On the other hand, respondents who rated themselves as very familiar with fashion were willing to purchase the items (25%).

To conclude, no correlation between identification of the main game character and let's play streamer on the brand recall or purchase intention was found. Similarly, no correlation was found among every subject tested for familiarity and the brand recall.

5. Discussion & practical implications and future research

5.1. *Discussion*

The main purpose of this study was to investigate factors affecting brand recall and purchase intention after fashion advertisements were displayed in a let's play video. A digital game was specifically modified for this research purposes and let's play videos were created. The data collection took place in survey form and results of 218 participants were analysed. Each survey respondent was displayed to one of four different conditions of let's play video. Overall aim of this study was finding out effects of brand placement on purchase intention and brand recall. Additionally, this study tried to investigate the relation between person having gaming experience and recalling the brand. For this study a 2 (no ad in environment versus ad in environment) x2 (no ad on avatar vs ad on avatar) between-subjects design was used.

After analysing the literature overall concepts were described according to the purpose of this study. The brand recall was defined as an ability to remember and recognize a fashion brand. The purchase intention was defined as willingness to buy the items of Nike brand that was used in experiment section of this study. A reearch by Toh & Leng (2014) suggsted that a crucial point for memorizing a brand advertisement is its size and location. For this reason two different types of advertisement were tested – a smaller one on the shirt of an avatar and a bigger one in the environment in a form of the store.

When it comes to purchase intention, this study did not find any signifficant effect on brand placement in the environment with the purchase intention. Neither an advertisement placed in an environment had an effect on purchase intention. However, after testing several other factors a significant results were found in relation of familiarity with fashion and purchase intention. People who are very interested in fashion were willing to purchase the items from the brand they were displayed to. On the other hand, people with no interest in fashion had no purchase intention. This finding fits with the study from Toh and Leng (2014) which pointed out that people who are more interested in specific items would be more willing to purchase the items.

To continue, significant results were found from perspective of brand recall after being displayed to an advertisement. The findings suggest that advertisements placed in the game environment are slightly more effective than advertisements placed on an avatar. Additionally, if environmental advertisement is combined with avatar advertisement it significally increases the brand recall rates. What does this mean? If a decision needs to be made, whether to place an advertisement on the game character or in the environment, then environmental advertisement will lead to better results. However, if there is an opportunity combine both types of advertisements within a game, then it is the best option for overall effectiveness of advertising.

Finally, according to previously performed literature analysis, an assumtion that people with gaming experience will notice brand better that people with no to little gaming experience was established. The results could not approve this assumption and no siggnificant relation between gaming experience and and brand recall was found.

To sum it up, according to the findings, it is possible to conclude that if the aim of marketing strategy is increasing the selling rates of fashion items, then advertisement should be placed on the main character of the game. On the other hand, if the aim of the marketing strategy

is making the target audience remember the fashion brand, then both environmental and avatar advertisements are equally effective. An important aspect for remembering the advertisement, is that combination of both types of advertisement will have a better effect than each of them separately. Worth remembering is finding from previously performed research by Lee & Faber (2007), which states that the brand placement of primary and secondary interfaces of the game can lead to cognitive overload and not noticing the brand. Therefore an important aspect to take into account might be not filling the game with advertisements, but placing them strategically within the game environment, so that they are not left unnoticed.

5.2. *Practical implications and future research*

Although this study could be helpful as a reference for future studies addressing this topic, it had several practical implications. Firstly, since this is a new and unexplored theme, there were no scientific sources for guidance in this research. The hypotheses were established based on a combination of academic papers that specify on the explored topics in different fields. In other words, none of the analysed papers focused specifically on combining digital game and fashion industries. The reason for that is no evidence of previously performed scientific research on the theme of this study. However, after conducting this research several recommendations for further research can be established.

Firstly, since this study did not find items that truly influence purchase intention an opportunity in the future could be finding factors, that could possibly affect the purchase intention of let's play viewers. Secondly, performing an experiment with pseudo brand instead of a well know one. This could be more effective for exploring the advertising effects compared to using a very popular brand. Exploration of those factors could lead to establishing more effective advertising strategies in the future.

To continue, the effects of time the advertisement is on the screen is yet to be explored. In other words, would people remember the brand better if they would have looked at it for a longer time? A related aspect that could be explored is effect of interaction with the brand. In the experiment of this study the game character visited a store with advertisements, but the effects of implementing fashion brand placement in a mission or task is yet to be discovered.

Another aspect that is worth attention is actor. The let's play streamer used for this study was not a professional in the field, but an amateur actor who tried to recreate the role of a streamer. By taking into account para-social relation theory, possibly, a significant effect of identification could be found if a real streamer with an established audience was used (Brown & Basil, 2010). Similarly, the results could have been affected, due to imitated let's play videos. Thus, in future research either professional and known let's players or professional actors could be used. The main reason for giving this recommendation is due to receiving negative comments from respondents in the process of the research. The comments on gaming channels stated that this is not a real let's play streamer and that the let's play video is unrealistic. According to this, the study results can only benefit from a person that creates a feeling of let's play video being realistic.

References

Alba, J. W., & Hutchinson, J. W. (1987). Dimensions of Consumer Expertise. Journal of Consumer Research, 13(4), 411–454. DOI: 10.1086/209080

Barton, J. (2021, May 18). *Luxury Fashion Brands Turn to Gaming to Attract New Buyers*. Wired. Retrieved July 10, 2021, from https://www.wired.com/story/luxury-fashion-brands-video-games-shopping/

Baumann, C., Hamin, H., & Chong, A. (2015). The role of brand exposure and experience on brand recall—Product durables vis-à-vis FMCG. Journal of Retailing and Consumer Services, 23, 21-31. DOI: 10.1016/j.jretconser.2014.11.003

Brown, W. J., & Basil, M. D. (2010). Parasocial Interaction and Identification: Social Change Processes for Effective Health Interventions. *Health Communication, 25*(6–7), 601–602. DOI: 10.1080/10410236.2010.496830

Caves, R. E. (2000). *Creative industries: Contracts between art and commerce* (No. 20). Harvard University Press**.**

Chaney, I., Hosany, S., Wu, M. S. S., Chen, C. H. S., & Nguyen, B. (2018). Size does matter: Effects of in-game advertising stimuli on brand recall and brand recognition. *Computers in Human Behavior*, *86*, 311–318. DOI: 10.1016/j.chb.2018.05.007

Chang, Y., Yan, J., Zhang, J., & Luo, J. (2010). Online In-Game Advertising Effect: Examining the Influence of a Match Between Games and Advertising. *Journal of Interactive Advertising*, *11*(1), 63–73. DOI: 10.1080/15252019.2010.10722178

Clement, J. (2021, May 25). *Gaming video content revenue worldwide 2016–2020*. Statista. Retrieved September 22, 2021, from https://www.statista.com/statistics/823289/gvc-revenue-worldwide/

Clement, J. (2021, September 7). *Global video game market value from 2020 to 2025*. Statista. Retrieved September 22, 2021, from https://www.statista.com/statistics/292056/video-game-market-value-worldwide/

Clement, J. (2021, September 7). *Number of video gamers worldwide 2015–2023*. Statista. Retrieved September 22, 2021, from https://www.statista.com/statistics/748044/number-video-gamers-world/

Crawford, G. (2015). Is it in the Game? Reconsidering Play Spaces, Game Definitions, Theming, and Sports Videogames. *Games and Culture*, *10*(6), 571–592. DOI: 10.1177/1555412014566235

Dahlen, M., & Rosengren, S. (2016). *If Advertising Won't Die, What Will It Be? Toward a Working Definition of Advertising. Journal of Advertising, 45(3), 334–345.* DOI: 10.1080/00913367.2016.1172387

Dean B. (2021, October 8). *Twitch Usage and Growth Statistics: How Many People Use Twitch in 2021?* Backlinko. Retrieved July 23, 2021, from https://backlinko.com/twitch-users

Elly A. Konijn & Johan F. Hoorn (2005) Some Like It Bad: Testing a Model for Perceiving and Experiencing Fictional Characters, Media Psychology, 7:2, 107-144, DOI: 10.1207/S1532785XMEP0702_1

Gilette, F., & Soper, S. (2015, November 19). *How Twitch Turned Video Game Voyeurism Into Big Business?* Bloomberg. Retrieved July 28, 2021, from https://www.bloomberg.com/features/2015-the-big-business-of-twitch/

Gogoi, B. (2013). Study of antecedents of purchase intention and its effect on brand loyalty of private label brand of apparel. International Journal of Sales & Marketing, 3(2), 73-86.

Grand Theft Auto: San Andreas. (2021, November 14). Wikipedia. Retrieved November 14, 2021, from https://en.wikipedia.org/wiki/Grand_Theft_Auto:_San_Andreas

Horton, D., & Richard Wohl, R. (1956). Mass Communication and Para-Social Interaction. *Psychiatry*, *19*(3), 215–229. DOI: 10.1080/00332747.1956.11023049

Kasemsap, K. (2017). Mastering Customer Service, Customer Experience, and Customer Orientation in the Hospitality and Tourism Industry. *Handbook of Research on Holistic Optimization Techniques in the Hospitality, Tourism, and Travel Industry*, 115–140. DOI: 10.4018/978-1-5225-1054-3.ch005

Keller, K. L. (1993). Conceptualizing, measuring, and managing customer-based brand equity. Journal of marketing, 57(1), 1-22. DOI: 10.1177/002224299305700101

Kelman, H. C. (1958b). Compliance, identification, and internalization three processes of attitude change. *Journal of Conflict Resolution*, *2*(1), 51–60. DOI: 10.1177/002200275800200106

Kerr, Gayle & Richards, Jef (2020) Redefining advertising in research and practice. International *Journal of Advertising*. DOI: 10.1080/02650487.2020.1769407

Khurram, M., Qadeer, F., & Sheeraz, M. (2018). The Role of Brand Recall, Brand Recognition and Price Consciousness in Understanding Actual Purchase. Journal of Research in Social Sciences, 6(2), 219-241. DOI: 10.24912/pr.v5i2.10210

Küster-Boluda, I., & Hernández-Fernández, A. (2012). Brand impact on purchase intention. An approach in social networks channel. *Economics and Business Letters*, *1*(2), 1. DOI: 10.17811/ebl.1.2.2012.1-9

Lee, M., & Faber, R. J. (2007). Effects of Product Placement in On-Line Games on Brand Memory: A Perspective of the Limited-Capacity Model of Attention. *Journal of Advertising*, *36*(4), 75–90. DOI: 10.2753/JOA0091-3367360406

Lee, Y. H., Yuan, C. W., & Wohn, D. Y. (2020). How Video Streamers' Mental Health Disclosures Affect Viewers' Risk Perceptions. *Health Communication*, 1–11. DOI: 10.1080/10410236.2020.1808405

Martí-Parreño, J., Bermejo-Berros, J., & Aldás-Manzano, J. (2017). Product Placement in Video Games: The Effect of Brand Familiarity and Repetition on Consumers' Memory. *Journal of Interactive Marketing*, *38*, 55–63. DOI: 10.1016/j.intmar.2016.12.001

Morwitz, V. (2012). Consumers' Purchase Intentions and their Behavior. *Foundations and Trends® in Marketing*, *7*(3), 181–230. DOI: 10.1561/1700000036

Namias, J. (1959). Intentions to Purchase Compared with Actual Purchases of Household Durables. *Journal of Marketing*, *24*(1), 26–30. DOI: 10.1177/002224295902400105

Park, J., & Stoel, L. (2005). Effect of brand familiarity, experience and information on online apparel purchase. *International Journal of Retail & Distribution Management*, *33*(2), 148–160. DOI: 1108/09590550510581476

Prashar, B., Dahir, S., & Sharma, A. (2012). Study of brand recall of consumer durables among consumers in Punjab. International Journal of Research in Commerce, IT and Mgmt, 2(7), 84-88.

Richards, J. I., & Curran, C. M. (2002). Oracles on "advertising": Searching for a definition. *Journal of Advertising*, *31*(2), 63-77. DOI:10.1080/00913367.2016.1172387

Shah, S. S. H., Aziz, J., Jaffari, A. R., Waris, S., Ejaz, W., Fatima, M., & Sherazi, S. K. (2012). The impact of brands on consumer purchase intentions. Asian Journal of Business Management, 4(2), 105-110.

Shahbandeh, M. (2021, January 21). *Global revenue of the apparel market, 2012–2025*. Statista. Retrieved September 23, 2021, from https://www.statista.com/forecasts/821415/value-of-the-global-apparel-market

Sheeran, P. (2002). Intention—Behavior Relations: A Conceptual and Empirical Review. *European Review of Social Psychology*, *12*(1), 1–36. DOI: 10.1080/14792772143000003

Soebandhi, S., & Andriansyah, Y. (2017). In-Game Advertising: Analyzing the Effects of Brand Congruity, Integration, and Prominence towards IGA Attitude and Purchase Intention. *Jurnal Manajemen Teknologi*, *16*(3), 258–270. DOI: 10.12695/jmt.2017.16.3.3

Terlutter, R., & Capella, M. L. (2013). The Gamification of Advertising: Analysis and Research Directions of In-Game Advertising, Advergames, and Advertising in Social Network Games. *Journal of Advertising*, *42*(2–3), 95–112. DOI: 1080/00913367.2013.774610

Toh, C. Y., & Leng, H. K. (2014). Demographic differences in recall and recognition rates of in-game advertisements. Journal of Direct, Data and Digital Marketing Practice, 15(3), 187–196. DOI: 10.1057/dddmp.2013.76

Usman, A., & Okafor, S. (2019). Exploring the Relationship Between Social Media and Social Influence. *Leveraging Computer-Mediated Marketing Environments*, 83–103. DOI: 10.4018/978-1-5225-7344-9.ch004

van Looy, J., Courtois, C., de Vocht, M., & de Marez, L. (2012). Player Identification in Online Games: Validation of a Scale for Measuring Identification in MMOGs. *Media Psychology*, *15*(2), 197–221. DOI: 10.1080/15213269.2012.674917