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The effects of in-game advertising on purchase intention of digital objects

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Master in Marketing

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ISCTE-IUL

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RESUMO

Uma grande pandemia atingiu 2020, o COVID-19 afetou muitas indústrias ao redor do mundo exceto a indústria de videogames. A indústria de videogames cresceu tanto nas últimas décadas que criou muitas oportunidades para o mercado. Estudos anteriores mostraram os efeitos positivos que a publicidade indireta tem na intenção de compra dos consumidores e este estudo foca nos impactos da publicidade no jogo na intenção de compra de diferentes objetos digitais. Para verificar se o tipo de objeto digital afeta a consciência de marca, se brand fit modera os efeitos do tipo de objeto digital na consciência de marca, se a consciência de marca afeta a intenção de compra e se a intenção de compra difere entre os grupos; foi realizada uma pesquisa com 300 jogadores do jogo Mobile Legends: Band Bang e eles foram separados em 5 grupos diferentes onde cada grupo viu uma condição diferente; uma marca (high fit e low fit) aparece em um item virtual diferente (skins e estátuas) e uma condição é o grupo controle que não viu marca. Os resultados mostram que a consciência de marca é preditor da intenção de compra do objeto digital e as pessoas que se lembram da marca apresentam um nível de intenção de compra maior quando comparadas com as pessoas que não se lembram da marca. O item virtual skin possui um nível maior de intenção de compra quando comparada às estátuas. E o grupo controle apresenta maiores níveis de intenção de compra quando comparado aos demais grupos.

Palavras-chave: Publicidade indireta, in-game advertising, consciência de marca, intenção de compra e itens virtuais.

Classificação JEL: M31; M37.

ABSTRACT

A major pandemic struck in 2020, the COVID-19 affected many industries around the world except the video game industry. The video games industry has grown so much in the past decades, that has created many opportunities for the market. Past studies have shown the positive effects that product placement has on the consumers' purchase intention and this study focus on the impact of in-game advertising on the purchase intention of different in-game digital objects. To verify if the type of digital object affects brand awareness, if brand fit moderates the effects of the type of digital object on brand awareness, if brand awareness affects purchase intention and if purchase intention differs between the groups; a survey was conducted with 300 players from the game Mobile Legends: Bang Bang and they were separated into 5 different groups in which every group saw one different condition; where one brand (high fit or low fit) appears in one different virtual items(skin or statue) and one condition was the control group that did not see any brand. The results show that brand awareness is a predictor of purchase intention towards the digital object and the people that recalled the brand had a higher level of purchase intention when compared to the people that not recalled the brand. The virtual item skin has also a higher level of purchase intention when compared to the statue. And the control group has higher levels of purchase intention when compared to the remaining groups.

Keywords: Product placement, in-game advertising, brand awareness, purchase intention, virtual items.

JEL Classification: M31; M37.

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1. INTRODUCTION

The COVID-19 pandemic had a potential effect on the macroeconomy (Mohsin, Hongzhen, and Hossain, 2021). This means that all the industries felt the impact in the last two years, not only did many sectors have to deal with the fact of a worldwide epidemic, but it also brutally changed people's personal lifestyles (Palma, Vosough and Liao, 2022). Industries had to readapt their realities to the present condition; in the food industries, for example, most restaurants around the world had to do delivery or at least take out to survive, and people had to quarantine themselves and keep social distancing as the basic premise to avoid viral outbreaks among consumer (Barreto, Loureiro, Rubio, and Romero, 2022). Tourism was mainly impossible; the hospitality industry and airline companies suffered consequences of the lack of customers. Airbnb, one of the growing start-ups as an online platform for stays, reported on Forbes that it had to cut two thousand employees and refocus its business on its core services which are more related to local rentals and local outdoor activities. Also in the entertainment industries for example; movie and series shooting was postponed, and concerts and festivals were only done in an online format. Nevertheless, Hall (2020), at the World Economic Forum, reported that the game industry is thriving and that the COVID-19 lockdowns have boosted consumers' engagement with video games and e-sports events. Revenues for worldwide gaming companies also have increased throughout the pandemic. People had to change their ways to entertain themselves at home, which is a factor for games to innovate and try to reach more consumers. With the boom of the online economy in the current digital era, digital games generate big interest (Sánchez-Navarro, Aranda, and Martínez-Martínez, 2015).

It is undeniable the growth mobile game industry in the past decade, their development is totally related to technological innovations and mostly; the increased global access to the internet and its advances (Syahrivar, Chairy, Juwono and Gyulavári, 2022). The seek for adventure, entertainment, and excitement without leaving home has set the potential of the games industry. People had to change their ways to have fun and consumption habits, by keeping it mainly online and in digital forms. If so many people are joining the game industry, how should games increase their players' purchase intention toward the digital objects? There are many studies regarding product placement and in-game advertising (IGA), but there are limited studies on how in-game advertising (IGA) on the mobile gaming platform can influence players' purchase intention towards the in-game digital object. The present dissertation theme is about the effects that in-game advertising has on the players' purchase intention. With a particular interest in the following questions:

1. What is the impact of in-game advertising on the purchase intention of digital objects?
2. What is the role of brand awareness and brand fit between the game and the brand in explaining the effects?

The aim of this dissertation is to investigate if the type of digital object that is used (skin and statue) affects brand awareness and if the brand fit(high and low) between the game and the brand moderates the effects of the type of digital object on the brand awareness. To understand if brand awareness affects purchase intention towards the digital object and if levels of purchase intention vary between the groups that saw a high fit brand on the digital objects, low fit brand on the digital objects, and no brands on the digital objects. The objective is to develop a dissertation thesis by collecting, comparing, and analyzing data from a survey with game players and see if it can gather enough evidence to support the theory and review if in-game advertising affects the purchase intention of digital objects and if brand awareness and brand fit can explain the effects.

Games audience includes the game players and also game fans who watch the games. Live streaming when playing video games has emerged in recent years as a major new topic in media and communication studies, the potential impacts of this broadcasting are further facilitated on different platforms that allow talking to the streamer through a chat window while watching them, the streamer will often respond the fans and then generate conversation, with the majority of profit coming from advertising or sponsor revenue. (Johnson and Woodcock, 2019).

Electronic sport (E-sport) is a video game-based competition between individual players or between teams. As one type of sporting event, E-sports has also been popular in attracting millions of spectators to the host cities in person or online through live streaming services (e.g., YouTube and Twitch). Due to the popularity of games, e-sports, e-sports teams and players, e-sports events have been sponsored by global companies as an online marketing venue to focus consumers' attention on companies and their products and services without the limitations of time and space. Based on the trend, the e-sport industry brings economic benefits to host cities' local communities, social media platforms, the gaming industry, and sponsored companies (Kim and Kim, 2020).

Over the few years, live-streaming platforms, such as Twitch and YouTube, have been dramatically developed and used for individuals' broadcast of digital content, including online video games. Consequently, online game live-streamers have played an important role in the advertisements industry as well as the online video game industry (Kim and Kim, 2022).

2. LITERATURE REVIEW

2.1. Games

Different kinds of games were always present during human evolution. The British Museum has records from board games that were invented in 1250–1150 BC. Games have an ancient history indeed, but technological innovations such as computers and the internet, made the games also renovate and innovate to keep people entertained, smartphones are now a necessity in our modern world (Rauschnabel, Felix, Hinsch, 2019).

According to Scholz & Barlow (2019), the first game was Tennis for Two invented by William Higinbotham in 1958, it already presented a competitive gaming element since it was played by two players against each other. Tennis for Two was a game developed on an analog computer, which simulated a tennis game or ping pong on a graphical display. Therefore, until the 70's not all people could have access to a computer, and way fewer could access the internet because it was just starting. But when computers became more popular; there was also an increase in investments in new video games, companies saw their opportunity with games like Space Invader or Atari and The Magnavox Odyssey was the first video game console. Nowadays video games are all around and they can be grouped into different types and depends on characteristics such as how to play the game and the gameplay interaction (Quwaider, Alabed, and Duwairi, 2019). Games can be first-person shooters (FPS); the ones that the player's perspective from the first person and usually involves shooting against the enemies (eg. Call of Duty), real-time strategy (RTS) games are the ones the players are usually required to build bases, spawn units to destroy the opponent (eg. The Age of Empires), role-playing games (RPG) are the ones that create a fantasy role-playing game (eg. Skyrim) and there are the multiplayer online battle arena (MOBA) ones that are online matches between 2 teams and it can last anywhere from 20 minutes and beyond, depending on players' skill levels (eg. Defense of the Ancients). Games in general come in different electronic device; consoles,

computers, tablets, and VR but all games also try to do their mobile version, so players can have the games in their hands all the time just like their smartphones (Clement, 2022). Many games in their initial concept were computer games or consoles, but nowadays many of them launch their mobile version; League of Legends is an example. It started as a computer game but now invests heavily in competitive events for its mobile versions (Liao, 2021). As a growing part of the population is playing video games worldwide, more audiences can be reached through advertising in video games, it is gaining strength as a marketing communications tool, by placing brands and products in video games, marketers expect to influence cognitive, affective, and influence in consumer outcomes including brand recall, brand recognition, brand attitude, brand choice or purchase intention (Martí, Bermejo and Aldás-Manzano, 2017). A partnership of brands and games varies a lot, can be with make-up brands, just like The Sims did by adding MAC (MAC Makeup) to their sims make-up, advertisers can place ads on banners, events, player jerseys, or any other in-game object. Sports games can be related to sports brands such as FIFA could with Nike or Addidas, racing games to car brands just as Forza could with Ferrari, and many other partnerships.

In 2020, Travis Scott, an American hip-hop singer, collaborated with Fortnite to give an experimental virtual experience concert; it was highly divulged in wall posters in-game and through social media. All the media, game fans, and Travis fans were talking about, creating a huge engagement; over 27 million logged in-game to join the concert and that generated over 40 million views, stated the game company Fortnite on Twitter. It is common to partner with celebrities; Free Fire did a partnership with DJ Alok and make exclusive Alok skins, they also partnered with the Netflix series La Casa de Papel, making events to engage the community and sell thematic skin. It's a win-win situation giving more exposure to the game and the brand. There are many possibilities to promote a brand in-game, in League of Legends 2020 Summer Split Tournament, it was the first time Mastercard had an in-game banner for promotion. There are still ways to promote sponsorships in e-sports events, just like Intel and Red Bull did in many e-sports like Dota 2, Counter-Strike, and FIFA.

Game professional teams are also usually sponsored by brands, they can also collaborate with game influencers or influential game streamers, and partnerships can start online but can be extendable to offline events. E-sports events usually happen every year for different games and according to the Consumer Technology Association; the global audience for e-sports will hit over 500 million people in 2024 (Sinclair, 2021). Sponsorship of e-sports events has become a marketing communication tool as it is able to particularly impact the target audience, the interaction between sponsor and sponsored has become a mutual benefit; it increases brand awareness in the market also facilitates communication with the selected audience (Rosário et al., 2021).

E-sports means electronic sports and involves competitive gaming as Scholz & Barlow (2019) described, it involves much more than the game development team and the players, it will have its own social media, customer service, tournaments team, media team, investors, hardware/service/infrastructure support, general public and of course the sponsors and advertising; which comes partly from the total revenues from e-sports (Parshakov and Zavertiaeva, 2018). The gaming market keeps getting larger, with people of all ages, gender, and with all demographic groups. In 2017 over 80 million watched the League of Legends World Championship which is very close to the 2017 Super Bowl with 111.3 million (Kim, Nauright, and Suveatwatanakul, 2020). Gamers are spending more time engaged in play and increasing their social and community activity, the estimated number of gamers worldwide in 2021 is 2.7 billion (Kelly, Schuler, Johnson, 2021). The opportunity is not only for the game and their professional players but also their content creators since their views are very high for game streaming, Forbes reported that more people watch e-sports than NBA. A widely diffused access to smartphones and the internet, made new players join the gaming market, it is also an instrument that popularized games, Accenture estimates that the value of the gaming industry already exceeds $300 billion. That's from the $200 billion in direct spending on consoles, software and subscriptions, in-game purchases, and mobile advertisement revenues. With a further $100 billion of value from adjacent

industries such as mobile devices, gaming PCs, peripherals, and gaming-related communities.

Three of the largest markets are; China, USA, and Japan, but gaming's popularity is also growing particularly in Latin America, the Middle East, and many southeast Asian countries with a mobile-first profile (Statista, 2021). As a result of the growth of the internet and mobile adoption, there are now nearly as many female gamers as there are males, most young people compared to usual sports; according to Scholz & Barlow (2019). The audience is usually digital and international, and after COVID-19 more audiences turn to e-sports since there were restrictions on the usual sports competition (Valverde, Campos, and Alpízar, 2020). Kim et al. (2020), said that the success of e-sports depends on the GDP of the country; which means a higher GDP allows the population to spend more money and time on entertainment, and also depends on the legitimacy of e-sports and the institutionalization of e-sports. Games are far away from decreasing in popularity or any kind of innovation stagnation, they are much ahead, by simply developing cloud gaming (Newzoo, 2021).

It's common for stores like Epic Games to allow users to connect to their console and to their computer through the same store account, but the innovation now; it's similar to the movies and series streaming like Netflix, the games will be supported in a server xCloud and will be there available to play by subscription in any technological devices, the concept is to have a package of games per month for members of the store (Amazon Prime Gaming). Xbox from Microsoft launched their Xbox Game Pass Ultimate Cloud Gaming Beta, in which it is possible to play the games with friends on different Microsoft devices; such as computers, smartphones, tablets, and consoles (Xbox Cloud Gaming, 2021).

E-sports is frequently played and transmitted via the Internet but now is also commonly shown on television with live commentating very similar to traditional sports, the exclusive online event has morphed into in-person mega-events while maintaining its presence through a variety of online channels (Jenny, Keiper, Taylor, Williams, Gawrysiak, Manning, and Tutka, 2018). E-sports can boost the economy with their unlimited potential growth (Jin, 2021). E-sports fans and

viewers are strongly loyal and supportive of their teams and athletes (Rosário and Raimundo, 2021). The future growth in the perception of e-sports as sports is undeniable (García and Murillo, 2020), the e-sports industry has a highly dynamic environment, combined with self-organization and self-governance, which can be seen as a liberal environment (Scholz & Barlow, 2019).

2.2. In-Game Advertising as a promotional tool

2.2.1. Product Placement

Product placement or brand placement indicates the inclusion of a logotype or a logo mark, the brand name, a product, or its packaging in entertainment media. Product placements normally involve "placing the brand inside an already existing plot" (Russell, 1998) in the case of traditional advertising, consumers can typically recognize that they are the target of a persuasive attempt from a brand, and can react properly. In contrast, product placements, specifically subtle placements, often add to the perceived realism of the narrative setting, with less attention given to the persuasive intentions; Gillespie, Muehling, and Kareklas (2018). Coviewing settings that encourage interaction between friends also enhance recall of product placements more than solo viewing settings (Coker and Altobello, 2018). For Chaney et al. (2018), product placement can also be the insertion of a billboard with the brand's advertising message, the effect of the product placement on the consumer is somewhat different between computer games and other contexts. For example, watching a television program or a film is a passive action, whereas a video game player actively interacts with the game and there might be differences between product placement in games and in traditional media. And because product placement is more expensive than traditional advertising, it shouldn't be an easy choice for the various different types of brands (van der Westhuizen and Mulder, 2019).

It is effective to use traditional media to do product placement as show studies with product placement in television (Corkindale, Neale & Bellman, 2021) and film (Srivastava, 2018). A positive perception due to product placement has a

positive impact on purchase intentions; and a purchase decision is the process of selecting two or more alternative choices that result in a decision to buy or not to buy (Asnawati, Nadir, Wardhani, and Setini, 2022).

Brands and their marketing team should believe that gamification can potentially increase customers' engagement, awareness, and loyalty toward the brand (Mishra and Malhotra, 2021). Gaming can also provide the opportunity for creative experimentation, which is the key to success in a post-pandemic world. Since most gamers are young people, brands that want to target the young generation should consider the game industry to help their promotion. Technological advances will also significantly increase the sensory richness of social media (Yadav and Pavlou, 2020). Within the marketing domain, e-sports can conceptualizes as a distinct segment of computer-game consumption, identified by the particular experiences of competitive gameplay that immerse, educate, entertain, and engage consumers in play, co-created within the value network of marketing actors by a means of the specific forms of the online and offline performances (Seo, 2013). Computer-based games are likely to be played many times, thus providing repetitive brand exposure (Eagle and Dahl, 2018).

To Palmas, Reinelt, and Klinker (2021); in-game advertising at its core work as an important communication tool in marketing, which aims to contribute to an increase in brand awareness and at the same time aims to influence the recipient's brand attitude positively, but advertiser may not only rely on exclusively in-game promotion and should focus on prominent advertisement displays for better brand recall when advertising high-involvement products by achieving as many interactive player-contacts as possible. According to Leng, Rozmand, Low, and Phua (2021) when advertising in-game; familiar brands tend to be recalled more when compared to unfamiliar brands, and players from multi-player games are more likely to recall a brand in comparison with the ones from single-player games. Fast-paced types of games also resulted in higher thought favorability to brand attitude than slow-paced games (Vashisht and Mohan, 2018). Billboards in-game show more effectiveness than other forms of advertising and the challenge for designers is to incorporate in-game advertisements that are dominant on small

screens to facilitate recall and recognition (Chaney et al., 2018).

A study conducted by Chernikova and Branco (2019) revealed that gamers generally respond positively towards product placement and that product placement can indirectly impact emotional responses that will impact consumers' purchase intention and advertising in the video game highlights brand recognition and the perception of virtual reality. Experiencing virtual product placements in immersive virtual reality may strengthen its effectiveness and the stimulus (Oberdorfer, Straka and, Latoschik, 2021). Additionally, game players showed a low intention of purchasing products or brands that only appeared on billboards, it is hypothesized that players will be more likely to select brands that appear as products used by a character than those that simply appear on background billboards (Techawachirakul, 2020).

2.2.2. Product placement in in-game advertising

The main advantage when using product placement in video games is that video game players can spend lots of time playing their favorite video games, therefore marketers may expect a higher brand exposure time when compared to other media like television or magazines (Martí, Bermejo and Aldás-Manzano, 2017). Consumers also pay more attention and recall larger advertisements and for games, context is better for the ad to be in the focal area rather than the peripheral area when prominently placed it's recalled at a better rate than those placed subtly, the more immersed a player is in the game their capacity to remember products and brands decrease (Chaney et al., 2018). Spectators of games have recall levels up to five times greater than those actually playing the game, so marketers should consider the advertisement for not only the players but mostly the watchers; a realistic environment is more appropriate to sell, and positive placement effects on a higher brand placement memory, outstanding placements enhance brand placement memory while not evidencing any significant backlash on persuasive effects (Babin, Herrmann, Kacha, and Babin, 2021). Advertisers should try for integrating the brands into the games they appear in, making them a part of the

video game, thereby increasing their likelihood of being processed by gamers, and advertising in games that encourage social gathering would result in greater reach than in games designed for individual play (Gangadharbatla, 2016). Product placement in video games is mainly visual, which can be presented in many shapes of in-game items; starting as banners or billboards and other many digital objects, these visual screen placements can be manipulated to help increase brand recall and brand recognition, therefore they can strongly affect consumers' brand awareness and brand familiarity; brand familiarity has been defined in terms of the previous experience a consumer has with a brand (Martí, Bermejo and Aldás-Manzano, 2017).

Regarding Park and Lin (2020), many consumers perceive user-based content as more trustworthy than traditional commercial strategies and product placement in-game can be extended to also game influencers' live and game events which can be unusual and give the game and the brand some extra attention. Associating the brand with cool people and cool technologies makes the brand cool and consumers spend more money on cool brands (Warren, Batra, Loureiro, and Bagozz, 2019). Brand coolness can also influence brand engagement from consumers (Khamwon and Kularbkaew, 2021).

Digital marketing campaigns that focus on social media marketing may also use advertising in games as a tool, this type of entertainment is widely popular and provides a huge engagement, especially when the game is presented in virtual reality, it can significantly increase the effectiveness of social advertising (Borawskaa, Borawskib, Biercewiczb, Latuszyńska and Dudac, 2020). Advergame is an interactive online game made with the purpose to advertise a product for a company, it is a very common way to promote video games and it is highly influential on customers when compared to traditional advertising media (Vashisht and Royne, 2016). In-game advertisement is not a new tool, but with VR for example; it can become as unique as the new technology experiences when not many people have tried therefore it continues to disrupt traditional media (Lupinek, Yoo, Ohu and Bownlee, 2021).

2.2.3 Influencing factors and consequences

Video games are known to be born in a digital era (De Prato, Feijóo, Nepelski, Bogdanowicz and Simon, 2010), and currently, mostly all industries should consider digital marketing; since it has increased year by year (Ghorbani, Kargaran, Saberi, Haghighinasab, Jamali & Ebrahim, 2021). Digital and social media marketing allows companies to achieve their marketing objectives at relatively a low costs (Dwivedi et al., 2021). The adoption of new technologies such as Augmented Reality (AR) and Virtual Reality (VR) is increasing and there are applications in different areas including marketing (Langaro and Martins, 2020). Using AR in retail environments also showed an increase in customer engagement with their shopping experience and an enhancement in brand recognition and recall (Lopera, Ospina, and Victoria, 2021).

At present, the use of mobile phones ranges from basic entertainment and communication to corporate meetings (Gomez and Raizada, 2020). That's a factor to consider when promoting a brand, choose the right advertisements in a platform that can be accessed by the majority, digital marketing is on the top of the list for reaching customers and is expected to continue to be at the forefront of the technological revolution; regarding Kim, Kang and Lee (2021). Most brands to succeed must communicate clearly with their consumers, and also must identify with them, games can provide an ambiance online and offline to target different types of consumers and new audiences (Schreiner, 2008).

There are many ways to promote a brand but nowadays you must consider digital marketing to communicate with your consumer (Giantaria, Yasaa, Suprastoa, and Rahmayantib, 2022). The social network is the latest development in advertising products and communicating with consumers (Shareef, Mukerji, Dwivedi, Rana, and Islam, 2019). When individuals watch television, series, or movies, they relax and let the information come to them, different from when playing video games, individuals playing video games are in an active processing mode, they interact with the video game and seek information actively, sometimes modifying how and what information is presented to them (Gangadharbatla, 2016).

The choice of communication channels is very broad, several possibilities are available to use. Television, radio, newspapers, magazines, direct mail, the Internet, and billboards are all suitable for media planners to find the right way to target relevant consumer segments with advertising campaigns that will be effective in one particular context (Hackley, 2005), and the emerging of new communication tools like social media as Facebook, YouTube, Instagram, TikTok, Twitter, and many others are the "best possibilities available" to communicate with potential customers; because it interacts socially and really engages with customer online (Sl, 2016). Social Media boost is a result of the popularization of smartphones and the internet which attracts young generations Z and Millennials and because they were born into the technology era, they are more malleable to learn and adjust to these new evolutions. Young adults (from ages 18 to 29) are the most likely to use social media; 90% do. Still, the usage among people with 65 years or more has more than tripled since 2010 when only 11% used social media. Today, 35% of all those who are 65 years or older report using social media, compared with just 2% back in 2005 (Parihar and Rai, 2020).

Multiplayer video games amplify social interaction between gamers (Bankov, 2019), some multiplayer online battle arena (MOBA) games have their own social network, in-game you can check your friends' list, chat and play with them. Apart from them, there are big social platforms that allow gamers to interact and watch live video streaming of people playing the games (Discord and Twitch). Typically older generations of gamers are more hesitant to engage on general purpose social media platforms such as Twitter or Facebook, meanwhile, mobile games are more popular amongst young children and teens that are more likely to use social media to share video game moments (Bankov, 2019).

3. CONCEPTUAL MODEL

Brand awareness which is the level of awareness that the consumer has for a brand, being the first brand in mind when in a search for a product (Bilgin, 2018) is the main factor when it comes to deciding which brand the consumer will consider at the time of purchasing (Srivastava & Dorsch, 2020). Brand recall, a component of brand awareness, is the customer‘s ability to recall a brand using information from memory (Khurram, Qadeer, and Sheeraz, 2018). Brand recall influences consumer purchase intention, and the type of advertisement and product will also affect brand recall (Srivastava, 2016).

Virtual objects in-game include skins for the avatar and for Allen and Anderson (2021); avatar identification has been defined as a temporary merging of characteristics of the avatar with concepts of the self and players tend to distance themselves from immoral avatars. Identification refers to the mental activity of temporarily imagining oneself in the position of another one (Riet, Meeuwes, Voorden & Jansz, 2018). Players can increases their self-esteem in real life through their avatar self-identification, avatars function as humans in online environments to enable communication in online environments (Choi, 2019). As for Kim, Gupta, and Koh (2011), self-identity shows that an avatar can be viewed as a unique way of representing one's self-identity and desire for self-disclosure. Their study focuses on a graphical digital item that includes digital avatars, avatar accessories (e.g., clothes, shoes, hats), decorative items for virtual rooms (e.g., furniture, art paintings, wallpapers), background skins/templates and emotes, that can be used to represent their users. Those virtual items can be defined as the ones that provide a competitive advantage; functional items and non-functional items; that are purely for the aesthetic (Marder et al., 2019). Younger players are more likely to buy in-game items, players who spend more time will also spend more and income is not a significant predictor of the willingness to pay and how much players would pay is determined not by their financial capability but by the game itself; regarding Cai, Wohn and Freeman (2019)**.** Gamers can also perceive virtual items as things that improve their gameplay or as symbols of status and

achievement which encourages players to either spend real-world money on them or become really good in the game to unlock them naturally (Hsiao and Chen 2016). Because gamers view in-game characters as part of themselves, they are most likely to purchase non-functional virtual items to make their in-game characters more fashionable or attractive (Wang, Sun, and Luo, 2022). Revenues from the online gaming industry have increased over the last few years, and the virtual items market has also grown. When gamers identify with the game characters, they place increased value on the in-game items and when gamers perceive greater values of those items, they are more inclined to purchase them (Park and Lee, 2011).

Advertising in video games enhances brand recognition and the perception of virtual reality (Chernikova and Branco, 2019). Recognition is the ability to remember when there was previous exposure to the brand (Roettl and Terlutter, 2018). Brand awareness is the fundamental and foremost limitation in any brand-related to search and it is the ability of a consumer to recognize and recall the brand in different situations, it affects the decision-making of a consumer about a product (Shahid, Hussain, & Zafar, 2017). Unaided awareness or spontaneous awareness is one of the situations where the digital objects(skin and statue) will be tested for recall, the other situation is the opposite; aided awareness, and the last situation is tested for brand recognition. Previous studies have not studied responses due to the involvement of different types of virtual objects and the significant effect on awareness.

Thus, the first hypotheses are developed:

H1a: The type of digital object that is used (Statue and skin) has a significant effect on aided awareness;

H1b: The type of digital object that is used (Statue and skin) has a significant effect on spontaneous awareness;

H1c: The type of digital object that is used (Statue and skin) has a significant effect on brand recognition.

In-game advertisement's success is traced back to a high degree of involvement based on the emotional influence experience while playing a game, and prominent brands were recalled slightly more often than peripheral ones (Palmas, Reinelt, and Klinker, 2021). When it is an outstanding placement, brands tend to appear in the central part of the game screen, thus, processing the in-game brand placements is more integral to the action of game-playing, and requires the less spare capacity to successfully perform the secondary task which is processing the in-game brand placements (Vashist, 2018). Games with prominent brand placement, and low game involvement resulted in greater brand recall than high game involvement conditions (Vashisht, 2017). Marketers and advertisers need to make sure that in-game brand placements are really being viewed and paid attention to by the players and watchers and understand that regarding advergame; the more the attentional capacity gets used up for game-playing activities, the less remains for processing in-game brand placements (Vashist, 2018). As seen in past studies, brand fit is an important variable when measuring awareness, because the relevance of fit determines the success of brand extensions (Knoerzer and Millemann, 2021).

Brands that can be integrated into the game experience, on a deeper emotional level advertisements, with a high level of integration can offer the highest chance of successful brand recall from the gamers. In the context of the in-game advertisement, it can be said that players need to use most of their cognitive resources to process the first stimuli that is to play the game, which can be the moving targets in a shooting game or the changing track in a racing game, the act of playing game leaves little cognitive ability to absorb surrounding information as the product placement (Chaney et al., 2018; Gangadharbatla, 2016). Video game live streaming is like real-time video social media that integrates traditional broadcasting and online gaming (Li, Wang, and Liu, 2020). Regarding Sjöblom and Hamari (2017), it has been assumed that watching others play does not provide the same thrills as playing games but watching others play may provide social gratifications that are commonly absent in a normal single-player

experience. Which is the reason to highlight the importance of the players' perspective and its big part in the games monetization process.

Previous research provides interesting findings on the impact of co-viewing on the recall of product placements in social settings; it suggests that co-viewing settings with friends generate superior recall when compared to watching alone, watching passively with a friend, or watching with a non-friend (Coker and Altobello, 2018). But when co-viewing the product placements in TV commercials reduces the effectiveness because the presence of another person distracts each co-viewer's attention from the screen (Bellman, Rossiter, Schweda & Varan, 2012). The limited-capacity model of attention of Kahneman (1973) suggests that a game player's limited processing capacity must be divided into the resources necessary for playing the game itself (primary task) and those needed for processing in-game brand messages (secondary task) (Lee & Faber, 2007). For Lee and Faber (2007) the more capacity is used for the primary task, the less capacity is available for the secondary task, inexperienced players also tend to use more capacity for the primary task unlike experienced players; when their involvement with the game is not very high. As for game-product congruity, it was also found that highly incongruent brands (brands that have no relations to the game) are better recalled than either moderately incongruent brands or highly congruent brands (brands that have relations to the game).

It is confirmed by Vashisht, Mohan and Chauhan (2020) that incongruent-newness produces a large contrast effect, which results in high mind-engagement of the players resulting in higher brand recall unlike a congruent-newness case, which means that when there is a strange and unexpected ad component it has more positive effects on the advertising effectiveness. So it is expected that gamers are more likely to use their cognitive resources more in processing incongruent newness than congruent newness. For Lee and Faber (2007), low-relevant brands (e.g., pet foods) were better remembered than high-relevant brands (e.g., gasoline) within a car racing type of game. As for Kim, Kim & Song (2019) gamers are more likely to have favorable brand evaluation when the game characters are congruent with the brand compared to the incongruent one. Another

previous study conducted by Srivastava (2018) with product placement in films; indicated that low-involvement products have better purchase intention when compared to high-involved products.

Because there are not many studies that measure if brand fit (high/low) moderates the effects of the type of digital object on awareness, the second hypotheses are:

H2a: The brand fit with the game (high/low) moderates the effects of the type of digital object on aided awareness;
H2b: The brand fit with the game (high/low) moderates the effects of the type of digital object on spontaneous awareness;
H2c: The brand fit with the game (high/low) moderates the effects of the type of digital object on brand recognition.

The use of brand awareness when dealing with purchase intention is unquestionable, higher levels of brand awareness are a positive effect; which motivates consumers to buy (Chakraborty, 2019). And to test if awareness has a significant effect on the purchase intention of digital objects; the third hypotheses are:

H3a: There is a significant effect of aided awareness on purchase intention towards the digital object;
H3b: There is a significant effect of spontaneous awareness on purchase intention towards the digital object;
H3c: There is a significant effect of recognition on purchase intention towards the digital object.

The motivation for players to purchase virtual items can be classified into two different types: (a) functional or instrumental props that assist players to increase the offensive or defensive power of their virtual characters (e.g., increased vehicle speeds); or (b) decorative or expressive props to alter the appearances of virtual

characters, or improve social relationships or communication (e.g., items that allow players to make love proclamations or offer congratulations to other players) (Wu and Hsu, 2018). In this study, the intention to purchase is defined as the consumer's intention to buy skin or a statue. Finally, the last hypotheses are:

H4a: Purchase intention towards the brand for participants exposed to the high fit object (skin) is higher than those exposed to the high fit turret (statue);
H4b: Purchase intention towards the brand for participants exposed to the low fit object (skin) is higher than those exposed to the low fit turret (statue).
H4c: Purchase intention towards the brand for participants exposed to brands is different from those not exposed to any brands(control group).

Based on the previous hypotheses, the conceptual model is presented in Figure 3.1 below:

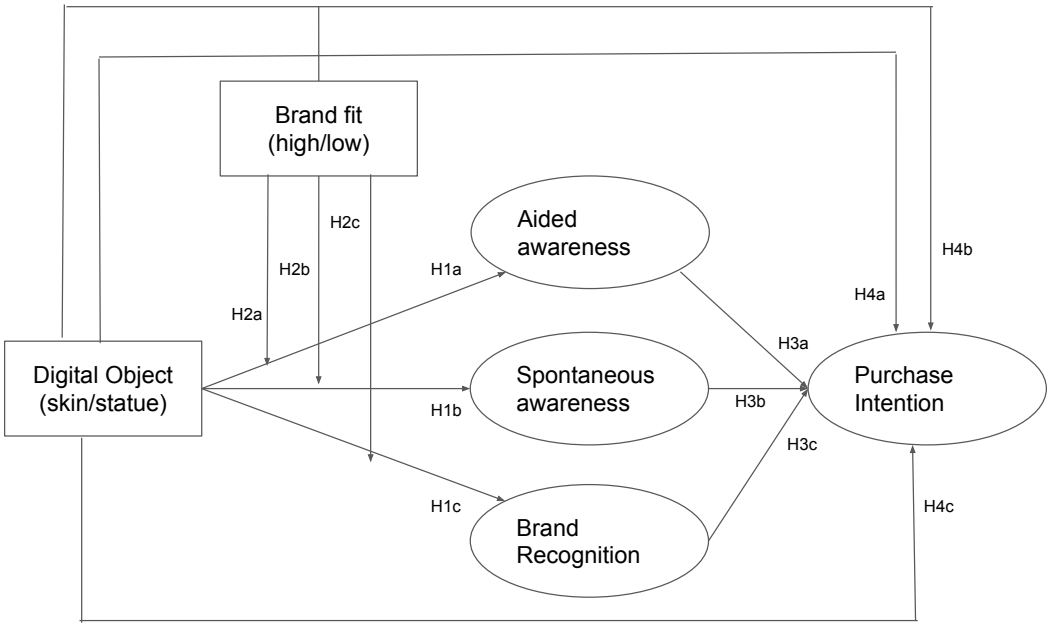

Figure 3.1 - Model

4. METHODOLOGY

4.1. Stimuli

This study is an experiment between subjects, in which participants were asked to watch test situations from a gameplay cut of the game Mobile Legends: Bang Bang (MLBB), a MOBA type of game was chosen because most past studies(Chaney et al., 2018; Vashist, 2018; Lee and Faber, 2007) have already studied the racing type of games. Four situations contained one brand on a different execution inside the game and one situation is the control group of the experiment, with no brand exposure, resulting in a total of five experimental conditions.

4.2. Participants and procedure

In all, 300 respondents were randomly assigned for the video exposure, and then asked to fill out an online questionnaire in Portuguese (Annex A) eliciting their memory of the brands embedded in the game and their purchase intention towards the digital items. The survey method was used in this study to collect the data and it was distributed among the unofficial Facebook community of MLBB players from Brazil and Portugal and also the staff that works for the game. The survey was conducted via Qualtrics and it contained four sections.

In the first section, respondents were informed that the information is treated in a confidential, anonymous, and aggregated way, being used only for academic purposes. In the second section, respondents were asked to watch one video containing one product placement in different executions in-game. As for the brand choice for the product placement; it was considered the brand congruency with the game. For Gross (2010), game-product congruity is scaled in four dimensions: (1) the brand is perceived to be a central object used in the content of the game (2) the lifestyle associated with the content of the game matches the lifestyle associated with the product or brand (3) the brand image is perceived to contribute to the theme of the game and (4) the product category of the brand seems appropriate to be associated with the theme of the game. A high fit for an

online game is also a digital brand with online products, mostly in the entertainment field (movies or music) and the low fit includes brands that are known for their physical products (food or beverage). The first video has a high fit (Netflix) on the skin (Figure 4.1). The second video has a high fit (Netflix) on the turret (Figure 4.2). The third video has a low fit (Mc Donald's) in the turret (Figure 4.3) and the last video has a low fit (Mc Donald's) on the skin(Figure 4.4). And, there is also a control group in which there is no brand in it, only the game gameplay(Figure 4.5). Each respondent will be assigned to watch one of the short videos randomly and each respondent won't watch more than one video. The videos were created based on a promotional gameplay video from the game in 2022, a short part where the skin and statue are most centered in the screen was cut out from the original video to be used as video stimulation for the survey, the brands' logos were added to the video using the video editing software Adobe Premiere and uploaded as a not listed video on Youtube. Then the videos were added to the survey and randomly assigned to each one of the respondents.

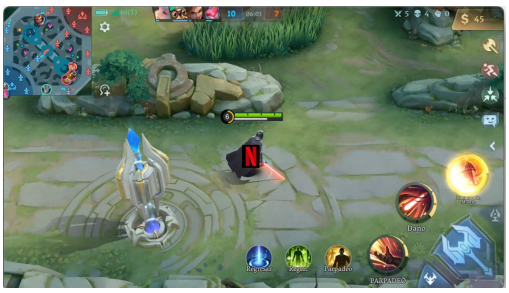

Figure 4.1 - Survey video 1
https://youtu.be/ewEG5czH7cg

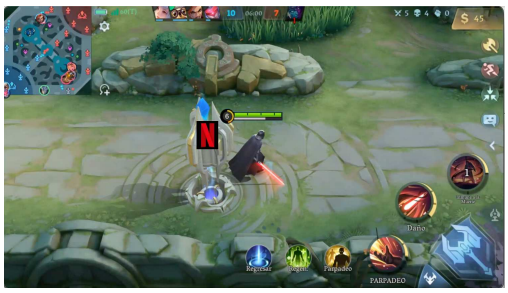

Figure 4.2 - Survey video 2
https://youtu.be/kaZwFUHOVoI

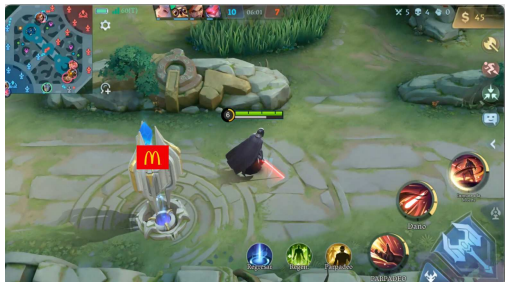

Figure 4.3 - Survey video 3
https://youtu.be/S30SrcGVvS0

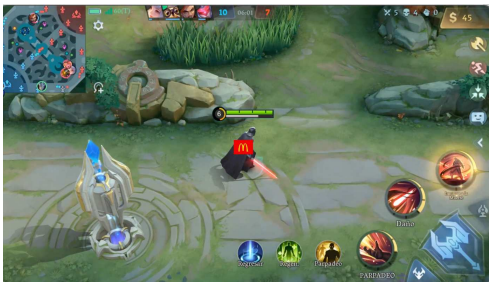

Figure 4.4 - Survey video 4
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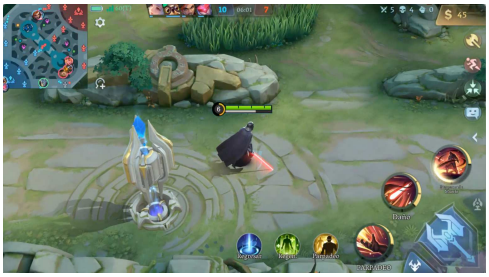

Figure 4.5 - Survey video 5
https://youtu.be/cmKI-DVcwnM

In the third section of the survey, respondents were asked to answer questions related to the video that they just watched in the previous section, to check what brand they recall and recognize from the video and which digital object they have the intention to purchase. In the last section of the survey to better understand the respondents, socio-demographic questions will be presented. In this section, there will be questions with answer options: about gender, age, educational level, and income.

After gathering the results obtained from the participants and comparing each other's values, confirm the hypotheses.

4.3. Measurements

The participants' awareness and intention to purchase digital items are measured from the same scales as past studies: Herrewijn and Poels (2015) and Balakrishnan and Griffiths (2018) respectively. The game-product congruency or brand fit refers to the degree to which the product category of the embedded brand is related to the content of the game (Peters & Leshner, 2013), and the scales used are adapted from Lee and Faber (2007).

Specifically, we asked them first to report spontaneously the brands they remembered encountering in the digital game, subsequently, participants were presented with a list of brand names (i.e. brand name recognition), and then a list of brand logos (i.e. brand logo recognition) (Herrewijn and Poels, 2015). In addition to this, we also captured the purchase intention measurement adapted from Balakrishnan and Griffiths, 2018 comprised of five items; (1) I intend to purchase… (2) I strongly recommend others to purchase… (3) I find purchasing

…. to be worthwhile (4) I am likely to purchase… and (5) I plan to spend more on purchasing. Participants were also asked to rate from 1 (totally disagree) to 7 (totally agree) the level of the perceived congruence of each brand with the game, the measures used were: (1) the shown product category is a relevant object to the game; (2) the images I associate with the brand are related to the images I associate with the game; (3) the brand represents a lifestyle associated with the game; and (4) the advertised brand is a good fit for the game (Lee and Faber, 2007).

5. RESULTS AND DISCUSSION

5.1. Descriptive statistics

For starters, with the descriptive analysis, to profile the population of this sample which is composed of a total of 300 valid respondents, from which about 74.3% are men and 23.7% are women and 2% are non-binary (Figure 5.1) which shows an increase in the female percentage when compared to previous studies from Hsiao & Chen (2016) and Hamari & Al. (2017) that 11% and 9% of their sample were female, respectively. The survey was conducted in Portuguese and most majority with 96.3% being Brazilian, 3.3% being Portuguese and the remaining 0.3% being Chinese (Figure 5.2).

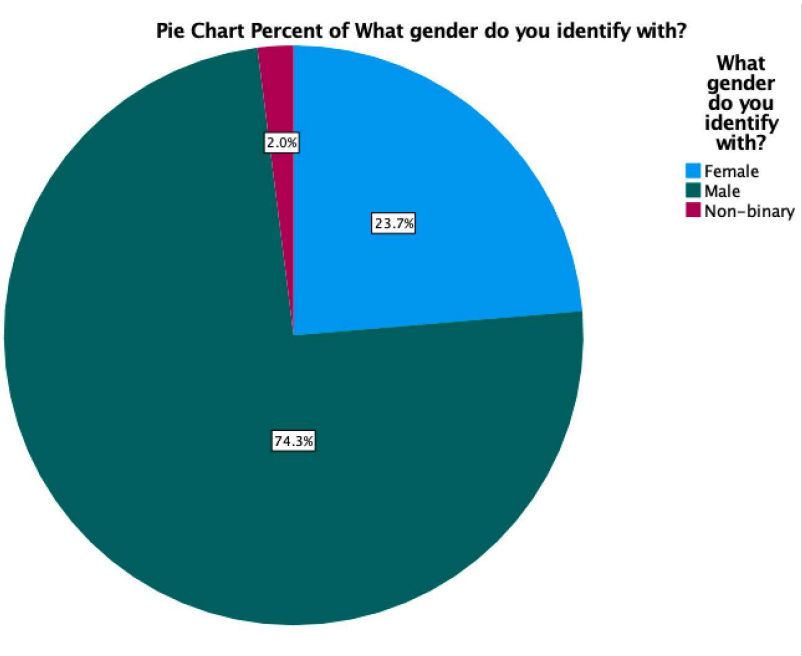

Figure 5.1- Gender

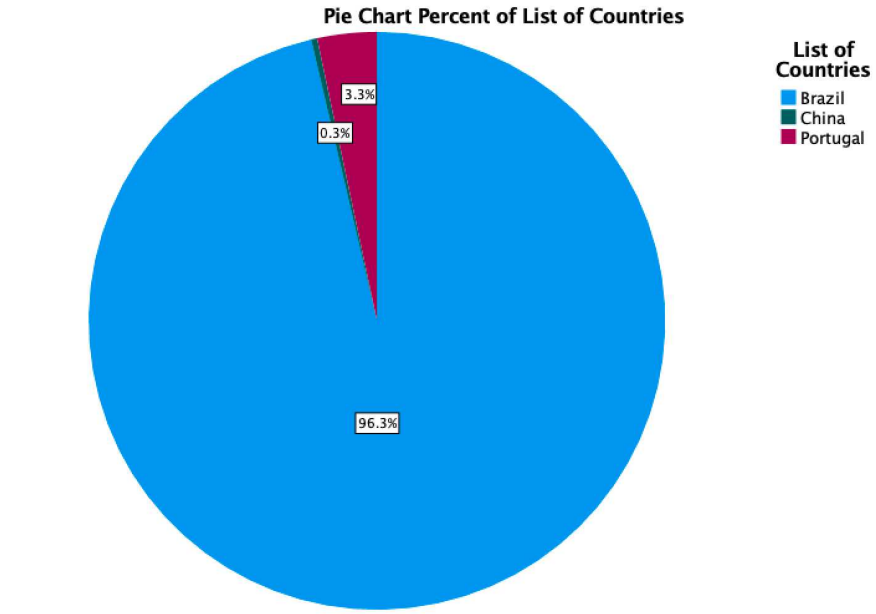

Figure 5.2- Nationality

The majority of respondents have an average age of approximately between 19 to 25 years old. And when analyzing the relationship between age and the highest level of education completed, it can be concluded that 71% of the population between 19 and 25 years has completed high school (Figure 5.3).

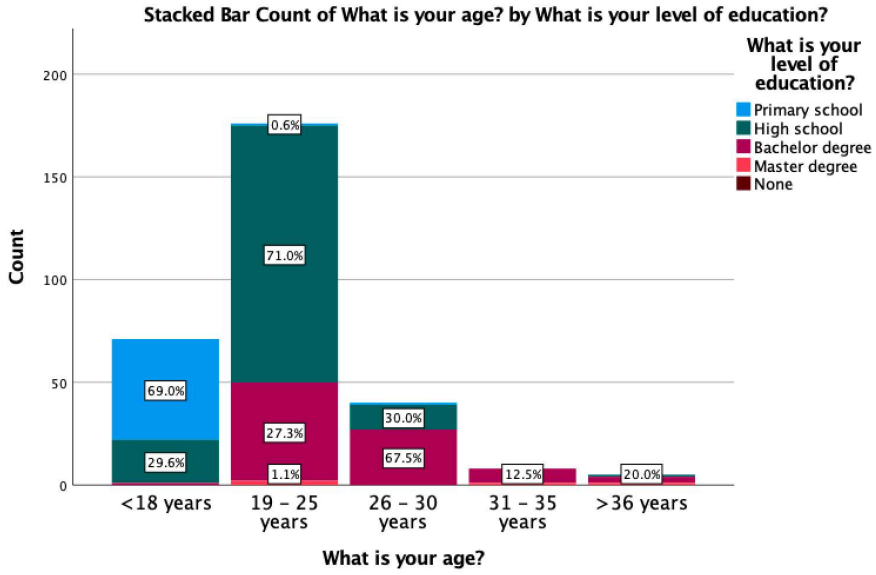

Figure 5.3- Age and Education

Moreover, when analyzing the relations of respondents that like to play the game with the frequency they play the game, it shows that 85.5% of the respondents that like to play; play every day or at least once a week. And 5.3% of respondents that never plays but played once before dislike the game. (Figure 5.4).

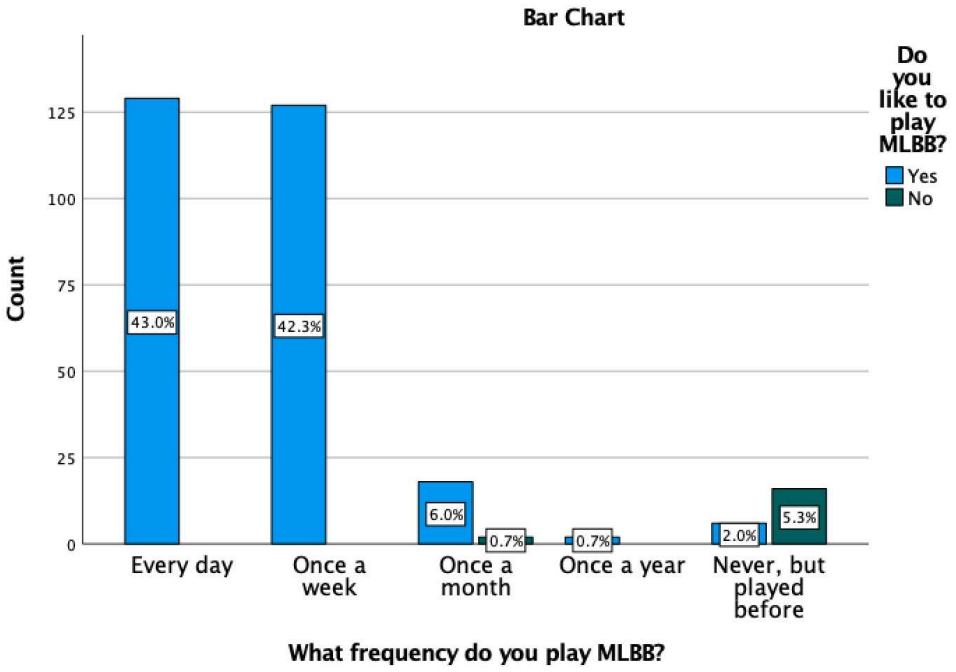

Figure 5.4- Frequency and like to play

The majority of 90,3% of the respondents used mobile to answer the survey and the remaining 9,7% used a computer (Figure 5.5) which reinforces the popularity of smartphones from recent studies (Ericsson, 2022).

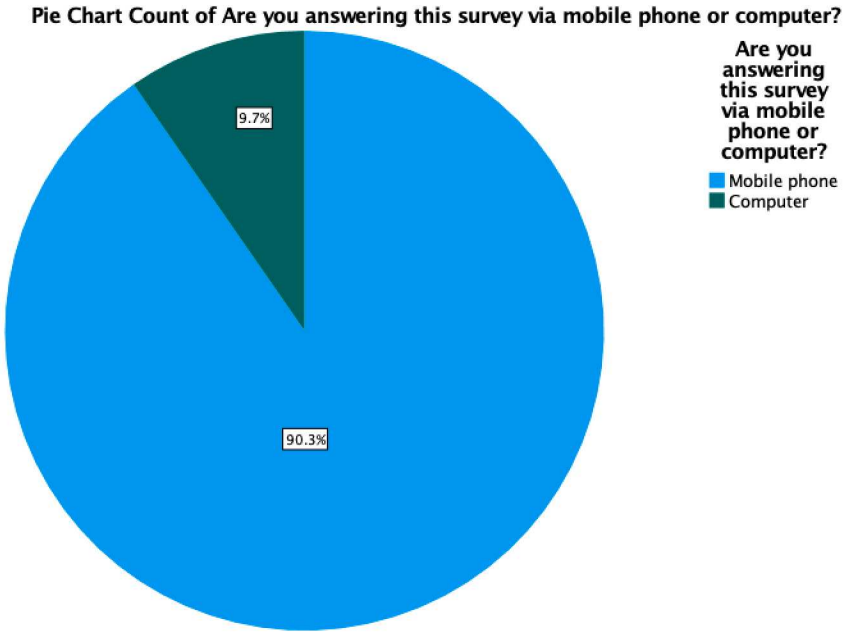

Figure 5.5- Mobile phone and computer

With the descriptive analysis is also important to categorize each one of the groups, every group had a total of 60 respondents with valid answers. The group that saw the brand Mc Donald's on the statue (M2) had 80% of male respondents (Figure 5.6) and 50% aged between 19 to 25 years old (Figure 5.8), 41.7% had finished high school (Figure 5.9) and 98.3% are Brazilians (Figure 5.7), 96.7% like to play MLBB (Figure 5.10) and 51.7% play every day (Figure 5.11). 88.3% of the respondents answered the survey using mobile phones (Figure 5.12). The group that saw the brand Netflix on the skin (N1) had 71.7% of male respondents (Figure 5.6) and 61.7% aged between 19 to 25 years old (Figure 5.8), 63.3% had finished high school (Figure 5.9) and 93.3% are Brazilians (Figure 5.7), 96.7% like to play MLBB (Figure 5.10) and 48.3% play once a week (Figure 5.11). 88.3% of the respondents also answered the survey using mobile phones (Figure 5.12). The group that saw the brand Netflix on the statue (N2) had 76.7% of male respondents (Figure 5.6) and 55% aged between 19 to 25 years old (Figure 5.8), 50% had finished high school (Figure 5.9) and 98.3% are Brazilians (Figure 5.7), 91.7% like to play MLBB (Figure 5.10) and 38.3% play every day (Figure 5.11). 90% of the respondents answered the survey using mobile phones (Figure 5.12).

The group that saw the brand Mc Donald's on the skin (M1) had 76.7% of male respondents (Figure 5.6) and 55% aged between 19 to 25 years old (Figure 5.8), 50% had finished high school (Figure 5.9) and 98.3% are Brazilians (Figure 5.7), 91.7% like to play MLBB (Figure 5.10) and 38.3% play every day (Figure 5.11). 90% of the respondents answered the survey using mobile phones (Figure 5.12). The last group is the control group which did not see any brand had 71.7% of male respondents (Figure 5.6) and 65% aged between 19 to 25 years old (Figure 5.8), 55% had finished high school (Figure 5.9) and 96.7% are Brazilians (Figure 5.7), 93.3% like to play MLBB (Figure 5.10) and 51.7% play every day (Figure 5.11). 95% of the respondents from the control group answered the survey using mobile phones (Figure 5.12).

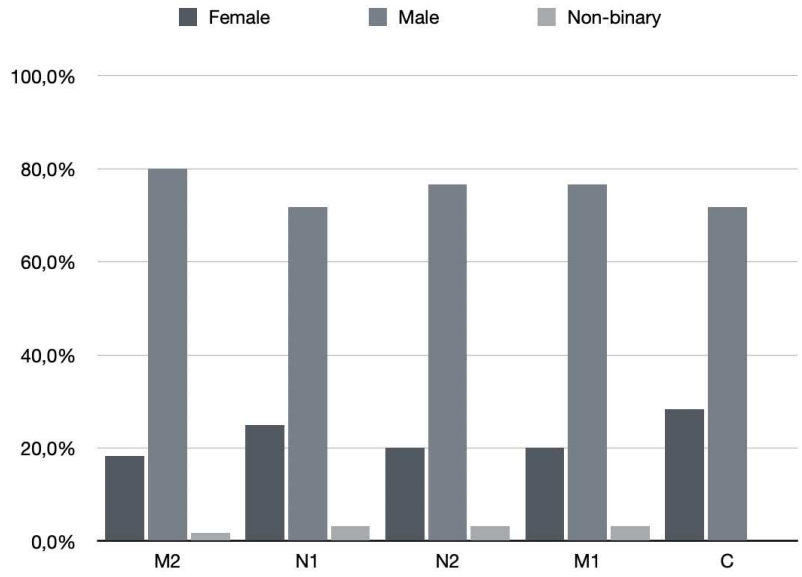

Figure 5.6- Groups Gender

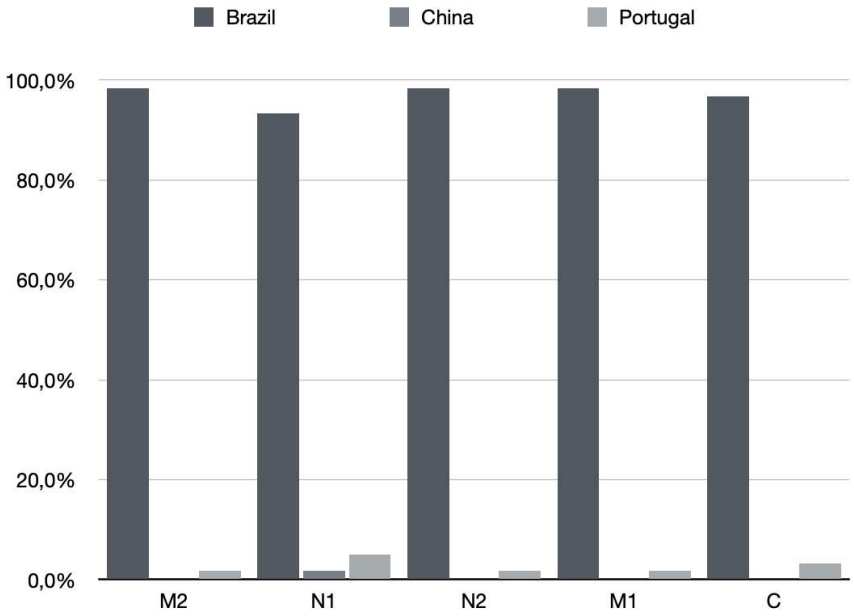

Figure 5.7- Groups Nationality

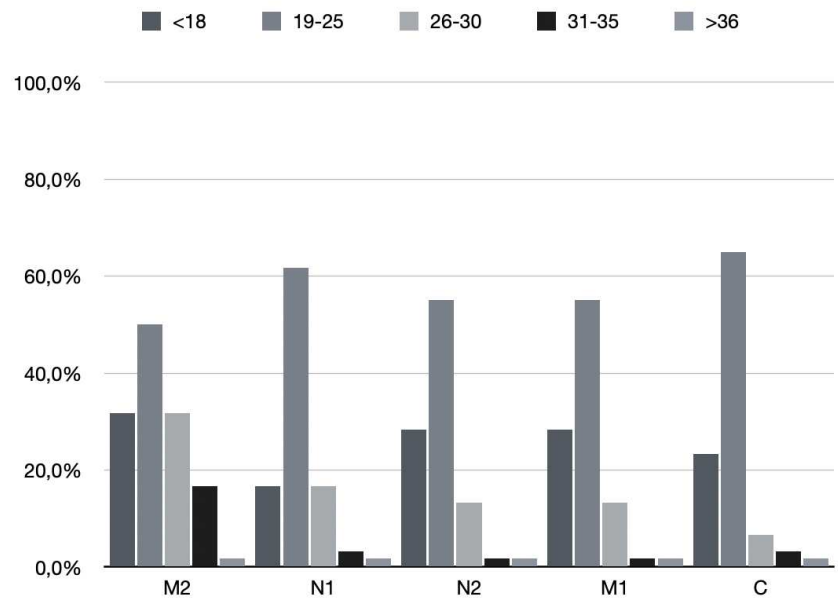

Figure 5.8- Groups Age

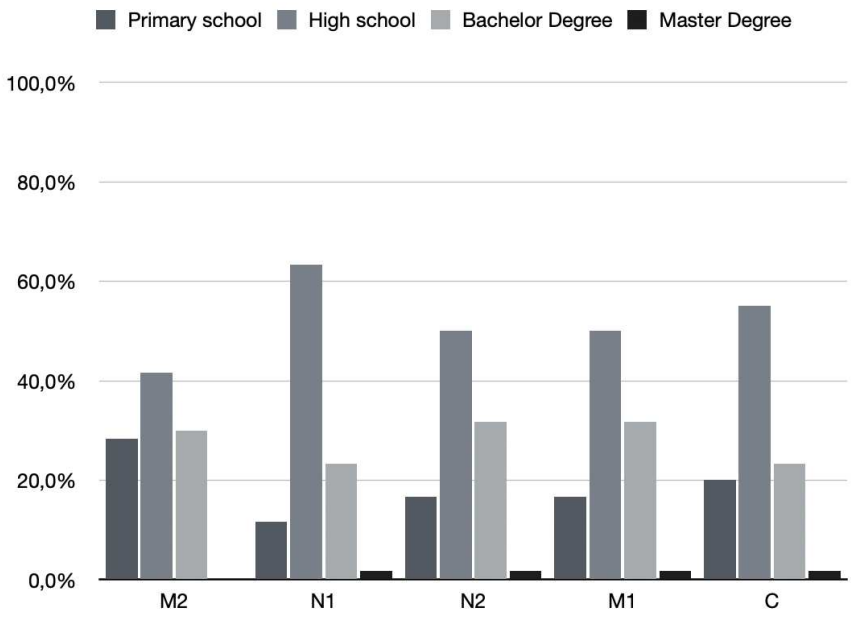

Figure 5.9- Groups Education Level

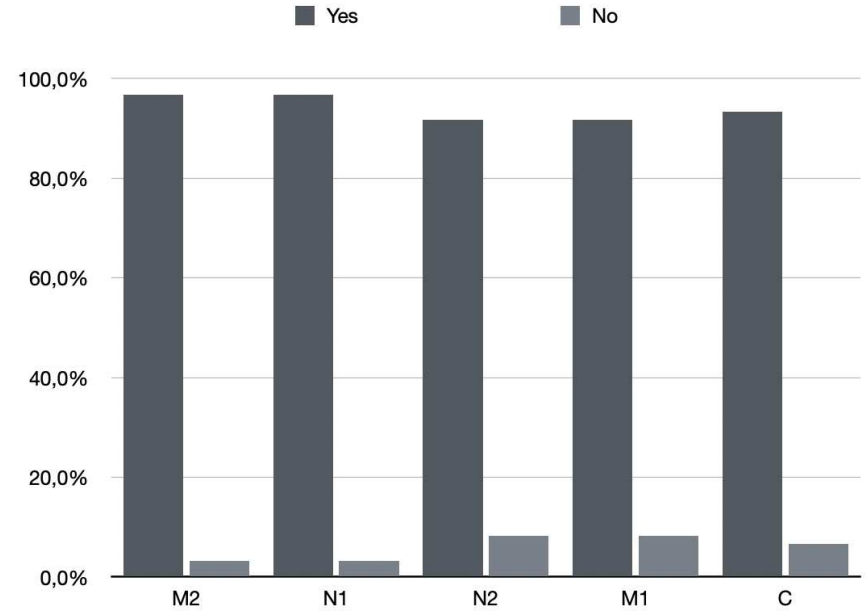

Figure 5.10- Groups and Like to play MLBB

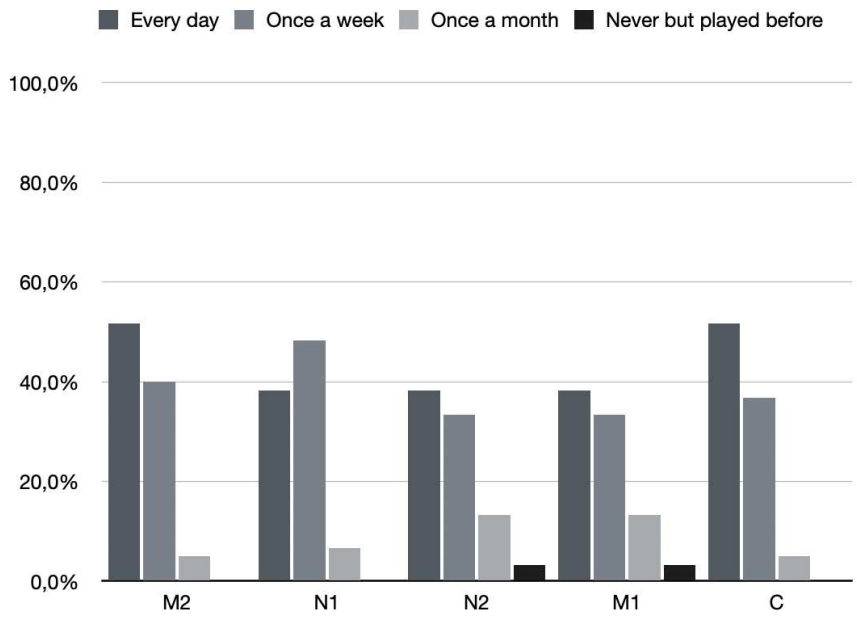

Figure 5.11- Groups and Frequency of play

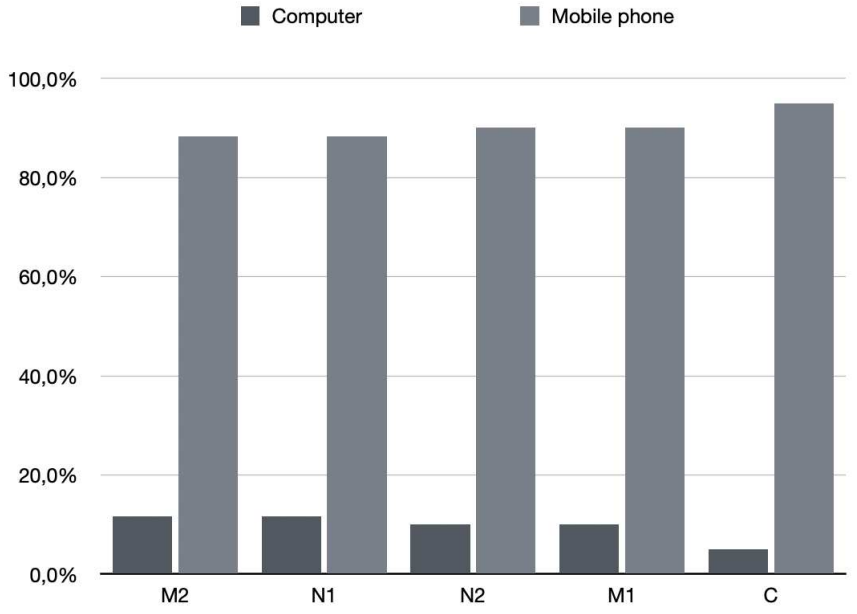

Figure 5.12- Groups and electronic device

5.2. Reliability tests

To verify if each item on the survey fits the right dimension measured, a Principal Component Analysis(PCA) was conducted and resulted in two dimensions; Purchase Intention and Brand Fit respectively (Table 5.1).

Rotated Component Matrix[a]

	Component	
	1	2
I intend to purchase	.946	-.014
I am likely to purchase	.935	-.013
I find purchase to be worthwhile	.925	.013
I strongly recommend others to purchase	.924	-.035
I plan to spend more on purchase	.866	.047
Advertised brand is a good fit for the game	.000	.992
Shown product category is a relevant object to the game	.010	.990
The images I associate with the brand are related to the images I associate with the game	.007	.988
The brand represents a lifestyle associated with the game	-.015	.987

Extraction Method: Principal Component Analysis.
Rotation Method: Varimax with Kaiser Normalization.[a]

a. Rotation converged in 3 iterations.

Table 5.1- PCA

After, to validate the items of each variable studied(Purchase Intention and Brand Fit) a Cronbach Alpha test was conducted to see if each Alpha is higher than 0,7. For Purchase Intention it is 0,954 and for Brand Fit it is 0,993 (Table 5.2 and 5.3).

Reliability

PURCHASE INTENTION

Case Processing Summary

		N	%
Cases	Valid	300	73.5
	Excluded[a]	108	26.5
	Total	408	100.0

a. Listwise deletion based on all variables in the procedure.

Reliability Statistics

Cronbach's Alpha	N of Items
.954	5

Table 5.2- Cronbach Alpha PI

Reliability

BRAND FIT

Case Processing Summary

		N	%
Cases	Valid	300	73.5
	Excluded[a]	108	26.5
	Total	408	100.0

a. Listwise deletion based on all variables in the procedure.

Reliability Statistics

Cronbach's Alpha	N of Items
.993	4

Table 5.3- Cronbach Alpha BF

An ANOVA test was also conducted to verify and see if the groups that saw a brand had a different mean than those that were not exposed to brands [$F(4, 295) = 62.330$, $p<.001$]. While the means from the four groups that saw a brand remain almost the same(M=4.08, DP=0.381; M=4.08, DP=0.334; M=4.13, DP= 0.468; M=4.18, DP=0.537) it is different from the mean of the group that did not see any brand(M=5.02, DP=0.129).

5.3. Hypotheses testing

Finally, to reach the objective of the research and test the hypotheses a few analysis was conducted. As a common method used by Martí-Parreño and Aldás-Manzano (2017) mainly due to their dichotomous nature, for the H1 a binary logistic regression was conducted to verify if the type of digital object (statue and skin) is a predictor for the variable Brand Aided Awareness, Brand Spontaneous

Awareness, and Brand Recognition. Thus, the H1a it was found that the model that contained the type of digital object (statue and skin) was not statistically significant [$X^2(1)=.352$, $p=.553$], see Annex C. For the H1b, it was found that the model that contained the type of digital object (statue and skin) was also not statistically significant [$X^2(1)=.200$, $p=.654$], see Annex D. And for the H1c it was found that the model that contained the type of digital object (statue and skin) was not statistically significant as well [$X^2(1)=.352$, $p=.553$], see Annex E. Which does not support the H1a, H1b, and H1c.

Because in the H2 there is a moderator variable, a variable used to investigate the strength of the relationship between an independent and dependent variable, a moderation analysis using the PROCESS macro extension installed in SPSS was conducted in order to verify if a (high/low) brand fit with the game moderates the effects of the type of digital object on aided awareness, spontaneous awareness, and recognition. As seen in Table 5.4 there was no statistically significant effect regarding the interaction between the variable Brand Fit (high/low) and the variable Brand Aided Awareness, so it can be concluded that there was no moderation which does not support the H2a (Annex F).

Moderation model effect

	Coefficient	***SE***	***t***	***p***
Constant	3.2562	.3776	8.623	<.0001
Type of Digital Object (X)	-.3934	.7552	-.5210	.6024
Brand fit with the game (W)	.1301	.0466	2.792	.0052
Type of Digital Object * Brand fit with the game (X*W)	-.0292	.0932	-.3140	.7535

Table 5.4- Moderation BAA

For the H2b, a moderation analysis was conducted in order to verify if a (high/low) brand fit with the game moderates the effects of the type of digital object on spontaneous awareness. As seen in Table 5.5 there was no statistically significant

effect regarding the interaction between the variable Brand Fit (high/low) with the game and the variable Brand Spontaneous Awareness, so it can be concluded that there was no moderation which does not support the H2b (Annex G).

Moderation model effect

	Coefficient	***SE***	***t***	***p***
Constant	2.4915	.2609	9.550	<.001
Type of Digital Object (X)	.0692	.5218	.1326	.8945
Brand fit with the game (W)	.1129	.0353	3.194	.0014
Type of Digital Object * Brand fit with the game (X*W)	-.0693	.0707	-.9809	.3266

Table 5.5- Moderation BSA

For the H2c, a moderation analysis was conducted in order to verify if a (high/low) brand fit with the game moderates the effects of the type of digital object on brand recognition. As seen in Table 5.6 there was no statistically significant effect regarding the interaction between the variable Brand Fit (high/low) with the game and the variable Brand Recognition, so it can be concluded that there was no moderation which does not support the H2c (Annex H).

Moderation model effect

	Coefficient	***SE***	***t***	***p***
Constant	3.2562	.3776	8.623	<.001
Type of Digital Object (X)	-.3934	.7552	-.5210	.6024
Brand fit with the game (W)	.1301	.0466	2.792	.0052
Type of Digital Object * Brand fit with the game (X*W)	-.0292	.0932	-.3140	.7535

Table 5.6- Moderation BF

Commonly used for predictive analysis, for the H3 a simple linear regression with a categorical independent variable was conducted to verify if Brand Aided Awareness, Brand Spontaneous Awareness, and Brand Recognition are able to predict the purchase intention towards the digital object. The analysis resulted in a statistically significant model [$F(1,238)=12.782$, $p<.001$; $R^2=.051$]. The variable Brand Aided Awareness ($\beta=-7.132$; $t=-3.572$; $p<.001$) is a predictor variable of the purchase intention of a digital object, explaining 5.1% of its variance which supports the H3a (Annex I). It can also be assumed that the participants who mention the brand tend to present higher values of purchase intention of a digital object, compared to the participants who did not mention the brand. For H3b, a simple linear regression with a categorical independent variable was conducted to verify if Brand Spontaneous Awareness is able to predict the purchase intention towards the digital object. The analysis resulted in a statistically significant model [$F(1,238)=7.822$, $p=.006$; $R^2=.032$]. The variable Brand Spontaneous Awareness ($\beta=-4.256$; $t=-2.797$; $p=.006$) is a predictor variable of the purchase intention of a digital object, explaining 3.2% of its variance which supports the H3b (Annex J). It can also be assumed that the participants who mention the brand tend to present higher values of purchase intention of a digital object, compared to the participants who did not mention the brand. For the H3c, a simple linear regression with a categorical independent variable was conducted to verify if Brand Recognition is able to predict the purchase intention toward the digital objects. The analysis resulted in a statistically significant model [$F(1,238)=12.782$, $p<.001$; $R^2=.051$]. The variable Brand Recognition ($\beta=-7.132$; $t=-3.575$; $p<.001$) is a predictor variable of the purchase intention of a digital object, explaining 5.1% of its variance which supports the H3c (Annex K). It can also be assumed that the participants who mention the brand tend to present higher values of purchase intention of a digital object, compared to the participants who did not mention the brand.

As for the H4a (Annex L), to verify whether there are statistical differences regarding the purchase intention between the people who saw the brand Netflix in the skin and the people who saw the brand Netflix in the turret, a t-test was

conducted for independent samples to check if the null hypothesis if fulfilled and to compare the means from the two groups. Through the Levine test it was verified that the assumption of homogeneity of variances was fulfilled (p=.743). Lastly, it can be concluded through this test that there is a statistically significant difference between the two groups[t(118)=2.583, p=.011]. Thus, the group of people who watched Netflix in the skin (M=48.15, SD=6.671) had a higher average purchase intention than the group of people who watched Netflix in the turret (M=45.03, SD=6.548) which accepts H4a. For the H4b (Annex M), to verify whether there are statistical differences regarding the purchase intention between the people who saw the brand Mc Donald's in the skin and the people who saw the brand Mc Donald's in the turret, a t-test was conducted for independent samples. Through the Levine test it was verified that the assumption of homogeneity of variances was fulfilled (p=.743). Lastly, it can be concluded through this test that there is not a statistically significant difference between the two groups[t(118)=-1.466, p=.145] which rejects H4b.

And lastly, for the H4c (Annex N), in order to compare the purchase intention of the groups exposed to brands and the group not exposed to brands(control group), a non-parametric Kruskal-Wallis test for independent samples was conducted after the ANOVA assumptions were not fulfilled. Thus, it was found that there are significant differences between the groups regarding purchase intention [H(4)=171.889, p<.001]. By the pairwise comparisons between the groups, it can conclude that the control group is significantly different from the other groups (p<.050), with a higher purchase intention(M=94.25, DP=10.787) when compared to the groups that were exposed to brands (M=42.08, DP=6.458; M=48.15, DP=6.671; M=45.03, DP= 6.548; M=43.83, DP=6.618).

To sum up, Table 5.7 shows if each one of the hypotheses' results is accepted or rejected.

Hypotheses	*Sig.*	*Results*
H1a The type of digital object that is used (Statue and skin) has a significant effect on aided awareness	.553	Rejected
H1b The type of digital object that is used (Statue and skin) has a significant effect on spontaneous awareness	.654	Rejected
H1c The type of digital object that is used (Statue and skin) has a significant effect on brand recognition	.553	Rejected
H2a The brand fit with the game (high/low) moderates the effects of the type of digital object on aided awareness	.7535	Rejected
H2b The brand fit with the game (high/low) moderates the effects of the type of digital object on spontaneous awareness	.3266	Rejected
H2c The brand fit with the game (high/low) moderates the effects of the type of digital object on brand recognition	.7535	Rejected
H3a There is a significant effect of aided awareness on purchase intention towards digital object	.001	Accepted
H3b There is a significant effect of spontaneous awareness on purchase intention towards the digital object	.006	Accepted
H3c There is a significant effect of recognition on purchase intention towards the digital object	.001	Accepted
H4a Purchase intention towards the brand for participants exposed to high fit object (skin) is higher than those exposed to high fit turret (statue)	.011	Accepted
H4b Purchase intention towards the brand for participants exposed to low fit object (skin) is higher than those exposed to low fit turret (statue)	.145	Rejected
H4c Purchase intention towards the brand for participants exposed to brands is different from those not exposed to any brands(control group)	.001	Accepted

Table 5.7- Hypotheses Outcomes

5.4. Discussion

To answer the main research questions regarding the impact of in-game advertising on the purchase intention of digital objects and the role of brand awareness and brand fit in explaining the effects, the survey items were tested and

compared with each other to conclude that brand awareness and brand fit indeed explain the effects of in-game advertising on the purchase intention of the digital object.

The first and second hypotheses test if the type of digital object used (statue and skin) is a predictor for brand awareness and if a (high/low) brand fit with the game can moderate the effects of the type of digital object on the brand awareness, the results showed the opposite just as in previous research (Oberdorfer et al., 2021).

As seen before by Chakraborty (2019), brand awareness can motivate consumers to buy. In this study, the third hypothesis resulted that brand awareness is a predictor of purchase intention towards the digital object, and respondents that mention the brand correctly have higher means of purchase intention towards the digital object, this can be explained because of respondent's lack of attention in remembering the brand, some of the answers from the survey was "I forgot", "I don't remember" or "I don't know". It can also be understood that brands that are more known among the game target tend to have higher levels of purchase intention toward the digital object, which is in line with the previous study (Catalán et al., 2019).

It was also found that people who saw a high-fit brand on the skin have higher levels of purchase intention towards the digital object when compared to the people who saw a high-fit brand on turrets which means that the company tested in the survey (MLBB) have higher levels of purchase intention with its skins instead of statues when comparing the two in-game virtual items, reinforcing the part research from Techawachirakul (2020). The low-fit brand on the skin and low-fit brand on turrets do not differ regarding the purchase intention towards the digital object confirming that only the high-fit brand has higher levels of purchase intention as seen in a previous study by Chang et al. (2010).

The last finding exposed an unusual expected result, which is that the groups exposed to the brand has lower purchase intention towards the digital object when compared to the groups that were not exposed to any brand, the reason can be explained because the in-game advertising negatively affects the in-game flow

experience of the players (Akhan & Özdemir, 2021), the role of flow has a positive impact on the attitude toward the game (Mishra et al., 2021), and the role of flow also has a positive impact on purchase intention towards the digital objects (Catalán et al., 2019).

6. CONCLUSIONS AND RECOMMENDATIONS

The aim of this study is to understand if the in-game advertisement is useful on the purchase intention towards the digital object and if brand awareness and brand fit explain the effects. As a function of this, an experiment with 5 different groups; each group was exposed to a different condition to test the variables of brand awareness, purchase intention, and brand fit. The 5 groups are divided into the ones who saw Netflix on the skin, Netflix on the turret, Mc Donald's on the skin, Mc Donald's on the turret, and one control group that did not see any in-game brand advertisement. Brand awareness, purchase intention, and brand fit were measured through all the groups that saw a brand while the group that did not see a brand was only measured by the purchase intention of the digital objects.

The report that can be drawn out of this study is that the type of digital object that is used (skin and statue) have not a significant effect on aided awareness, spontaneous awareness, and recognition, and the brand fit with the game (high and low) does not moderate the effects of the type of digital object on aided awareness, spontaneous awareness, and recognition. But there is a significant effect of aided awareness, spontaneous awareness, and recognition on the purchase intention toward the digital object. The variables aided awareness and recognition both explain the same 5.1% of the variance of the purchase intention towards digital objects while the variable spontaneous awareness explains 3.2% of the dependent variable purchase intention towards the digital object. In all of the 3 hypotheses from H3; regarding the effect of aided awareness, spontaneous awareness, and recognition on the purchase intention towards digital objects the participants who mention the brand correctly present higher values of purchase intention of a digital object, compared to the participants who did not mention the brand correctly. The group that saw Netflix on the skin had a higher mean of purchase intention that the group that saw Netflix on the turret but there were no differences between the group that saw Mc Donald's on the skin and the group that saw the brand Mc Donald's on the turret. Nevertheless, when comparing the 5 groups together regarding the variable purchase intention it is assumed that there

are significant differences between the groups and that the control group has higher values of purchase intention, in short, the group that did not see any in-game advertising has more intention to buy digital object when compared to the groups that saw in-game advertising. Under this circumstance, in-game advertising has a negative impact the purchase intention of digital objects because the level of purchase intention towards the digital objects was higher in the group that did not see any in-game advertising. Brand awareness impact the purchase intention of the digital object but the brand fit only impact on the purchase intention of the digital object when compared between a high fit and a low fit, excluding the control group.

In conclusion, the type of digital object does not impact awareness and brand fit does not moderate the effects (Oberdorfer et al., 2021), but brand awareness impacts on purchase intention of digital objects, and the presence of brands indicate lower purchase intention of digital objects when compared to the absence of brand; which can be explained by the in-game advertising negatively affects the game flow (Akhan & Özdemir, 2021), consequently affects the brand attitude towards the game (Mishra et al., 2021) and affects the purchase intention towards the in-game digital object (Catalán et al., 2019). Games should be very cautious when partnering with brands and also brands should choose wisely their collaborations; to find a common target from both companies, because not every in-game advertising that is brand and game congruent will for sure be accepted by the players. The product placement must first be authentic and not intrusive, after all, consumers prefer to buy a brand they know instead of a new product (Shahid et al., 2017). It's important to understand the brand target and the game target, learn who are the consumers and what they need should be the main goal for the companies to ensure the flow experience and to have positive effects with the in-game advertising on the purchase intention of digital objects.

6.1. Limitations and future research

This study was based on a MOBA(Multiplayer Online Battle Arena) mobile game which means that the findings should not be generalized to all types of video games. The limitations of this study consist firstly in the type of video game tested, future research should definitely test the effects of in-game advertising on purchase intention for many other types of games (e.g. shooter games, role-playing games, simulation games) and the many platforms(e.g. PC, console, VR) it has. Secondly, this survey was conducted in Portuguese which excluded many other players from the game, future research can consider a more diverse sample to do the analysis because a different culture can also influence the responses from the survey and lead to different results in the end. Lastly, the in-game advertising had limitations of size and position which affected the realism of the IGA. Due to time limitations, it was not possible to create an experimental real game base, it was used a cut from a pre-made video instead, for the manipulations on Adobe Premiere.

It would be interesting for future work to research the impact of mobile IGA on purchase intention by displaying the actual product instead of a brand logo, and to use more interactive and realistic stimuli to understand the effects. Future research should definitely focus on the brand fit and game flow experience when exposing in-game advertising.

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ANNEXES

Annex A - Survey in PT

Intro Question Block

Caros participantes,

Esse questionário faz parte da minha dissertação de Mestrado em Marketing e não vai demorar mais de 10 minutos. As informações serão tratadas de forma confidencial e anônima, sendo utilizadas apenas para fins acadêmicos.

Você aceita realizar o questionário?

Agradeço desde já!

- Sim
- Não

Bloco M2

Para responder as perguntas por favor escute e assista com atenção o video abaixo:

O video que você acabou de assistir é do jogo MLBB?

- Sim
- Não
- Não sei

No vídeo que você acabou de assistir aparece um herói e uma torre?

- Sim
- Não
- Não sei

Para responder as perguntas por favor escute e assista com atenção video abaixo:

Você conseguiu ver bem o vídeo?

- Sim
- Não
- Não sei

O vídeo que você acabou de assistir foca em um confronto/batalha?

- Sim
- Não
- Não sei

O vídeo que você acabou de assistir tem som?

- Sim
- Não
- Não sei

Você lembra de ter visto alguma marca no video?

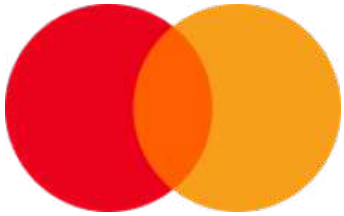
- Sim
- Não
- Não sei

Que marca você viu no vídeo?

Qual marca você viu no vídeo?

- Shell
- Mc Donald's
- Burger King
- Master Card
- None

Qual marca você viu no vídeo?



None

Com base no vídeo anterior onde aparece a marca Mc Donald's na torre, avalie seu nível de concordância com as afirmações a seguir sobre estátuas com o tema Mc Donald's:

	Discordar totalmente	Discordar	Discordar parcialmente	Nem concordar nem discordar	Concordar parcialmente	Concordar	Concordar totalmente
Eu pretendo comprar estátuas (torre) com o tema Mc Donald's							
Eu recomendo fortemente que os outros comprem estátuas (torre) com o tema Mc Donald's							
Eu acho que comprar estátuas (torre) com o tema Mc Donald's valem a pena							
É provável que eu compre estátuas (torre) com o tema Mc Donald's com frequência							
Eu pretendo gastar mais em estátuas (torre) com o tema Mc Donald's							

Com base no vídeo anterior avalie seu nível de concordância com as afirmações a seguir:

	Discordar totalmente	Discordar	Discordar parcialmente	Nem concordar nem discordar	Concordar parcialmente	Concordar	Concordar totalmente
A categoria do produto apresentado é um objeto relevante para o jogo							
Associo imagens da marca apresentada com as imagens do jogo							
A marca apresentada representa um estilo de vida associado ao jogo							
A marca apresentada combina							

com o jogo	○	○	○	○	○	○	○

Bloco N1

Para responder as perguntas por favor escute e assista com atenção o video abaixo:

O video que você acabou de assistir é do jogo MLBB?

- ○ Sim
- ○ Não
- ○ Não sei

No vídeo que você acabou de assistir aparece um herói e uma torre?

- ○ Sim
- ○ Não
- ○ Não sei

Para responder as perguntas por favor escute e assista com atenção o video abaixo:

Você conseguiu ver bem o vídeo?

- ○ Sim
- ○ Não
- ○ Não sei

O vídeo que você acabou de assistir foca em um confronto/batalha?

- ○ Sim
- ○ Não
- ○ Não sei

O vídeo que você acabou de assistir tem som?

- ○ Sim
- ○ Não
- ○ Não sei

Você lembra de ter visto alguma marca no video?

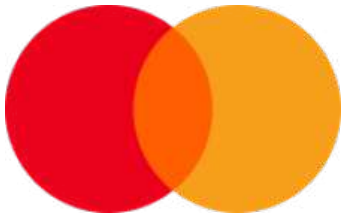
- ○ Sim
- ○ Não
- ○ Não sei

Que marca você viu no vídeo?

Qual marca você viu no vídeo?

- Shell
- Netflix
- Burger King
- Master Card
- None

Qual marca você viu no vídeo?

- 
- 
- 
- 
- None

Com base no vídeo anterior onde aparece a marca Netflix na skin, avalie seu nível de concordância com as

afirmações a seguir sobre skins com o tema Netflix:

	Discordar totalmente	Discordar	Discordar parcialmente	Nem concordar nem discordar	Concordar parcialmente	Concordar	Concordar totalmente
Eu pretendo comprar skins com o tema Netflix	○	○	○	○	○	○	○
Eu recomendo fortemente que os outros comprem skins com o tema Netflix	○	○	○	○	○	○	○
Eu acho que comprar skins com o tema Netflix valem a pena	○	○	○	○	○	○	○
É provável que eu compre skins com o tema Netflix com frequência	○	○	○	○	○	○	○
Eu pretendo gastar mais em skins com o tema Netflix	○	○	○	○	○	○	○

Com base no vídeo anterior avalie seu nível de concordância com as afirmações a seguir:

	Discordar totalmente	Discordar	Discordar parcialmente	Nem concordar nem discordar	Concordar parcialmente	Concordar	Concordar totalmente
A categoria do produto apresentado é um objeto relevante para o jogo	○	○	○	○	○	○	○
Associo imagens da marca apresentada com as imagens do jogo	○	○	○	○	○	○	○
A marca apresentada representa um estilo de vida associado ao jogo	○	○	○	○	○	○	○
A marca apresentada combina com o jogo	○	○	○	○	○	○	○

Bloco N2

Para responder as perguntas por favor escute e assista com atenção o video abaixo:

O video que você acabou de assistir é do jogo MLBB?

- ○ Sim
- ○ Não
- ○ Não sei

No vídeo que você acabou de assistir aparece um herói e uma torre?

- ○ Sim
- ○ Não
- ○ Não sei

Para responder as perguntas por favor escute e assista com atenção o video abaixo:

Você conseguiu ver bem o vídeo?

- Sim
- Não
- Não sei

O vídeo que você acabou de assistir foca em um confronto/batalha?

- Sim
- Não
- Não sei

O vídeo que você acabou de assistir tem som?

- Sim
- Não
- Não sei

Você lembra de ter visto alguma marca no video?

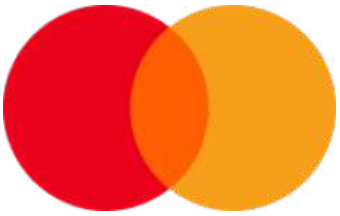
- Sim
- Não
- Não sei

Que marca você viu no vídeo?

Qual marca você viu no vídeo?

- Shell
- Netflix
- Burger King
- Master Card
- None

Qual marca você viu no vídeo?



None

Com base no vídeo anterior onde aparece a marca Netflix na torre, avalie seu nível de concordância com as afirmações a seguir sobre estátuas com o tema Netflix:

	Discordar totalmente	Discordar	Discordar parcialmente	Nem concordar nem discordar	Concordar parcialmente	Concordar	Concordar totalmente
Eu pretendo comprar estátuas (torre) com o tema Netflix							
Eu recomendo fortemente que os outros comprem estátuas (torre) com o tema Netflix							
Eu acho que comprar estátuas (torre) com o tema Netflix valem a pena							
É provável que eu compre estátuas (torre) com o tema Netflix com frequência							
Eu pretendo gastar mais em estátuas (torre) com o tema Netflix							

Com base no vídeo anterior avalie seu nível de concordância com as afirmações a seguir:

	Discordar totalmente	Discordar	Discordar parcialmente	Nem concordar nem discordar	Concordar parcialmente	Concordar	Concordar totalmente
A categoria do produto							

apresentado é um objeto relevante para o jogo	○	○	○	○	○	○	○
Associo imagens da marca apresentada com as imagens do jogo	○	○	○	○	○	○	○
A marca apresentada representa um estilo de vida associado ao jogo	○	○	○	○	○	○	○
A marca apresentada combina com o jogo	○	○	○	○	○	○	○

Bloco M1

Para responder as perguntas por favor escute e assista com atenção o video abaixo:

O video que você acabou de assistir é do jogo MLBB?

- ○ Sim
- ○ Não
- ○ Não sei

No vídeo que você acabou de assistir aparece um herói e uma torre?

- ○ Sim
- ○ Não
- ○ Não sei

Para responder as perguntas por favor escute e assista com atenção o video abaixo:

Você conseguiu ver bem o vídeo?

- ○ Sim
- ○ Não
- ○ Não sei

O vídeo que você acabou de assistir foca em um confronto/batalha?

- ○ Sim
- ○ Não
- ○ Não sei

O vídeo que você acabou de assistir tem som?

- ○ Sim
- ○ Não
- ○ Não sei

Você lembra de ter visto alguma marca no video?

- ○ Sim

Não

Não sei

Que marca você viu no vídeo?

Qual marca você viu no vídeo?

Shell

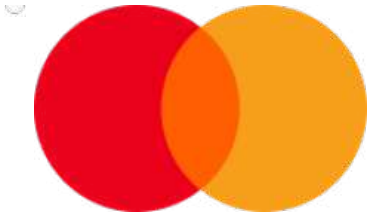
Mc Donald's

Burger King

Master Card

None

Qual marca você viu no vídeo?



None

Com base no vídeo anterior onde aparece a marca Mc Donald's na skin, avalie seu nível de concordância com as afirmações a seguir sobre skins com o tema Mc Donald's:

	Discordar totalmente	Discordar	Discordar parcialmente	Nem concordar nem discordar	Concordar parcialmente	Concordar	Concordar totalmente
Eu pretendo comprar skins com o tema Mc Donald's							
Eu recomendo fortemente que os outros comprem skins com o tema Mc Donald's							
Eu acho que comprar skins com o tema Mc Donald's valem a pena							
É provável que eu compre skins com o tema Mc Donald's com frequência							
Eu pretendo gastar mais em skins com o tema Mc Donald's							

Com base no vídeo anterior avalie seu nível de concordância com as afirmações a seguir:

	Discordar totalmente	Discordar	Discordar parcialmente	Nem concordar nem discordar	Concordar parcialmente	Concordar	Concordar totalmente
A categoria do produto apresentado é um objeto relevante para o jogo							
Associo imagens da marca apresentada com as imagens do jogo							
A marca apresentada representa um estilo de vida associado ao jogo							
A marca apresentada combina com o jogo							

Block C

Para responder as perguntas por favor assista com atenção o video abaixo:

O video que você acabou de assistir é do jogo MLBB?

Sim

Não

Não sei

No vídeo que você acabou de assistir aparece um herói e uma torre?

- Sim
- Não
- Não sei

Para responder as perguntas por favor assista com atenção o video abaixo:

Você conseguiu ver bem o vídeo?

- Sim
- Não
- Não sei

O vídeo que você acabou de assistir foca em um confronto/batalha?

- Sim
- Não
- Não sei

O vídeo que você acabou de assistir tem som?

- Sim
- Não
- Não sei

Com base no vídeo anterior avalie seu nível de concordância com as afirmações a seguir:

	Discordar totalmente	Discordar	Discordar parcialmente	Nem concordar nem discordar	Concordar parcialmente	Concordar	Concordar totalmente
Eu pretendo comprar skins	○	○	○	○	○	○	○
Eu recomendo fortemente que os outros comprem skins	○	○	○	○	○	○	○
Eu acho que comprar skins valem a pena	○	○	○	○	○	○	○
É provável que eu compre skins com frequência	○	○	○	○	○	○	○
Eu pretendo gastar mais em skins	○	○	○	○	○	○	○
Eu pretendo continuar comprando estátuas (torre)	○	○	○	○	○	○	○
Eu recomendo fortemente que os outros comprem estátuas (torre)	○	○	○	○	○	○	○
Eu acho que comprar estátuas (torre) valem a pena	○	○	○	○	○	○	○
É provável que eu compre estátuas (torre) com frequência	○	○	○	○	○	○	○
Eu pretendo gastar mais em estátuas (torre)	○	○	○	○	○	○	○

Socio Demographics

Com qual gênero você se identifica?

- Feminino
- Masculino
- Não binario/a

Qual a sua idade?

- Menos de 18 anos
- Entre 19 a 25 anos
- Entre 26 a 30 anos
- Entre 31 a 35 anos
- Mais de 36 anos

Qual seu nível completo de escolaridade?

- Ensino fundamental
- Ensino médio
- Ensino superior
- Mestrado
- Nenhum

Qual sua nacionalidade?

Você gosta de jogar MLBB?

- Sim
- Não

Qual a frequência que você joga MLBB?

- Todo dia
- 1x por semana
- 1x por mês
- 1x por ano
- Nunca, mas ja joguei

Você costuma comprar skins?

- Sim
- Não

Você costuma comprar estátuas para torre?

- Sim
- Não

Você está respondendo esse questionário via celular ou computador?

- Celular
- Computador

Annex B - Survey in ENG

Intro Question Block

Dear participants,

This questionnaire is part of my Master's thesis in Marketing and will not take more than 10 minutes. The information will be treated confidentially and anonymously, being used only for academic purposes. Do you agree to take the questionnaire?

Thanks in advance!

- Yes
- No

Bloco M2

To answer the questions, please listen and watch carefully the video below:

Is the video you just watched from the game MLBB?

- Yes
- No
- Don't know

In the video you just watched, does a hero and a turret appear?

- Yes
- No
- Don't know

To answer the questions, please listen and watch carefully the video below:

Could you see well the video?

- Yes
- No
- Don't know

Does the video you just watched focus on a confrontation/battle?

- Yes
- No
- Don't know

Does the video you just watched have sound?

- Yes
- No
- Don't know

Do you remember seeing any brands in the video?

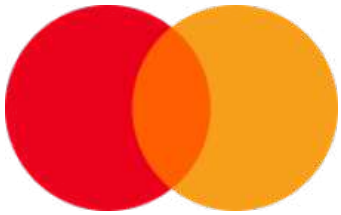
- Yes
- No
- Don't know

What brand did you see in the video?

What brand did you see in the video?

- Shell
- Mc Donald's
- Burger King
- Master Card
- None

What brand did you see in the video?



None

Based on the previous video where the Mc Donald's brand appears on the turret, rate your level of agreement with the following statements about statues with the Mc Donald's theme:

	Totally disagree	Disagree	Partially disagree	Neither agree nor disagree	Partially agree	Agree	Totally agree
I intend to purchase statues (turret) with the Mc Donald's theme							
I strongly recommend others to purchase Mc Donald's themed (turret) statues							
I think to purchase statues (turrets) with the Mc Donald's theme are worthwhile							
I'm likely to purchase Mc Donald's themed statues (turrets) more often							
I plan to spend more on statues (turrets) with Mc Donald's theme							

Based on the previous video, rate your level of agreement with the following statements:

	Totally disagree	Disagree	Partially disagree	Neither agree nor disagree	Partially agree	Agree	Totally agree
The shown product category is a relevant object to the game							
I associate with the brand are related to the images I associate with the game							
The brand represents a lifestyle associated with the game							
The advertised brand is a good fit for the game							

Bloco N1

To answer the questions, please listen and watch carefully the video below:

Is the video you just watched from the game MLBB?

- Yes
- No
- Don't know

In the video you just watched, does a hero and a turret appear?

- Yes
- No
- Don't know

To answer the questions, please listen and watch carefully the video below:

Could you see well the video?

- Yes
- No
- Don't know

Does the video you just watched focus on a confrontation/battle?

- Yes
- No
- Don't know

Does the video you just watched have sound?

- Yes
- No
- Don't know

Do you remember seeing any brands in the video?

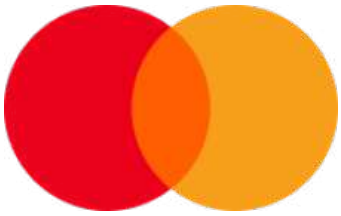
- Yes
- No
- Don't know

What brand did you see in the video?

What brand did you see in the video?

- Shell
- Netflix
- Burger King
- Master Card
- None

What brand did you see in the video?



- None

Based on the previous video where the Netflix brand appears on the skin, rate your level of agreement with the following statements about skin with the Netflix theme:

	Neither

	Totally disagree	Disagree	Partially disagree	agree nor disagree	Partially agree	Agree	Totally agree
I intend to purchase skins with the Netflix theme	○	○	○	○	○	○	○
I strongly recommend others to purchase Netflix themed (turret) skins	○	○	○	○	○	○	○
I think to purchase skins with the Netflix theme are worthwhile	○	○	○	○	○	○	○
I'm likely to purchase Netflix themed skins more often	○	○	○	○	○	○	○
I plan to spend more on skins with Netflix theme	○	○	○	○	○	○	○

Based on the previous video, rate your level of agreement with the following statements:

	Totally disagree	Disagree	Partially disagree	Neither agree nor disagree	Partially agree	Agree	Totally agree
The shown product category is a relevant object to the game	○	○	○	○	○	○	○
I associate with the brand are related to the images I associate with the game	○	○	○	○	○	○	○
The brand represents a lifestyle associated with the game	○	○	○	○	○	○	○
The advertised brand is a good fit for the game	○	○	○	○	○	○	○

Bloco N2

To answer the questions, please listen and watch carefully the video below:

Is the video you just watched from the game MLBB?

- ○ Yes
- ○ No
- ○ Don't know

In the video you just watched, does a hero and a turret appear?

- ○ Yes
- ○ No
- ○ Don't know

To answer the questions, please listen and watch carefully the video below:

Could you see well the video?

- ○ Yes
- ○ No
- ○ Don't know

Does the video you just watched focus on a confrontation/battle?

- Yes
- No
- Don't know

Does the video you just watched have sound?

- Yes
- No
- Don't know

Do you remember seeing any brands in the video?

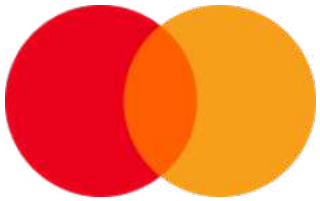
- Yes
- No
- Don't know

What brand did you see in the video?

What brand did you see in the video?

- Shell
- Netflix
- Burger King
- Master Card
- None

What brand did you see in the video?



None

Based on the previous video where the Netflix brand appears on the turret, rate your level of agreement with the following statements about statues with the Netflix theme:

	Totally disagree	Disagree	Partially disagree	Neither agree nor disagree	Partially agree	Agree	Totally agree
I intend to purchase statues (turret) with the Netflix theme							
I strongly recommend others to purchase Netflix themed (turret) statues							
I think to purchase statues (turrets) with the Netflix theme are worthwhile							
I'm likely to purchase Netflix themed statues (turrets) more often							
I plan to spend more on statues (turrets) with Netflix theme							

Based on the previous video, rate your level of agreement with the following statements:

	Totally disagree	Disagree	Partially disagree	Neither agree nor disagree	Partially agree	Agree	Totally agree
The shown product category is a relevant object to the game							

I associate with the brand are related to the images I associate with the game	○	○	○	○	○	○	○
The brand represents a lifestyle associated with the game	○	○	○	○	○	○	○
The advertised brand is a good fit for the game	○	○	○	○	○	○	○

Bloco M1

To answer the questions, please listen and watch carefully the video below:

Is the video you just watched from the game MLBB?

- ○ Yes
- ○ No
- ○ Don't know

In the video you just watched, does a hero and a turret appear?

- ○ Yes
- ○ No
- ○ Don't know

To answer the questions, please listen and watch carefully the video below :

Could you see well the video?

- ○ Yes
- ○ No
- ○ Don't know

Does the video you just watched focus on a confrontation/battle?

- ○ Yes
- ○ No
- ○ Don't know

Does the video you just watched have sound?

- ○ Yes
- ○ No
- ○ Don't know

Do you remember seeing any brands in the video?

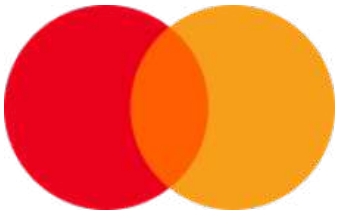
- ○ Yes
- ○ No
- ○ Don't know

What brand did you see in the video?

What brand did you see in the video?

- Shell
- Mc Donald's
- Burger King
- Master Card
- None

What brand did you see in the video?



- None

Based on the previous video where the Mc Donald's brand appears on the skins, rate your level of agreement with the following statements about skins with the Mc Donald's theme:

	Totally disagree	Disagree	Partially disagree	Neither agree nor disagree	Partially agree	Agree	Totally agree
I intend to purchase skins with the Mc Donald's theme							
I strongly recommend others to purchase Mc Donald's themed skins							
I think to purchase skins with the Mc Donald's theme are worthwhile							
I'm likely to purchase Mc Donald's themed skins more often							
I plan to spend more on skins with Mc Donald's theme							

Based on the previous video, rate your level of agreement with the following statements:

	Totally disagree	Disagree	Partially disagree	Neither agree nor disagree	Partially agree	Agree	Totally agree
The shown product category is a relevant object to the game							
I associate with the brand are related to the images I associate with the game							
The brand represents a lifestyle associated with the game							
The advertised brand is a good fit for the game							

Block C

To answer the questions, please listen and watch carefully the video below:

Is the video you just watched from the game MLBB?

- Yes
- No
- Don't know

In the video you just watched, does a hero and a turret appear?

- Yes
- No
- Don't know

To answer the questions, please listen and watch carefully the video below:

Could you see well the video?

- Yes
- No
- Don't know

Does the video you just watched focus on a confrontation/battle?

- Yes
- No
- Don't know

Does the video you just watched have sound?

- Yes
- No
- Don't know

Based on the previous video, rate your level of agreement with the following statements:

	Totally disagree	Disagree	Partially disagree	Neither agree nor disagree	Partially agree	Agree	Totally agree
I intend to purchase skins							
I strongly recommend others to purchase skins							
I think to purchase skins are worthwhile							
I'm likely to purchase skins more often							
I plan to spend more on skins							
I intend to purchase statues (turret)							
I strongly recommend others to purchase statues (turret)							
I think to purchase statues (turrets) are worthwhile							
I'm likely to purchase statues (turrets) more often							
I plan to spend more on statues (turrets)							

Socio Demographics

Gender

- Female
- Male
- Non-binary

Age

- Less than 18 years
- 19 to 25 years
- 26 to 30 years
- 31 to 35 years
- Over 36 years

Complete level of education

- Primary school
- High school
- Bachelor degree
- Master
- None

Nationality

Do you like to play MLBB?

- Yes
- No

What's the frequency do you play MLBB?

- Every day
- Once a week
- Once a month
- Once a year
- Never, but played before

Do you buy skins?

- Yes
- No

Do you buy statue(turrets)?

- Yes
- No

You are answering via mobile phone or computer?

- ◯ Mobile phone
- ◯ Computer

Annex C- H1a Outputs

Logistic Regression

Case Processing Summary

Unweighted Cases[a]		N	Percent
Selected cases	Included in Analysis	240	100,0
	Missing cases	0	,0
	Total	240	100,0
Unselected cases		0	,0
Total		240	100,0

[a] If weight is in effect, see classification table for the total number of cases

Dependent Variable Encoding

Original value	Internal Value
Not mention the brand	0
Mention the brand	1

Block 0: Beginning Block

Classification Table[a,b]

			Predicted		
			B.A.A		
	Observed		Not mention the brand	Mention the brand	Percentage corret
Step 0	B.A.A	Not mention the brand	0	12	,0
		Mention the brand	0	228	100,0
	Overall Percentage				95,0

[a] Constant is included in the model

[b] The cut value is .500

Variables in the Equation

		B	S.E.	Wald	df	Sig.	Exp(B)
Step 0	Constant	2,944	,296	98,835	1	<,001	19,000

Variables not in the Equation

			Score	df	Sig.
Step 0	Variables	TypObj	,351	1	,554
	Overall Statistics		,351	1	,554

Block 1: Method = Enter

Omnibus Test of Model Coefficients

		Chi-square	df	Sig.
Step 1	Steo	,352	1	,553
	Block	,352	1	,553
	Model	,352	1	,553

Model Summary

Step	-2 Log likelihood	Cox & Snell R Square	Nagelkerke R Square
1	94,935[a]	,001	,004

[a] Estimation terminated at iteration number 6 because parameter estimates changed by less than .001.

Hosmer and Lemeshow Test

Step	Chi-square	df	Sig.
1	,000	0	.

Contingency Table for Hosmer e Lemeshow Test

		B.A.A = Not mention the brand		B.A.A = Mention the brand		
		Observed	Expected	Observed	Expected	Total
Step 1	1	7	7,000	113	113,000	120
	2	5	5,000	115	115,000	120

Classification Table[a]

			Predicted		
			B.A.A		
	Observed		Not mention the brand	Mention the brand	Percentage corret
Step 1	B.A.A	Not mention the brand	0	12	,0
		Mention the brand	0	228	100,0
	Overall percentage				95,0

[a] The cut value is .500

Variables in the Equation

								95% Confidence Interval for EXP(B)	
		B	S.E.	Wald	df	Sig.	Exp(B)	Lower Bound	Upper Bound
Step 1[a]	TypObj	-,354	,600	,348	1	,555	,702	,216	2,276
	Constant	3,135	,457	47,108	1	<,001	23,000		

[a] Variable(s) entered on step 1: TypObj.

Annex D- H1b Outputs

Logistic Regression

Case Processing Summary

Unweighted Cases[a]		N	Percent
Selected cases	Included in Analysis	240	100,0
	Missing cases	0	,0
	Total	240	100,0
Unselected cases		0	,0
Total		240	100,0

[a] If weight is in effect, see classification table for the total number of cases

Dependent Variable Encoding

Original value	Internal Value
Not mention the brand	0
Mention the brand	1

Block 0: Beginning Block

Classification Table[a,b]

			Predicted		
			B.A.S		
	Observed		Not mention the brand	Mention the brand	Percentage corret
Step 0	B.A.S	Not mention the brand	0	22	,0
		Mention the brand	0	218	100,0
	Overall Percentage				90,8

[a] Constant is included in the model

[b] The cut value is .500

Variables in the Equation

		B	S.E.	Wald	df	Sig.	Exp(B)
Step 0	Constant	2,293	,224	105,111	1	<,001	9,909

Variables not in the Equation

			Score	df	Sig.
Step 0	Variables	TypObj	,200	1	,655
	Overall Statistics		,200	1	,655

Block 1: Method = Enter

Omnibus Test of Model Coefficients

		Chi-square	df	Sig.
Step 1	Step	,200	1	,654
	Block	,200	1	,654
	Model	,200	1	,654

Model Summary

Step	-2 Log likelihood	Cox & Snell R Square	Nagelkerke R Square
1	146,861[a]	,001	,002

[a] Estimation terminated at iteration number 5 because parameter estimates changed by less than .001.

Hosmer e Lemeshow Test

Step	Chi-square	df	Sig.
1	,000	0	.

Contingency Table for Hosmer e Lemeshow Test

		B.A.S = Not mention the brand		B.A.S = Mention the brand		
		Observed	Expected	Observed	Expected	Total
Step 1	1	12	12,000	108	108,000	120
	2	10	10,000	110	110,000	120

Classification Table[a]

			Predicted		
			B.A.S		
	Observed		Not mention the brand	Mention the brand	Percentage corret
Etapa 1	B.A.S	Not mention the brand	0	22	,0
		Mention the brand	0	218	100,0
	Overall Percentage				90,8

[a] The cut value is .500

Variables in the Equation

								95% Confidence Interval for EXP(B)	
		B	S.E.	Wald	df	Sig.	Exp(B)	Lower Bound	Upper Bound
Step 1[a]	TypObj	,201	,449	,200	1	,655	1,222	,507	2,947
	Constant	2,197	,304	52,140	1	<,001	9,000		

[a] Variable(s) entered on step 1: TypObj.

Annex E- H1c Outputs

Logistic Regression

Case Processing Summary

Unweighted Cases[a]		N	Percent
Selected cases	Incluído na análise	240	100,0
	Missing cases	0	,0
	Total	240	100,0
Unselected cases		0	,0
Total		240	100,0

[a] If weight is in effect, see classification table for the total number of cases

Dependent Variable Encoding

Original value	Internal Value
Not mention the brand	0
Mention the brand	1

Block 0: Beginning Block

Classification Table[a,b]

			Predicted		
			B.R		
	Observed		Not mention the brand	Mention the brand	Percentage corret
Step 0	B.R	Not mention the brand	0	12	,0
		Mention the brand	0	228	100,0
	Overall Percentage				95,0

a. Constant is included in the model

b. The cut value is .500

Variables in the Equation

		B	S.E.	Wald	df	Sig.	Exp(B)
Step 0	Constant	2,944	,296	98,835	1	<,001	19,000

Variables not in the Equation

			Score	df	Sig.
Step 0	Variables	TypObj	,351	1	,554
	Overall Statistics		,351	1	,554

Block 1: Method = Enter

Omnibus Test of Model Coefficients

		Chi-square	df	Sig.
Step 1	Step	,352	1	,553
	Block	,352	1	,553
	Model	,352	1	,553

Model Summary

Step	-2 Log likelihood	Cox & Snell R Square	Nagelkerke R Square
1	94,935[a]	,001	,004

[a] Estimation terminated at iteration number 5 because parameter estimates changed by less than .001.

Hosmer e Lemeshow Test

Step	Chi-square	df	Sig.
1	,000	0	.

Contingency Table for Hosmer e Lemeshow Test

		B.R = Not mention the brand		B.R = Mention the brand		
		Observed	Expected	Observed	Expected	Total
Step 1	1	7	7,000	113	113,000	120
	2	5	5,000	115	115,000	120

Classification Table[a]

			Predicted		
			B.R		
	Observed		Not mention the brand	Mention the brand	Percentage corret
Step 1	B.R	Not mention the brand	0	12	,0
		Mention the brand	0	228	100,0
	Overall percentage				95,0

a. The cut value is .500

Variables in the Equation

								95% Confidence Interval for EXP(B)	
		B	S.E.	Wald	df	Sig.	Exp(B)	Lower Bound	Upper Bound
Step 1[a]	TypObj	-,354	,600	,348	1	,555	,702	,216	2,276
	Constant	3,135	,457	47,108	1	<,001	23,000		

a. Variable(s) entered on step 1: TypObj.

Annex F- H2a Outputs

Matriz

```
Run MATRIX procedure:

***************** PROCESS Procedure for SPSS Version 4.1 *****************

          Written by Andrew F. Hayes, Ph.D.       www.afhayes.com
    Documentation available in Hayes (2022). www.guilford.com/p/hayes3

**************************************************************************
Model  : 1
    Y  : B.A.A
    X  : TypObj
    W  : BRANDFIT

Sample
Size:  240

**************************************************************************
OUTCOME VARIABLE:
 B.A.A

Coding of binary Y for logistic regression analysis:
     B.A.A  Analysis
       ,00       ,00
      1,00      1,00

Model Summary
       -2LL    ModelLL         df          p   McFadden   CoxSnell   Nagelkrk
    86,9582     8,3291     3,0000      ,0397      ,0874      ,0341      ,1041

Model
              coeff         se          Z          p       LLCI       ULCI
constant     3,2562      ,3776     8,6236      ,0000     2,5161     3,9963
TypObj       -,3934      ,7552     -,5210      ,6024    -1,8736     1,0867
BRANDFIT      ,1301      ,0466     2,7929      ,0052      ,0388      ,2214
Int_1        -,0292      ,0932     -,3140      ,7535     -,2118      ,1533

These results are expressed in a log-odds metric.

Product terms key:
 Int_1    :        TypObj    x        BRANDFIT
```

```
Covariance matrix of regression parameter estimates:
           constant     TypObj   BRANDFIT      Int_1
constant      ,1426     -,0554      ,0102     -,0045
TypObj       -,0554      ,5703     -,0045      ,0410
BRANDFIT      ,0102     -,0045      ,0022     -,0008
Int_1        -,0045      ,0410     -,0008      ,0087

Likelihood ratio test(s) of highest order
unconditional interactions(s):
        Chi-sq         df          p
X*W      ,0990     1,0000      ,7530

*********** BOOTSTRAP RESULTS FOR REGRESSION MODEL PARAMETERS ************

OUTCOME VARIABLE:
 B.A.A

              Coeff   BootMean     BootSE   BootLLCI   BootULCI
constant     3,2562     6,2820    14,9273     2,7305    68,1231
TypObj       -,3934    -5,7414    29,8590  -129,2712     1,7034
BRANDFIT      ,1301      ,3416     1,1358      ,0125     4,9719
Int_1        -,0292     -,4239     2,2773    -9,7105      ,2279

************************ ANALYSIS NOTES AND ERRORS ************************

Level of confidence for all confidence intervals in output:
  95,0000

Number of bootstrap samples for percentile bootstrap confidence intervals:
  5000

NOTE: Total effect model not available with dichotomous Y

NOTE: The following variables were mean centered prior to analysis:
          BRANDFIT TypObj

------ END MATRIX -----
```

Annex G- H2b Outputs

Matriz

```
Run MATRIX procedure:

***************** PROCESS Procedure for SPSS Version 4.1 *****************

          Written by Andrew F. Hayes, Ph.D.       www.afhayes.com
    Documentation available in Hayes (2022). www.guilford.com/p/hayes3

**************************************************************************
Model  : 1
    Y  : B.A.S
    X  : TypObj
    W  : BRANDFIT

Sample
Size:  240

**************************************************************************
OUTCOME VARIABLE:
 B.A.S

Coding of binary Y for logistic regression analysis:
     B.A.S  Analysis
       ,00       ,00
      1,00      1,00

Model Summary
       -2LL    ModelLL         df          p   McFadden   CoxSnell   Nagelkrk
   135,1750    11,8860     3,0000      ,0078      ,0808      ,0483      ,1055

Model
              coeff         se          Z          p       LLCI       ULCI
constant     2,4915      ,2609     9,5501      ,0000     1,9802     3,0028
TypObj        ,0692      ,5218      ,1326      ,8945     -,9535     1,0918
BRANDFIT      ,1129      ,0353     3,1945      ,0014      ,0436      ,1821
Int_1        -,0693      ,0707     -,9809      ,3266     -,2078      ,0692

These results are expressed in a log-odds metric.

Product terms key:
 Int_1    :        TypObj    x        BRANDFIT
```

```
Covariance matrix of regression parameter estimates:
           constant     TypObj   BRANDFIT      Int_1
constant      ,0681     -,0027      ,0042     -,0010
TypObj       -,0027      ,2723     -,0010      ,0169
BRANDFIT      ,0042     -,0010      ,0012      ,0000
Int_1        -,0010      ,0169      ,0000      ,0050

Likelihood ratio test(s) of highest order
unconditional interactions(s):
        Chi-sq         df          p
X*W      ,9726     1,0000      ,3240

********** BOOTSTRAP RESULTS FOR REGRESSION MODEL PARAMETERS **********

OUTCOME VARIABLE:
 B.A.S

             Coeff   BootMean     BootSE   BootLLCI   BootULCI
constant     2,4915     2,5836      ,3325     2,0948     3,2155
TypObj        ,0692      ,0850      ,6674    -1,0444     1,3070
BRANDFIT      ,1129      ,1152      ,0375      ,0500      ,1851
Int_1        -,0693     -,0742      ,0753     -,2137      ,0593

************************ ANALYSIS NOTES AND ERRORS ************************

Level of confidence for all confidence intervals in output:
  95,0000

Number of bootstrap samples for percentile bootstrap confidence intervals:
  5000

NOTE: Total effect model not available with dichotomous Y

NOTE: The following variables were mean centered prior to analysis:
          BRANDFIT TypObj

------ END MATRIX -----
```

Annex H- H2c Outputs

Matriz

```
Run MATRIX procedure:

***************** PROCESS Procedure for SPSS Version 4.1 *****************

          Written by Andrew F. Hayes, Ph.D.       www.afhayes.com
    Documentation available in Hayes (2022). www.guilford.com/p/hayes3

**************************************************************************
Model  : 1
    Y  : B.R
    X  : TypObj
    W  : BRANDFIT

Sample
Size:  240

**************************************************************************
OUTCOME VARIABLE:
 B.R

Coding of binary Y for logistic regression analysis:
       B.R  Analysis
       ,00       ,00
      1,00      1,00

Model Summary
       -2LL    ModelLL         df          p   McFadden   CoxSnell   Nagelkrk
    86,9582     8,3291     3,0000      ,0397      ,0874      ,0341      ,1041

Model
              coeff         se          Z          p       LLCI       ULCI
constant     3,2562      ,3776     8,6236      ,0000     2,5161     3,9963
TypObj       -,3934      ,7552     -,5210      ,6024    -1,8736     1,0867
BRANDFIT      ,1301      ,0466     2,7929      ,0052      ,0388      ,2214
Int_1        -,0292      ,0932     -,3140      ,7535     -,2118      ,1533

These results are expressed in a log-odds metric.

Product terms key:
 Int_1    :        TypObj    x        BRANDFIT
```

```
Covariance matrix of regression parameter estimates:
           constant     TypObj   BRANDFIT      Int_1
constant      ,1426     -,0554      ,0102     -,0045
TypObj       -,0554      ,5703     -,0045      ,0410
BRANDFIT      ,0102     -,0045      ,0022     -,0008
Int_1        -,0045      ,0410     -,0008      ,0087

Likelihood ratio test(s) of highest order
unconditional interactions(s):
        Chi-sq         df          p
X*W      ,0990     1,0000      ,7530

********** BOOTSTRAP RESULTS FOR REGRESSION MODEL PARAMETERS **********

OUTCOME VARIABLE:
 B.R

              Coeff   BootMean     BootSE   BootLLCI   BootULCI
constant     3,2562     6,5108    15,2850     2,7095    69,5407
TypObj       -,3934    -6,1321    30,5693  -132,5039     1,6955
BRANDFIT      ,1301      ,3586     1,1604      ,0137     5,0100
Int_1        -,0292     -,4535     2,3265    -9,9016      ,2343

************************ ANALYSIS NOTES AND ERRORS ************************

Level of confidence for all confidence intervals in output:
  95,0000

Number of bootstrap samples for percentile bootstrap confidence intervals:
  5000

NOTE: Total effect model not available with dichotomous Y

NOTE: The following variables were mean centered prior to analysis:
          BRANDFIT TypObj

------ END MATRIX -----
```

Annex I- H3a Outputs

Univariate Analysis of Variance

Between-Subjects Factors

		Value Label	N
B.A.A	0	Not mention the brand	12
	1	Mention the brand	228

Descriptive Statistics

Dependent Variable: PURCHASEINTENTION

B.A.A	Mean	Std. Deviation	N
Not mention the brand	38,00	7,966	12
Mention the brand	45,13	6,670	228
Total	44,78	6,899	240

Tests of Between-Subjects Effects

Dependent Variable: PURCHASEINTENTION

Source	Type III Sum of Squares	df	Mean Square	F	Sig.
Corrected Model	579,797[a]	1	579,797	12,782	<,001
Intercept	78783,797	1	78783,797	1736,796	<,001
B.A.A	579,797	1	579,797	12,782	<,001
Error	10796,053	238	45,362		
Total	492528,000	240			
Corrected Total	11375,850	239			

[a] R Squared = .051 (Adjusted R Squared = .047)

Parameter Estimates

Dependent Variable: PURCHASEINTENTION

Parameter	B	Std. Error	t	Sig.	95% Confidence Interval	
					Lower Bound	Upper Bound
Intercept	45,132	,446	101,182	<,001	44,253	46,010
[B.A.A=0]	-7,132	1,995	-3,575	<,001	-11,061	-3,202
[B.A.A=1]	0[a]	.	.	.	.	.

[a] This parameter is set to zero because it is redundant.

Annex J- H3b Outputs

Univariate Analysis of Variance

Between-Subjects Factors

		Value Label	N
B.A.S	0	Not mention the brand	22
	1	Mention the brand	218

Descriptive Statistics

Dependent Variable: PURCHASEINTENTION

B.A.S	Mean	Std. Deviation	N
Not mention the brand	40,91	8,652	22
Mention the brand	45,17	6,596	218
Total	44,78	6,899	240

Tests of Between-Subjects Effects

Dependent Variable: PURCHASEINTENTION

Source	Type III Sum of Squares	df	Mean Square	F	Sig.
Corrected Model	361,977[a]	1	361,977	7,822	,006
Intercept	148051,977	1	148051,977	3199,271	<,001
B.A.S	361,977	1	361,977	7,822	,006
Error	11013,873	238	46,277		
Total	492528,000	240			
Corrected Total	11375,850	239			

[a] R Squared = .032 (Adjusted R Squared = .028)

Parameter Estimates

Dependent Variable: PURCHASEINTENTION

Parameter	B	Std. Error	t	Sig.	95% Confidence Interval	
					Lower Bound	Upper Bound
Intercept	45,165	,461	98,028	<,001	44,257	46,073
[B.A.S=0]	-4,256	1,522	-2,797	,006	-7,254	-1,258
[B.A.S=1]	0[a]	.	.	.	.	.

[a] This parameter is set to zero because it is redundant.

Annex K- H3c Outputs

Univariate Analysis of Variance

Between-Subjects Factors

		Value Label	N
B.R	0	Not mention the brand	12
	1	Mention the brand	228

Descriptive Statistics

Dependent Variable: PURCHASEINTENTION

B.R	Mean	Std. Deviation	N
Not mention the brand	38,00	7,966	12
Mention the brand	45,13	6,670	228
Total	44,78	6,899	240

Tests of Between-Subjects Effects

Dependent Variable: PURCHASEINTENTION

Source	Type III Sum of Squares	df	Mean Square	F	Sig.
Corrected Model	579,797[a]	1	579,797	12,782	<,001
Intercept	78783,797	1	78783,797	1736,796	<,001
B.R	579,797	1	579,797	12,782	<,001
Error	10796,053	238	45,362		
Total	492528,000	240			
Corrected Total	11375,850	239			

[a] R Squared = .051 (Adjusted R Squared = .047)

Parameter Estimate

Dependent Variable: PURCHASEINTENTION

Parameter	B	Std. Error	t	Sig.	95% Confidence Interval	
					Lower Bound	Upper Bound
Intercept	45,132	,446	101,182	<,001	44,253	46,010
[B.R=0]	-7,132	1,995	-3,575	<,001	-11,061	-3,202
[B.R=1]	0[a]	.	.	.	.	.

[a] This parameter is set to zero because it is redundant.

Annex L- H4a Outputs

T-Test

Group Statistics

	groups	N	Mean	Std. Deviation	Std. Error Mean
PURCHASEINTENTION	Net skin	60	48,15	6,671	,861
	Net torre	60	45,03	6,548	,845

Independent Samples Test

		Levene's Test for Equality of Variances		t-test for Equality of Means							
						Sig. (2-tailed)				95% Confidence Interval of the Difference	
		F	Sig.	t	df	Unilateral p	Bilateral p	Mean Difference	Std. Error Difference	Lower	Upper
PURCHASEINTENTION	Equal variances assumed	,108	,743	2,583	118	,006	,011	3,117	1,207	,727	5,506
	Equal variances not assumed			2,583	117,959	,006	,011	3,117	1,207	,727	5,506

Independent Samples Effect Sizes

				95% Confidence Interval	
		Standardizer[a]	Point Estimate	Lower	Upper
PURCHASEINTENTION	Cohen's d	6,610	,472	,108	,833
	Hedges' Correction	6,652	,469	,107	,828
	Glass's delta	6,548	,476	,106	,842

a. The denominator used in estimating the effect sizes.

Cohen's d uses the pooled standard deviation.

Hedges' correction uses the pooled standard deviation, plus a correction factor.

Glass's delta uses the sample standard deviation of the control group.

Annex M- H4b Outputs

T-Test

Group Statistics

	groups	N	Mean	Std. Deviation	Std. Error Mean
PURCHASEINTENTION	Mc torre	60	42,08	6,458	,834
	Mc skin	60	43,83	6,618	,854

Independent Sample Test

		Levene's Test for Equality of Variances		t-test for Equality of Means						
						Sig. (2-tailed)				95% Confidence Interval of the Difference
		F	Sig.	t	df	Unilateral p	Bilateral p	Mean Difference	Std. Error Difference	Lower	Upper
PURCHASEINTENTION	Equal variances assumed	,108	,743	-1,466	118	,073	,145	-1,750	1,194	-4,114	,614
	Equal variances not assumed			-1,466	117,929	,073	,145	-1,750	1,194	-4,114	,614

Independent Sample Effect Sizes

				95% Confidence Interval	
		Standardizer[a]	Point Estimate	Lower	Upper
PURCHASEINTENTION	Cohen's d	6,539	-,268	-,627	,092
	Hedges' Correction	6,581	-,266	-,623	,092
	Glass's delta	6,618	-,264	-,624	,098

a. The denominator used in estimating the effect sizes.

Cohen's d uses the pooled standard deviation.

Hedges' uses the pooled standard deviation, plus a correction factor.

Glass's delta uses standard deviation of the control group.

Annex N- H4c Outputs

Descriptives

PURCHASEINTENTION

	N	Mean	Std. Deviation	Std. Error	95% Confidence Interval for Mean		Minimun	Maximun
					Lower Bound	Upper Bound		
Mc torre	60	42,08	6,458	,834	40,42	43,75	30	51
Net skin	60	48,15	6,671	,861	46,43	49,87	30	60
Net torre	60	45,03	6,548	,845	43,34	46,72	30	53
Mc skin	60	43,83	6,618	,854	42,12	45,54	30	59
Control	60	94,25	10,787	1,393	91,46	97,04	63	119
Total	300	54,67	21,306	1,230	52,25	57,09	30	119

Test of Homogeneity of Variances

		Levene Statistic	df1	df2	Sig.
PURCHASEINTENTION	Based on Mean	4,852	4	295	<,001
	Based on Median	3,450	4	295	,009
	Based on Median and with adjusted df	3,450	4	248,015	,009
	Based on trimmed mean	4,721	4	295	,001

ANOVA

PURCHASEINTENTION

	Sum of Squares	df	Mean Square	F	Sig.
Between Groups	118668,580	4	29667,145	512,829	<,001
Within Groups	17065,750	295	57,850		
Total	135734,330	299			

Nonparametric Test

Hypothesis Tests Summary

	Null Hypothesis	Test	Sig.[a,b]	Decision
1	The distribution of PURCHASEINTENTION is the same across groups.	Independent samples Kruskal Wallis Test	,000	Reject the null hypothesis

[a] The significance level is .050.

[b] Asymptotic significances are displayed.

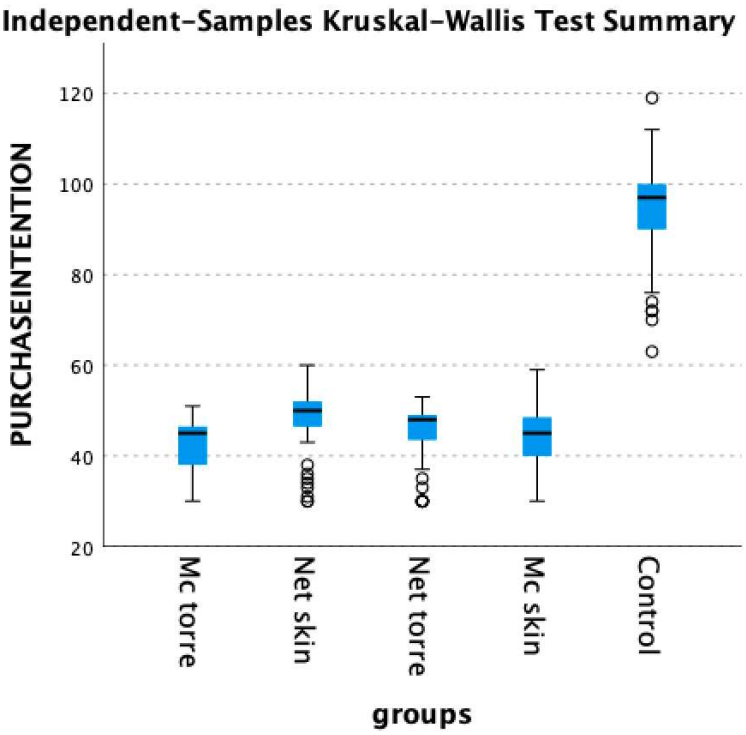
Kruskal-Wallis Test

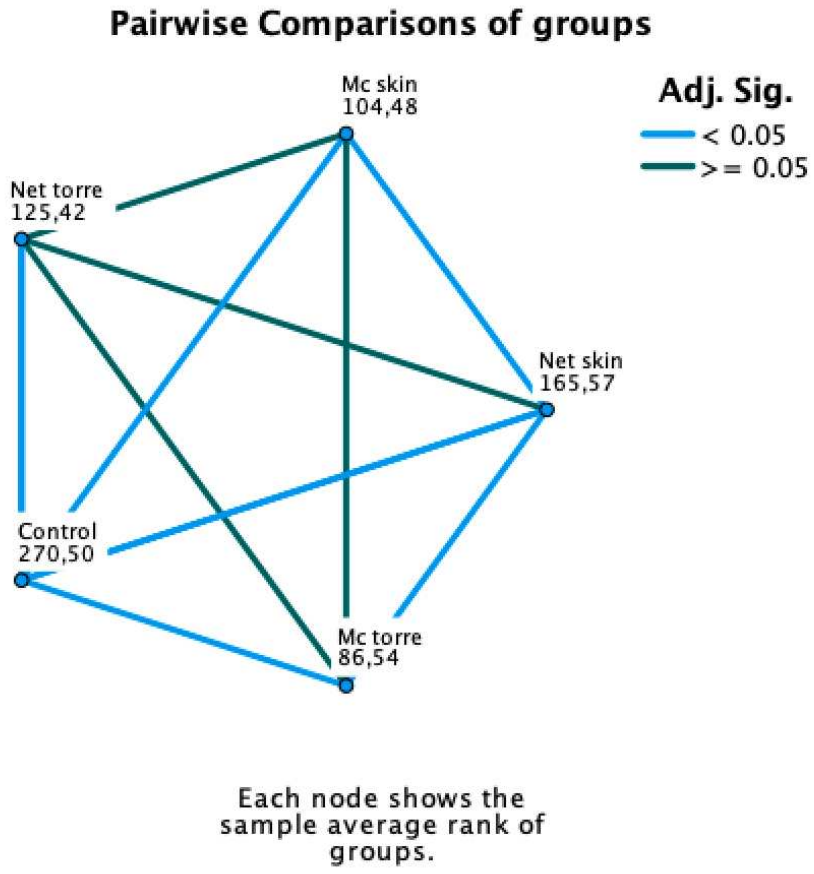
PURCHASEINTENTION between groups

Independent-Samples Kruskal-Wallis Test Summary

Total N	300
Test Statistic	171,889[a]
Degrees of Freedon	4
Asymptotic Sig.(2-sided test)	,000

[a] The test statistics is adjusted for ties.




Pairwise Comparisons of groups
Mc skin
104,48
Net torre
125,42
Net skin
165,57
Control
270,50
Mc torre
86,54
Adj. Sig.
< 0.05
>= 0.05
Each node shows the sample average rank of groups.