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PARTNERSHIPS WITHIN THE GAMING ECONOMY:

Can a brand partnership within the gaming economy alter the brand personality of the sponsoring brand?

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Abstract:

As the gaming economy thrives, marketers must identify the threats and opportunities that arise from targeting the new, digitally inclined gaming audience. This paper examines the brand transference of an advergaming partnership between a gaming provider with a vibrant brand personality and a cosmetics company with an inactive brand personality. Three brand personality dimensions were analysed: *Inactiveness*, *Sincerity*, and *Vibrancy*. It was hypothesized that there would be a brand personality transference when 1) initially exposed to the partnership, 2) one-week after the exposure and, 3) brand personalities unrelated to advergaming (i.e., sincerity) would not be affected. H1 and H2 were accepted whilst H3 was rejected. Managerial implications are discussed based on the findings.

Keywords:

Marketing, Consumer Behaviour, Partnerships, Brand Personality, Advergaming, Brand Personality Transference, Gaming Providers, Gaming Economy

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1. Introduction

The gaming industry has grown exponentially over the past 50 years, reaching record sales, increasing revenue streams and substantial market share every year (Wallach 2020). In fact, as of 2020, gaming obtained the title of the biggest earning media sector worldwide, surpassing Hollywood (Dobrilova 2022) and is worth "ten times as much as the film or music industry" (*How large is the global gaming industry?* 2020). The rise of the internet and mobile was the main facilitator for the growth of the gaming industry (Wadsworth 2020) (Appendix I), leading to more than 2.5 billion players worldwide and equating to around 30% of the global population (Dobrilova 2022). It is estimated that its worldwide market value will reach 339.95 billion USD by 2027, indicating an 8.94% CAGR from 2020 to 2027 (Mordor Intelligence 2022). Given the irrefutable growth and user count, video games are increasingly seen as a viable source to develop a successful omnichannel marketing strategy (Clavio, Kraft and Pedersen 2009) to connect with and retain the new, younger, digital audiences (Liao 2019).

Branding partnerships and sponsorships are avenues sought to get into the gaming industry, particularly given the traditional marketing limitations imposed by COVID-19. In 2020, *Castrol* partnered with the gaming ecosystem, *Garena,* that owns the highest profitable mobile game in Vietnam, in order to tap into Gen Z's sense of belonging within the digital world. This activation led to a remarkable 1670% ROI (Mindshare Vietnam 2021). *Clear*, a men's haircare brand, partnered with *Honour of* Kings, the #1 mobile game in China, to increase brand growth, boost e-commerce sales and develop brand awareness amongst the young male target audience. The partnership resulted in the selling-out of the limited-edition Clear Dragon shampoo and a 37% increase in young male target audience consumers during the campaign period (Mindshare China, 2021b). *Pepsi Black* connected with the lucrative 400M Chinese gaming community by partnering with *League of Legends* and K/DA, a virtual idol band. The new marketing stream led to 8.8 million brand interactions and a colossal 597%

increase in gross merchandise volume on Singles' Day, representing 57% of Pepsi's total sales that year (Mindshare China, 2021a). In Australia, McDonalds established a 3-year partnership with *Blizzard*, a game developer, to increase brand love by 20% amongst the younger millennial generation. Within the three years, McDonalds had 88% recognition in E-sports, and extraordinarily increased the brand love by 66%, three times more than the initial goal of the campaign (OMD Sydney 2022). Branding partnerships, as seen, have spanned across different industries, of which positive results were indicated in various brand development areas including brand awareness, brand preference, brand love, and even purchase behaviour. A plethora of other brand partnerships within the luxury and beauty industry have emerged - including Fortnite X Balenciaga (Fortnite 2021), Colour Pop X Animal Crossings (ColourPop X Animal Crossing Makeup Collection 2021), and Louis Vuitton X League of Legends (Louis Vuitton x League of Legends 2019) - however case studies have not yet been created or the companies decline to share financial details of the deals (Liao 2019).

Despite the vast amount of industry examples demonstrating the effectiveness of the gaming industry in tapping into new, digital audiences, there is limited literature review on this topic. Pine and Gilmore (1998) first observed and predicted a consumer behaviour shift through coining the word "experience economy", to explain how consumers prefer spending on experiences rather than on physical products and services. Belk (2013) analysed the extension of the self in the digital world, stating that "knowingly or unknowingly, intentionally or unintentionally, we regard our possessions as parts of ourselves" (ibid, 477). As such, the extended self serves as a co-construction and re-embodiment of self. Marketers can capitalize on this phenomenon to use a brand's characteristics and personality to reinforce consumers' digital self-identity. Yet, this must be done in a strategic manner as the millennial and younger demographics have "strong negative feelings towards blatant and traditional forms of advertisement" (Freitas, Contreras-Espinosa and Correia 2021, 399). Recent literature has also

found that gamified brand applications that combine experiential consumption with hedonic benefits (Tseng & Lee 2018) drive marketing effectiveness (Tseng, Hsieh and Lee 2021). To reach such effectiveness, marketers must create relevant value-adding features to gaming sponsorships to decrease fan resistance to the promotional messages (Freitas, Contreras-Espinosa and Correia 2021, 397). In this way, marketers should not tell consumers what makes a brand unique but should rather focus on having the consumer experience the uniqueness themselves (Calder and Malthouse 2006). Most recently, the concept of "advergaming" has been introduced in the limited brand-gaming literature to describe how brands can interact most meaningfully with their target community. This will be analysed further in the literature review.

Given the above, studies have indicated the need for brands to interact authentically with the gaming community through new methods rather than traditional advertising approaches. Moreover, industry examples have showcased that the gaming economy is a profitable marketing avenue to enter (Clavio, Kraft and Pedersen 2009), increasing brand love, loyalty and even purchase intention. To the author's knowledge, little to no research looks at the long-term effects of a brand partnership with the gaming economy on brand personality. Thus, the current study aims to determine if a consumer's perception of a cosmetic's brand personality changes after the brand engages in a partnership with a gaming provider.

The results from the research will be beneficial for managers to identify the long-term threats and opportunities with partnering with gaming providers to tap into a new consumer base. It will address the implications of this emerging and innovative topic, namely how marketers can address evolving customer digital self-identity needs whilst maintaining control of (or, if wanted, completely transform) the product's brand image. It can also help marketers determine which gaming providers to partner with given their brand personality and the overall product-market fit. Finally, this research aims to contribute to the limited brand partnerships and gaming literature.

2. Literature Review

2.1 The Gaming Community

The gaming community is predicted to achieve 3.22 billion gamers worldwide by 2023 (Statista, 2021). The largest demographic group that currently games are millennials and Generation Z (Clavio, Kraft and Pedersen 2009). These are highly desirable target audiences for marketers, as they make up future sales and enable long-term brand growth. The gaming community has exclusive characteristics that are irreplicable within other communities, thus presenting interesting marketing and advertising implications.

In a qualitative interview with Demetri Detsaridis, Product Lead at *Epic Games* who has worked in the gaming industry for 21 years, Detsaridis (2022) stated that gamers are unique as they have an interesting overlap between a complete mass market profile and a niche market. In another qualitative interview with Terrence Mulin, strategy director at *Epic Games*, Mulin (2022) stated that whilst traditional marketing is about saturating a market until a consumer eventually purchases a product, marketing within the gaming economy is much more about the consumers' interaction with the product. In turn, consumers remember an enjoyable, positive experience with a brand, making that product more desirable (ibid.). As such, it is important to "pay attention to gaming cultural nuances" (WARC 2021) in order to foster trust and enthusiasm amongst this unique community.

Moreover, majority of gamers were born in a technological era, thus implying that they are not persuaded with traditional advertising material (Freitas, Contreras-Espinosa and Correia 2021, p.399). In fact, "this audience is extremely switched-on, media literate, and highly cynical of marketing ploys" (Farrand et al. 2006). They game for the experiential value of escapism, enjoyment, social affiliation, and entertainment (Valaei et al. 2021, 78). As such, they frown at explicit product placements and logos incorporated into games. At the same time, gaming requires an individual's full attention (Perrotta 2020). The average gamer plays around

8.45 hours weekly (MarketLine 2021) and, in China, the country with the highest number of gamers, the average gamer plays 12.39 hours per week (Statista 2021). These hours prove to be crucial for marketers to establish a strong, lasting brand connection with individuals fully immersed in the virtual world.

According to Freitas, Contreras-Espinosa and Correia's (2021) study, gamers understand that the gaming industry has not reached its full potential and brands can support the growth of the industry by interacting authentically and in a value-adding manner within the games (p.417). Companies, thus, must go beyond plastering their logo on games and move towards improving the space and experience (Ströh 2017). In fact, engaging with the gaming economy in a value-adding manner leads to a higher probability of high positive ROIs and a cost-effective investment (Freitas, Contreras-Espinosa and Correia 2021, p.397). This presents a unique opportunity for brands and marketers.

2.2 Advergaming

Based on the unique characteristics of gamers, the concept of *advergaming* (Sharma 2014) was created. This is often mistaken with in-game advertising in which real products and brands are inserted within the video game or computer game through traditional marketing communication mechanisms (Smith et al. 2014). Conversely, advergaming is advertisement in the form of a brand insertion within the entertainment property (Adis and Kim 2013). It "reflects the postmodern consumer by joining integrated marketing communications and gamers as entertainment and culture" (Jukić 2019). They allow marketers to convey creative communications to consumers (Sharma 2014). Advergames are often characterized by their interactive branding mechanisms, and have the goal to inform, persuade, teach, and entertain (ibid). If implemented successfully, advergaming can increase brand awareness (Hernandez

and Chapa 2010), create positive brand attitudes (Lee and Cho 2017) and increase purchase intention (Azizi 2009).

A plethora of factors may affect how brands are perceived within the advergaming context. First and foremost, advergames must have a solidified entertainment value as this is the largest source of value for gamers (Adis and Kim 2013). The entertainment value is quantified by the ability of marketers and advertisers in fulfilling the audiences' need for escapism, aesthetic, enjoyment, emotional release, and diversion (Ducoffe 1995). Secondly, Lee and Choi (2017) found that advergames that are more exciting, and dynamic are more likely to attract more consumers. Moreover, Wise et al. (2008) found that product-irrelevant advergames are less enjoyed and result in a smaller change in brand attitude than for product-relevant advergames. Finally, the gamers' familiarity and knowledge of the game influence their cognitive capacity to perceive and process brand placements. In this way, an inexperienced gamer will have less spare capacity to interpret brand insertions within games (Besharat et al. 2013).

2.3 Brand Personality

One important aspect to consider when creating a brand partnership within the advergaming field is brand personality, given that brand personality traits assist consumers in distinguishing favourable brands from unfavourable brands (Lee and Cho 2017). They also allow consumers to develop a strong, meaningful connection to the brand (Doyle 1990). The purpose of this research is to enhance the comprehension of advergames' effects on a sponsoring brand's perceived brand personality.

Brand personality is defined as "the set of human characteristics associated with a brand" (Aaker 1997, 347). The concept roots from the notion of anthropomorphism, a term coined by the Greek philosopher Xenophanes in the 1700s, in which the human-like features

including motivations, intentions and emotions, are attributed to an object or non-human element (Epley, Waytz and Cacioppo 2007). The process of attributing characteristics to brands fosters self-brand integration and promotes social meanings (Klipfel, Barclay and Bockorny 2014), thus making brands more relatable and comprehensible to the consumer. Aaker's (1997) theoretical brand personality scale highlights five dimensions of personality –*sincerity, competence, excitement, sophistication,* and *ruggedness* – that can be utilized by managers to identify benchmark personality brands. They also prompt discussions of what brand personality markets should develop within a given market or given the business goals of a company. Each brand personality dimension is defined with brand personality traits that further assist in recognizing the brand's distinctness.

Although the most cited and applied scale in brand personality literature, Aaker's (1997) work has been criticized by scholars on the dimension's definitions, reliability, and validity (Kumar 2018). Mardrigal and Bousch (2008) question the exclusion of a social responsibility brand dimension, whilst George and Anandkumar (2012) question the applicability of the dimensions across cultures. Moreover, according to Azoulay and Kapferer (2003), the scopes of the brand dimensions are too wide, thus limiting its general applicability to all brands and industries. In fact, after replicating the experiment with brands within one industry, Austin et al. (2003) found that individuals interpret traits differently given the characteristics or features of the brands in different product categories. This suggests that brand personality traits need to be more clearly defined within each product category and industry.

Based on Aaker's (1997) limitations, Lee and Cho (2017) created a brand personality scale dedicated to advergaming. Their study indicates that *Vibrancy, Competence, Intelligence, Activeness* and *Excitement* (Appendix II) are the most relevant brand personality dimensions for advergames (ibid.). Contrary to Aaker's (1997) model, advergame brand personality dimensions contain both positive and negative traits to account for the negative reactions

arising from consumers when they are exposed to blatant forms of traditional marketing techniques (Shabir 2017). For instance, *Activeness* includes "boring" and "dull", which are negative traits, as well as "athletic", "surreal" and "passionate", which are positive traits.

In modern literature, old brand personality dimensions are often replaced with new dimensions that are more applicable to a study's purposes (Kumar 2018). This paper investigates the change in advergame-specific brand personalities as a result of a partnership with a gaming provider. As such, this paper selected three relevant brand personality dimensions from Lee and Cho (2017) and Aaker (1997).

To determine whether there is a drastic change in brand personality pre and post partnership, two contrasting brand personality dimensions were included: *Activeness* and *Vibrancy* (Lee and Cho 2017). *Vibrancy* was chosen as it is a brand personality dimension that is associated with being dynamic and lively (Lee and Cho 2017), which are features that attract gamers the most (ibid.). To contrast these characteristics, *Activeness* was chosen. In particular, the negative characteristics of the brand personality dimension such as being dull, and boring were selected as there are seen as unsuccessful traits of advergames (ibid.). Hence, this brand personality dimension is referred to as *Inactiveness* throughout the paper.

A third brand personality dimension, *Sincerity*, adapted from Aaker (1997), was included as a control. *Sincerity* is not a brand personality trait that is associated with advergaming (Lee and Cho 2017) and, thus, the aim of including it within the experiment is to determine whether the change in brand personality perceptions is relevant. Five different personality traits make up each dimension as showed in the table below.

Table 1: A table demonstrating the three brand personality dimensions analysed in this paper along with the brand personality traits that make up each dimension.

Brand Personality Dimension	Inactiveness	Sincerity	Vibrancy
Trait 1	• Dull	• Honest	• Dynamic
Trait 2	• Boring	• Wholesome	• Speedy
Trait 3	• Predictable	• Sentimental	• Lively
Trait 4	• Traditional	• Real	• Entertainment
Trait 5	• Ordinary	• Down-to-Earth	• Innovative

2.4 Brand Personality Transference in Advergaming

Brand personality is an important concept to grasp, however it is under-researched within the brand sponsorship literature (Rutter et al. 2019). Within the concept of advergaming, in particular, this topic is equally underdeveloped and under-researched (Hung, Lee and Yang 2017). Moreover, it remains unclear the long-term effects that advergaming partnerships have on the sponsoring brand.

Previous literature in different sectors has examined how brand perceptions and personalities can be transferred. For instance, Gwinner and Eaton (1999) showcased how celebrity endorsement and sports sponsorships lead to a positive image transfer both for the sponsoring brand and the celebrity. When analyzing country and city brands, Kolbl (2020) found that there is a suggested transfer between dissimilar brand traits. However, limited literature, to the author of this paper's knowledge, examines if and how advergaming marketing techniques affect the sponsoring and/or partnering brand's personality.

3. Question Formulation and Hypothesis Generation

Given the above, the following research question has been formulated:

3.1 Research Question

Research question: Can a gaming providers' *vibrant* brand personality transfer to a partnering and/or sponsoring brand with an *inactive* brand personality?

For the purposes of the experiment, the beauty industry will be the focal sector in order to obtain definitive results on one sector rather than generalizing arbitrarily to all sectors. Moreover, more beauty brand-gaming partnerships have emerged over the past year, indicating that this may be a common strategy undertaken by most brands going forward, and thus is a relevant industry to analyse. Additionally, from January to June 2021, the author of this paper concluded an internship at L'Oréal, the largest player in the beauty industry, and experienced first-hand management expressing their interest in the gaming industry. Since then, L'Oréal Men Expert has announced a partnership with *Fnatic*, the world's leading esports organization (Caldwell 2022).

3.2 Hypothesis

The experiment will analyse two contradictory advergaming brand dimensions – *Inactiveness* and *Vibrancy* (Lee and Cho 2017) – to determine whether the vibrant brand personality of the gaming provider is transferred to the cosmetics brand. A third brand personality dimension that is unrelated to advergaming – *Sincerity* – was included as a third brand personality trait. "Honest", "Wholesome", "Sentimental", "Real" and "Down-to-Earth" were the personality traits used to measure the sincerity of the fictional brand.

To test whether the brand personality changes in the long term, the experiment will look at the brand personality perceptions one week after the initial exposure to the cosmetic brand-gaming provider partnership.

The hypotheses are as follows.

H1: *A gaming providers' vibrant brand personality will transfer to contrasting cosmetic brand's inactive brand personality after consumers are exposed to the partnership.*

H2: *A gaming providers' vibrant brand personality will transfer to contrasting cosmetic brand's inactive brand personality one week after consumers are exposed to the partnership.*

H3: *A gaming providers' vibrant brand personality will not alter brand personality dimensions that do not relate to advergaming.*

4. Methodology

4.1 Sample

To test the outlined hypothesis, a longitudinal design was employed, as this allows to identify developmental trends. Two online surveys using *Qualtrics* were created, and participants were encouraged to partake in both parts of the experiment. In both surveys, participants indicated their gender (male vs. female) and were exposed to a gender-relevant scenario (Appendix IV). As a beauty brand was utilized within the experiment, gender-specific names (i.e., *Beautify* or *FORCE*) and stimuli were employed for the purpose of being gender relevant. The chosen target group were gamers as the experiment aimed to look at how engaging in advergaming would change the gamers' perspective on the unknown brand's brand personality.

Experiment Part 1 (Pre vs. Post Partnership)

The first survey comprised of 137 adult participants, out of which 70 were gamers that gamed at least 30 minutes a week (n=70). The non-gamers were excluded from the analysis so as to focus on one target group. Out of the 70 gamers, 5 identified as game developers and/or work in the gaming industry. The participants were collected through convenience sampling, using the researcher's network, sending cold messages on LinkedIn to game developers, and through a survey-sharing online platform, *Survey Circle*. Participation in this study was completely voluntary, however a €25 Amazon gift card raffle was used to incentivize participation in both phases of the experiment.

In the first stage of the experiment (Appendix III), the most representative age group was 25–34-year-olds (51.4%), followed by 18–24-year-olds (30.0%), Most respondents (86%) identified as male, whilst 14% identified as female. In terms of gaming demographics, 54% of the participant sample game between 1 to 5 hours a week whilst 20% of participants game 9+ hours a week. Finally, the participant sample consisted of 21 different nationalities, with Portugal (26.1%) and Norway (24.6%) being the nationalities that were most represented.

Experiment Part 2 (1-week after initial partnership stimuli)

Out of the 70 gamers that filled out the first survey, 56 shared their email addresses to participate in the second survey, out of which 37 participated (Appendix III). 89% identified as male and 11% identified as female. Again, the largest age group consisted of 25-34-year-olds (48.6%) followed by 18–24-year-olds (34.3%). Majority of participants gamed between 1-2 hours of week (42.9%), followed by 9+ hours per week (25.7%). 5 of the survey participants identified themselves as developers and/or working in the gaming industry. 13 nationalities were represented, out of which Norway (29.7%) and Portugal (27.0%) were the largest represented.

4.2 Design & Procedures

The experiment was divided into two surveys that were available in English. Both surveys began with an introduction of the experiment, the purpose and the contact information of the experimenter should the participant have any questions and/or wish to withdraw from the study (Appendix IV). In both surveys, participants were asked for their gender so that the gender-relevant scenario was showcased.

Survey 1

The first survey (Appendix IV) served to obtain the initial perceptions of the brand personality dimensions, which were used as the control group of the experiment. The first survey was also used to quantify the short-term changes in brand personality dimensions given the brand partnership.

To begin, all participants read a short description of a fictional cosmetics/skincare brand which prompted the formulation of the *Inactiveness* brand personality within participants' minds. The description included statements such as "the brand has released 3 products per year, with relatively similar shades, thus failing to diversify", "tends to follow the general industry trends rather than being an industry leader" and "has not explored the digital sphere". These were included to stimulate thoughts that the brand is *dull*, *boring*, *predictable*, *traditional*, and *ordinary* – the brand personality traits utilized to measure the *Inactiveness* brand dimension. Following reading the description of the cosmetics/skincare brand, participants were asked to rate the brand on 15 different brand personality traits (Appendix VIII) through a 7-item Likert scale (1 = Strong Disagree; 7 = Strongly Agree). These traits were randomized to avoid participant and response bias.

Immediately after rating the cosmetics brand based on the initial description specified, participants were exposed to a brand partnership between the fictional cosmetics brand and

Fortnite, one of the largest gaming providers worldwide. Advergames have interactive branding mechanisms that inform, persuade, teach, and entertain (Sharma 2014). However, this requires time and know-how to produce. Due to the experimenter's lack of knowledge and hard skills on how to develop a successful advergame, fictional yet credible scenarios were utilized for this experiment instead. *Epic Games*, the game developer for *Fortnite*, was chosen for the partnering company because *Fortnite* has over 350 million active users worldwide (Clement 2021). Moreover, the game is known for its partnerships and collaborations with multiple brands.

Within the second part of the survey, the description of the partnership included information about *Fortnite* stating that it is always "on top of the latest trends" by partnering with "Balenciaga, Marvel Air Jordan and Stranger Things" as well as establishing "in-game concerts with Ariana Grande, Marshmello, and Travis Scott". These were included to stimulate the *Vibrancy* brand personality dimension that aligns with *dynamic*, *speedy*, *lively*, *entertaining*, and *innovative* traits. Details of the partnership were equally included. In particular, the description stated that the cosmetics/skincare brand will "release a new bundle for which, upon purchase, consumers receive a code to unlock a new character within Fortnite". A fictional promotional image of the advertisement was included to help the participants envision the partnership, as well as make it more legitimate.

Gamers game for enjoyment, entertainment, and escapism (Valaei et al. 2021, 78) and brand placement acceptance is significantly important to brand attitude (Adis and Kim 2013). As such, a feasible example of a brand partnership was incorporated within the experiment. This was ensured by describing previous *Fortnite* partnership agreements in which the selling of a product would unlock a limited-edition skin (i.e., character in *Fortnite* terminology), which leads to a 'value-adding' experience for the gamer. A fictional, promotional image was also created to augment the credibility and feasibility of the fictional partnership. The stimuli

incorporated mimicked previous *Fortnite* partnership promotional content (Appendix VII) but incorporated the name of the fictional brand created for the purposes of the experiment.

The credibility of the stimuli was important to establish so that gamers could envision the 'value-adding' aspects of the partnership within the *Fortnite* game, leading to positive perceptions of the brand (Valaei et al. 2021). If this were not established, the gamers would frown at the poor product placement and develop unfavourable perceptions (ibid.) towards the fictional cosmetics brand, which would derail the experiment results away from the research question.

Upon reading the description of the brand partnership and seeing the fictional promotional image, participants were then asked to, once again, rate the brand on the 15-different brand personality traits. To conclude the survey, *nationality, gender,* and *age* were included to control for the diversity amongst the participant sample. Moreover, the *number of hours played per week* and whether the participants *worked as a game developer and/or within the gaming industry* were registered.

To collect participants for the second survey, a €25 Amazon gift card raffle was advertised. Participants were given the choice to leave their email behind to be contacted for the second part of the experiment, as well as to enter the raffle.

Survey 2

The second survey (Appendix VI) served to determine whether the brand personality perception allocated to the cosmetics brand altered a week after being exposed to the *Fortnite* partnership.

Exactly one week after filling out the first survey, the participants that chose to enrol in the €25 Amazon gift card Raffle were contacted via email (Appendix V) and invited to partake in the second half of the study (Appendix VI). To exclude participants who had not completed

the first half of the experiment, the question “Have you conducted the first part of this experiment?” was included. If participants answered “No”, they were automatically taken to the end of the survey.

Participants who answered “Yes” were showcased a paragraph stating: “Please base your answers based on your recall of the “Beautify”/ “FORCE” cosmetics/skincare brand discussed in the first part of the experiment conducted last week” (Appendix VI). The brand name and stimuli utilized in the first survey were included once more to prompt brand recall. These, once again, corresponded to the gender identified by the participant. The participant was asked to, for the final time, rate the cosmetics/skincare brand on the 15-different brand personality traits as described above.

5. Data Analysis

5.1 Preparation of Data Set

For the data analysis, SPSS statistical software version 28.0 was utilized. The participant’s perception of the fictional brand personality before and after the partnership was the focus of the study. In the first survey, forty-five cases were excluded from the data analysis for inconclusive entries and missing crucial data, thus showcasing lack of involvement and attention to the study. Specifically, these cases were excluded for not completing the full survey, which is essential to then be able to compare the perceptions pre and post partnership. Moreover, twenty-two cases were excluded for not being part of the target group for this experiment (i.e., gamers). The mean value of the different brand personality dimensions was calculated on SPSS to be able to conduct the statistical tests.

5.2 Reliability of Measures

Prior to analyzing the data set, the reliability of the scales' internal consistency was investigated with the Cronbach's alpha scale. The 5 personality traits identified for each of the brand personality dimensions were analysed together (Appendix VIII). A Cronbach alpha greater than 0.7 is recommended to demonstrate the reliability of the measures (Peterson 1994). All scales had a Cronbach's alpha greater than the recommended threshold ($\alpha > 0.7$), except from *Inactiveness Pre-partnership* ($\alpha = 0.497$), and *Sincerity Pre-Partnership* ($\alpha = 0.660$). These two items do not reach the conventional standards for reliability even when items were dropped (Appendix IX for full statistics).

5.3 Pre and Post Partnership Brand Personality Transference

A paired sample t-test (Appendix X) was conducted to test whether participants changed their perceptions of the fictional cosmetic brand's initial brand personality and immediately after being exposed to the *Fortnite* partnership. The results indicated a significant difference [$t(69) = 12.885$, $p < 0.001$] between the sample means of the *Inactiveness* scores at the beginning of the survey ($\mu = 5.27$; $SD = 0.92$) and the scores after being exposed to the partnership ($\mu = 2.95$, $SD = 1.12$). The results also indicated a significant difference [$t(69) = 4.295$, $p < 0.001$] between the sample means of the initial *Sincerity* scores ($\mu = 3.99$, $SD = 0.98$) and the scores after the partnership ($\mu = 3.37$, $SD = 1.00$). Finally, there was a significant difference [$t(69) = -11.865$, $p < 0.001$] between the sample means of the initial *Vibrancy* scores ($\mu = 2.34$, $SD = 1.00$) and the scores after exposed to the partnership ($\mu = 4.49$, $SD = 1.18$).

5.4 Brand Personality Transference After 1 Week

A Repeated Measures ANOVA test was equally performed to compare whether the brand personality of the gaming provider transferred to the fictional cosmetics brand one-week after exposed to the *Fortnite* partnership. This test analysed the results of the individuals that conducted the first and second survey (n=37). As such, the means of the initial brand personality scores and the brand personality scores obtained one-week after the initial partnership stimuli were compared.

When analyzing *Sincerity*, there was a significant difference [$F(1,36) = 6.192$, $p = 0.018$] between the initial perceptions of the brand dimension ($\mu = 4.03$, $SD = 1.01$) and the follow-up assessment one-week after ($\mu = 3.48$, $SD = 1.03$) (Appendix XII). In particular, the fictional cosmetics brand was perceived to be slightly less 'sincere' after the partnership with the gaming provider. There was equally a statistically significant difference between the *Inactiveness* [$F(1,36) = 76.099$, $p < 0.001$] and *Vibrancy* [$F(1, 36) = 34.331$, $p < 0.001$] brand personality dimensions. A post-hoc comparison using the Bonferroni correction showed a significant decrease in the initial perceptions of *Inactiveness* ($\mu = 5.28$, $SD = 0.86$) and follow-up assessment one-week later ($\mu = 2.97$, $SD = 1.28$) (Appendix XI). At the same time, the post-hoc comparison demonstrated a significant increase between the initial perceptions of *Vibrancy* ($\mu = 2.22$, $SD = 0.82$) and follow-up assessment one-week later ($\mu = 4.08$, $SD = 1.62$) (Appendix XIII). This means that the participants considered the cosmetics brand personality to be less 'active' and more 'vibrant' after partnering with the gaming provider. These results are not affected by the participants' weekly number of hours spent gaming nor by whether the participants are game developers and/or work in the gaming economy (see full co-variate analysis for each brand personality dimension from Appendix XI to XIII).

6. General Discussions

The present study examined whether a partnership between a gaming provider with a *vibrant* brand personality could transfer to a cosmetics brand with an *inactive* brand personality. A third brand personality, *sincerity*, was incorporated to determine whether the transference of brand personality would affect other, unrelated, brand personality dimensions in the advergaming sphere.

H1 hypothesised that the gaming providers' vibrant brand personality would transfer to a contrasting cosmetics brand's brand personality after consumers are exposed to the partnership. As expected, when comparing the initial brand personality scores with the scores after participants initially being exposed to the *Fortnite* partnership, there was a significant change between the *Vibrancy* and *Inactiveness* brand personality dimensions.

H2 hypothesized that the brand transference from the game provider to the cosmetic brand would equally occur 1-week after the exposure to the partnership. As predicted, there was a significant change in the *Vibrancy* and *Inactiveness* brand personality dimensions. In specific, the results indicated an increase in *Vibrancy* and decrease in *Inactiveness*. In other words, there was a brand transference from the gaming provider's vibrant personality to the cosmetic brand's initial inactive brand personality.

H3 hypothesized that there would be no significant change in brand personality traits that are unrelated to advergaming. Surprisingly, the *Sincerity* brand personality dimension did show a significant change between the initial cosmetic brand's brand dimension immediately after the partnership exposure and equally one-week after. In particular, there was a significant decrease in both the short-term and long-term. As such, H3 cannot be accepted and is thus rejected.

In conclusion, the findings of the present study suggest that there is both a short-term and long-term brand personality transference in how gamers perceive sponsoring brands after

a partnership with a gaming provider. There can, however, also exist an unexpected change in other brand personality dimensions, perhaps leading to negative spill-over effects.

7. Managerial Implications

With consumers, particularly Millennials and Generation Z, becoming more and more digitally inclined, the results of the study open the horizon to another value-adding manner to address evolving customer digital self-identity whilst strengthening a brand. Specifically, the results of the study demonstrate how engaging in the gaming economy through value-adding advergames can serve as a strategy to restructure a brand's personality.

Marketers wishing to tap into the gaming economy should consider allocating their budget to strategic partnerships with gaming providers. This can have a two-fold beneficial outcome. First, the brand and subsequently company will be able to reach a new, highly profitable customer base (i.e., gamers). Second, whilst engaging with a new customer base, the brand can strategically alter the audience's perceptions about the brand's personality. However, when choosing to incorporate advergames within a company's integrated marketing communications and omnichannel approach, marketers must make calculated decisions about the types of partnerships undertaken within the gaming economy, particularly which gaming providers to partner with given their brand personalities. The wrong partnership can possibly lead to an unwanted brand personality transference which can be hard to alter back. As a result, marketers should consider a) the brand's own brand personality, b) the partner's brand personality and c) the goals of the partnership. By considering the three aspects, marketers can make more informed decisions about strategic partnerships within the gaming economy that can lead to positive brand personality transference.

Additionally, we have learnt from past studies that advergames can increase brand awareness (Hernandez and Chapa 2010) and create positive brand attitudes (Lee and Cho 2017), consequently leading to increased purchase intention (Azizi 2009). As such, and based

on the results of the current study, marketers can utilize the results alongside past industry examples to persuade top management that gamers are a worthwhile target group. They are not only profitable but can equally enable brand growth and restructuring in an effortless manner.

Nonetheless, the results of the experiment showcased that there might be changes in other, unrelated, brand personality dimensions. In this case, the cosmetics brand was seen to be less sincere after the partnership with the gaming provider. This may have been as a result of a perceived inadequate "product-market fit" between the cosmetics brand and the gaming market. In other words, given that gamers may be highly cynical of marketing ploys (Farrand et al 2006), they may equally become very sceptical of partnerships and second-guess the intentions of brands engaging with the gaming economy. As such, a partnership that may be considered by gamers as strategically created mainly for profitability and targeting reasons may be seen as less sincere. More research must be conducted in this realm to obtain conclusive results as to why the perception of *Sincerity* decreased over time in this experiment. Nevertheless, these results indicate that marketers must conduct proper due diligence to safeguard the brand's equity and minimize the undesired spill-over effects of partnerships.

8. Limitation and Future Research Guidance

Despite the statistical significance of the results, this study and the generalizability of its results presents limitations. Firstly, in terms of the data, the second survey conducted had a small sample size ($n = 37$). Although the sample size is enough to conduct significant statistics ($n > 30$), there is an increased chance of bias due to the variability of the data set, thus affecting the overall reliability and validity of the results. Consequently, the study should be replicated with a larger sample size to determine if the results are the same and generalizable. Moreover, the participants of the study came from a plethora of countries and cultures. The current study did not formally investigate any effects of cultural differences on the significance of the results. Moreover, how one culture defines 'vibrant' can be very different to how another culture

interprets it. Further studies should determine whether the results of the study's design differ across different cultures and countries. This can be done by either conducting a wide-scale experiment where there are at least 50 participants from each nationality, or through conducting a country-specific experiment. By investigating the effect of cultural differences, marketers and top managers can also deliberate whether engaging in advergames is relevant in their operating market.

Second, the Cronbach alpha recommended threshold is above 0.7 (Peterson 1994), however this was not the case for two of the scales, namely *Inactiveness Pre-partnership,* and *Sincerity Pre-Partnership*. To increase the validity of these scales, more participants need to be part of the study. Additionally, further studies must have a consistent environment for all participants, which will also help increase the validity of the scales. The results of this study were obtained from a survey that participants completed in their own time. As such, some participants might have taken the survey when they had lots of free time and were in a quiet area, whilst others might have taken the survey in a public and noisy area whilst on a quick 10-minute break. Moreover, all participants completed the survey on their own computer or mobile phone, meaning that they could have had multiple tabs and messages appearing whilst completing the surveys. As a result, the attention levels dedicated to the experiment may have varied tremendously amongst participants, thus possibly affecting the reliability of the results.

Third, it must be noted that the study focused solely on three different brand personality dimensions – *Vibrancy*, *Sincerity,* and *Inactiveness*. As such, further research should replicate the study at hand with different combinations of the brand personality dimensions. This would help determine whether the findings of this experiment are applicable to all brand personality dimensions within advergaming (i.e., *Vibrancy, Excitement, Competence, Activeness,* and *Intelligence*). Most importantly, it would help marketers and top management to consider the

brand personalities of the gaming providers they wish to partner with and how that could affect their own brand.

Fourth, the study analysed the transference of brand personality one-week after the partnership exposure. Given the survey was based on a simple description, testing participants more than a week later might have led to participants forgetting about the fictional cosmetics brand in general and answer the survey randomly. Further research should investigate whether this brand personality transference lasts for a longer period and if a relapse of the initial brand personality perceptions occurs at any point. It is recommended that the further studies utilize a mock advergame or some interactive feature to assist with the brand recall.

Lastly, this longitudinal study was conducted with two surveys where the partnership was simply described, and participants had to imagine how interactive the partnership is within the gaming virtual world. Given that advergames are characterized by their interactive branding mechanisms (Sharma 2014), further research should conduct a similar experiment in which participants can play a little of the advergame. In this way, participants have a real engagement with the brand within the gaming sphere, thus offering more realistic results based on value-adding interactions.

9. References

Aaker, Jennifer Lynn. 1997. "Dimensions of Brand Personality". *SSRN Electronic Journal* 34 (3). doi:10.2139/ssrn.945432.

Adis, Azaze Azizi Abdul, and Hyung Jun Kim. 2013. "The Mediating Role of Brand Recall and Brand Attitude In Influencing Purchase Intention In Advergames". *European Journal of Business and Management* 5 (18). doi:10.53728/2765-6500.1561.

Austin, Jon R., Judy A. Siguaw, and Anna S. Mattila. 2003. "A Re-Examination of The Generalizability Of The Aaker Brand Personality Measurement Framework". *Journal Of Strategic Marketing* 11 (2): 77-92. doi:10.1080/0965254032000104469.

Azizi, Phang Ing. 2009. "The Impact of Advertising Position and Games Experience On Purchase Intention in Advergaming". *Interdisciplinary Journal of Contemporary Research In Business* 1 (4): 40-47. https://www.researchgate.net/publication/248391744_INTERDISCIPLINARY_JOURNAL_OF_CONTEMPORARY_RESEARCH_IN_BUSINESS.

Azoulay, Audrey, and Jean-Noël Kapferer. 2003. "Do Brand Personality Scales Really Measure Brand Personality?". *Journal Of Brand Management* 11 (2): 143-155. doi:10.1057/palgrave.bm.2540162.

Belk, Russell W. 2013. "Extended Self in a Digital World: Table 1.". *Journal Of Consumer Research* 40 (3): 477-500. doi:10.1086/671052.

Besharat, Ali, Anand Kumar, John R. Lax, and Eric J. Rydzik. 2013. "Leveraging Virtual Attribute Experience in Video Games to Improve Brand Recall and Learning". *Journal Of Advertising* 42 (2-3): 170-182. doi:10.1080/00913367.2013.774593.

Business Wire. 2020. *Epic Games And Disney Expand Collaboration With New Disney+ Offer*. Image. https://www.businesswire.com/news/home/20201106005561/en/Epic-Games-and-Disney-Expand-Collaboration-with-New-Disney-Offer.

Calder, Bobby J., and Edward C. Malthouse. 2006. "Managing Media and Advertising Change with Integrated Marketing". *Journal Of Advertising Research* 45 (04): 356. doi:10.1017/s0021849905050427.

Caldwell, Georgina. 2022. "L'Oréal Men Expert Partners with Esports Brand Fnatic". *Global Cosmetics News*. https://www.globalcosmeticsnews.com/loreal-men-expert-partners-with-esports-brand-fnatic/.

Clavio, Galen, Patrick M. Kraft, and Paul M. Pedersen. 2009. "Communicating with Consumers Through Video Games: An Analysis of Brand Development Within the Video Gaming Segment of the Sports Industry". *International Journal Of Sports Marketing And Sponsorship* 10 (2): 39-52. doi:10.1108/ijsms-10-02-2009-b005.

Clement, J. 2021. *Fortnite - Statistics & Facts*. Image. https://www.statista.com/topics/5847/fortnite/#dossierKeyfigures.

"Colourpop X Animal Crossing Makeup Collection". 2021. *Animal Crossing World*. https://animalcrossingworld.com/2021/01/colourpop-cosmetics-x-animal-crossing-new-horizons-collection-pricing-revealed/.

Detsaridis, Demetri. 2022. Interview with Product Lead at Epic Games. Interview by Mariana Martins da Silva. In person. Teams Online Call.

Dobrilova, Teodora. 2022. "How Much is the Gaming Industry Worth in 2022?". *Tech Jury*. https://techjury.net/blog/gaming-industry-worth/#gref.

Doyle, Peter. 1990. "Building Successful Brands: The Strategic Options". *Journal Of Consumer Marketing* 7 (2): 5-20. doi:10.1108/eum0000000002572.

Ducoffe, Robert H. 1995. "How Consumers Assess The Value Of Advertising". *Journal Of Current Issues & Research In Advertising* 17 (1): 1-18. doi:10.1080/10641734.1995.10505022.

Epley, Nicholas, Adam Waytz, and John T. Cacioppo. 2007. "On Seeing Human: A Three-Factor Theory of Anthropomorphism.". *Psychological Review* 114 (4): 864-886. doi:10.1037/0033-295x.114.4.864.

Farrand, Tom, David Nichols, Tom Rowley, and Matt Avery. 2006. "Brands and Gaming: Are You Ready to Play?". *Young Consumers* 7 (2): 8-13. doi:10.1108/17473610610701448.

Fortnite. 2021. "High Digital Fashion Drops into Fortnite with Balenciaga". *Epic Games*. https://www.epicgames.com/fortnite/en-US/news/high-digital-fashion-drops-into-fortnite-with-balenciaga.

Freitas, Bruno Duarte Abreu, Ruth Sofia Contreras-Espinosa, and Pedro Álvaro Pereira Correia. 2021. "The Importance of Incorporating Relevant-Added Value into Esports Sponsorships". *Journal Of Contemporary Marketing Science* 4 (3): 397-423. doi:10.1108/jcmars-03-2021-0009.

George, Jijo, and Victor Anandkumar. 2012. "From Aaker to Heere: A Review and Comparison of Brand Personality Scales". *SSRN Electronic Journal*. doi:10.2139/ssrn.2061570.

Global ESports News. 2022. *Fortnite X NBA All-Star*. Image. https://www.global-esports.news/fortnite/fortnite-x-nba-all-star-decide-for-yourself-which-emote-goes-into-the-game/.

Gwinner, Kevin P., and John Eaton. 1999. "Building Brand Image Through Event Sponsorship: The Role of Image Transfer". *Journal Of Advertising* 28 (4): 47-57. doi:10.1080/00913367.1999.10673595.

Hernandez, Monica D., and Sindy Chapa. 2010. "Adolescents, Advergames and Snack Foods: Effects of Positive Affect and Experience on Memory and Choice". *Journal Of Marketing Communications* 16 (1): 59-68. doi:10.1080/13527260903342761.

How Large Is The Global Gaming Industry?. 2020. Video. CGTN Europe.

Hung, Huang-Chia, Chia-Wen Lee, and Cheng-Fu Yang. 2017. "Evaluating Game-Brand Congruity And Flow On Brand Personality By Using Gamifying Learning". *EURASIA Journal Of Mathematics, Science And Technology Education* 13 (7). doi:10.12973/eurasia.2017.00706a.

Jukić, Dinko. 2019. "Advergaming: Identity Brand Analysis in the Virtual World". *International Journal of Marketing Science* 2 (1). https://hrcak.srce.hr/clanak/340953.

Klipfel, Joseph A. L., Allen C. Barclay, and Kristi M. Bockorny. 2014. "Self-Congruity: A Determinant Of Brand Personality". *Journal Of Marketing Development and Competitiveness* 8 (3). http://t.www.na-businesspress.com/JMDC/BockornyKM_Web8_3_.pdf.

Kolbl, Živa. 2020. "Brand Stereotypes: Application and Transfer". http://maksi2.ef.uni-lj.si/zaloznistvoslike/481/Brand%20Stereotypes%20%C5%BD.%20Kolbl%20brez%20ovitka.pdf.

Kumar, Ajay. 2018. "Story of Aaker's Brand Personality Scale Criticism". *Spanish Journal of Marketing - ESIC* 22 (2): 203-230. doi:10.1108/sjme-03-2018-005.

Lee, Heejun, and Chang-Hoan Cho. 2017. "An Application of Brand Personality to Advergames: The Effect of Company Attributes on Advergame Personality". *Computers In Human Behavior* 69: 235-245. doi:10.1016/j.chb.2016.12.035.

Liao, Shannon. 2019. "Luxury Brands Are Working with Video Games. Louis Vuitton is the Latest to get in on the Act". *CNN Business*, , 2019. https://edition.cnn.com/2019/09/23/tech/luxury-brands-video-games/index.html.

"Louis Vuitton X League of Legends". 2019. *Louis Vuitton*. https://eu.louisvuitton.com/eng-e1/magazine/articles/louis-vuitton-x-league-of-legends#.

MarketLine. 2021. *Average Weekly Hours Spent Playing Video Games in Selected Countries Worldwide As Of January 2021*. Image. https://www-statista-com.eu1.proxy.openathens.net/statistics/273829/average-game-hours-per-day-of-video-gamers-in-selected-countries/.

Mindshare China. 2021. "Clear: From Battle to Bottle – Esports Breakthrough". World Advertising Research Center. https://www.warc.com/content/article/mma-smarties/clear-from-battle-to-bottle--esports-breakthrough/142152.

Mindshare China. 2021a. "Pepsi Black: Virtual Band Experience". World Advertising Research Center. https://www.warc.com/content/article/mma-smarties/pepsi-black-virtual-band-experience/142149.

Mindshare Vietnam. 2021b. "Castrol: Ultimate Victory in Esports". World Advertising Research Center. https://www.warc.com/content/paywall/article/mma-smarties/castrol-ultimate-victory-in-esports/en-GB/142282?.

Mordor Intelligence. 2022. "Gaming Market - Growth, Trends, COVID-19 Impact and Forecasts (2022-2027)". https://www.mordorintelligence.com/industry-reports/global-gaming-market.

Mulin, Terrence. 2022. Interview with Strategy Director at Epic Games. Interview by Mariana Martins da Silva. In person. Teams.

OMD Sydney. 2022. "McDonald's: Would You Like E-Sports with That?". World Advertising Research Center. https://www.warc.com/content/article/rankings-media/mcdonalds-would-you-like-e-sports-with-that/140219.

Perrotta, Matt. 2020. "Business Models of Video Games: Past, Present, and Future". *Linkedin.Com*. https://www.linkedin.com/pulse/business-models-video-games-past-present-future-matt-perrotta/.

Peterson, Robert A. 1994. "A Meta-Analysis of Cronbach's Coefficient Alpha". *Journal Of Consumer Research* 21 (2): 381. doi:10.1086/209405.

Pine, B. Joseph, and James H. Gilmore. 1998. "Welcome to the Experience Economy". *Harvard Business Review*, 1998. https://hbr.org/1998/07/welcome-to-the-experience-economy.

Rutter, Richard, John Nadeau, Ulf Aagerup, and Fiona Lettice. 2019. "The Olympic Games And Associative Sponsorship". *Internet Research* 30 (1): 85-107. doi:10.1108/intr-07-2018-0324.

Shabir, Naeem. 2017. *Esports: The Complete Guide 17/18: A Guide for Gamers, Teams, Organisations and Other Entities In, Or Looking to Get into the Space*. Wroclaw: Independently Published.

Sharma, Muskan. 2014. "Advergaming – The Novel Instrument in the Advertising". *Procedia Economics and Finance* 11: 247-254. doi:10.1016/s2212-5671(14)00193-2.

Smith, Martin Williamson, Wei Sun, John Sutherland, and Bobby Mackie. 2014. "Game Advertising: A Conceptual Framework and Exploration of Advertising Prevalence". *The Computer Games Journal* 3 (1): 95-124. doi:10.1007/bf03395948.

Statista. 2021. *Number of Active Video Gamers Worldwide From 2015 To 2024*. Image. https://www-statista-com.eu1.proxy.openathens.net/statistics/748044/number-video-gamers-world/.

Tseng, Timmy H., and Crystal T. Lee. 2018. "Facilitation of Consumer Loyalty Toward Branded Applications: The Dual-Route Perspective". *Telematics And Informatics* 35 (5): 1297-1309. doi:10.1016/j.tele.2018.03.002.

Tseng, Timmy H., Sara H. Hsieh, and Crystal T. Lee. 2021. "How Gamified Branded Applications Drive Marketing Effectiveness?". *Marketing Intelligence &Amp; Planning* 39 (5): 633-648. doi:10.1108/mip-09-2020-0407.

Valaei, Naser, Gregory Bressolles, Hina Khan, and Yee Min Low. 2021. "Ads in Gaming Apps: Experiential Value of Gamers". *Industrial Management &Amp; Data Systems* 122 (1): 78-106. doi:10.1108/imds-11-2020-0660.

Wadsworth, Clayton. 2020. "50 Years of Gaming History, By Revenue Stream (1970-2020)". *Visual Capitalist*, 2020. https://www.visualcapitalist.com/50-years-gaming-history-revenue-stream/.

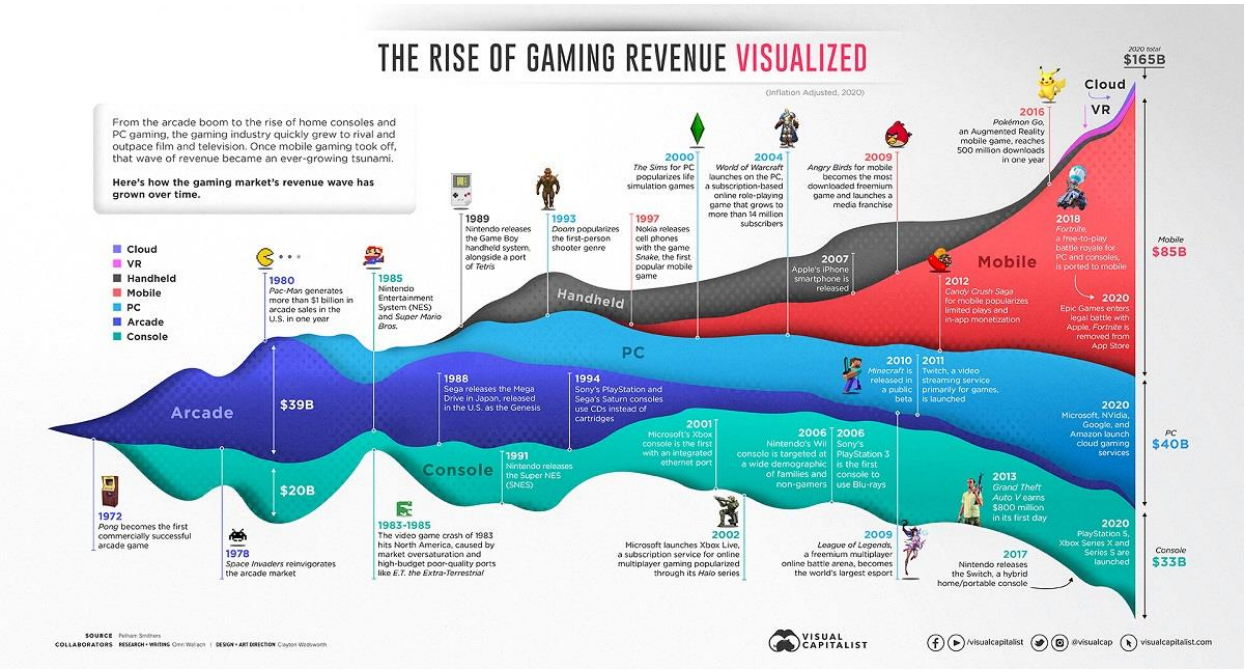
Wallach, Omri. 2020. "The History of the Gaming Industry In One Chart". *World Economic Forum*, 2020. https://www.weforum.org/agenda/2020/11/gaming-games-consels-xbox-play-station-fun/#:~:text=Early%20prototypes%20of%20video%20games,their%20own%20knock%2Doff%20versions.

WARC. 2021. "What is Working in Gaming?". https://www.warc.com/content/paywall/article/warc-wwi/whats-working-in-gaming/en-GB/122415?.

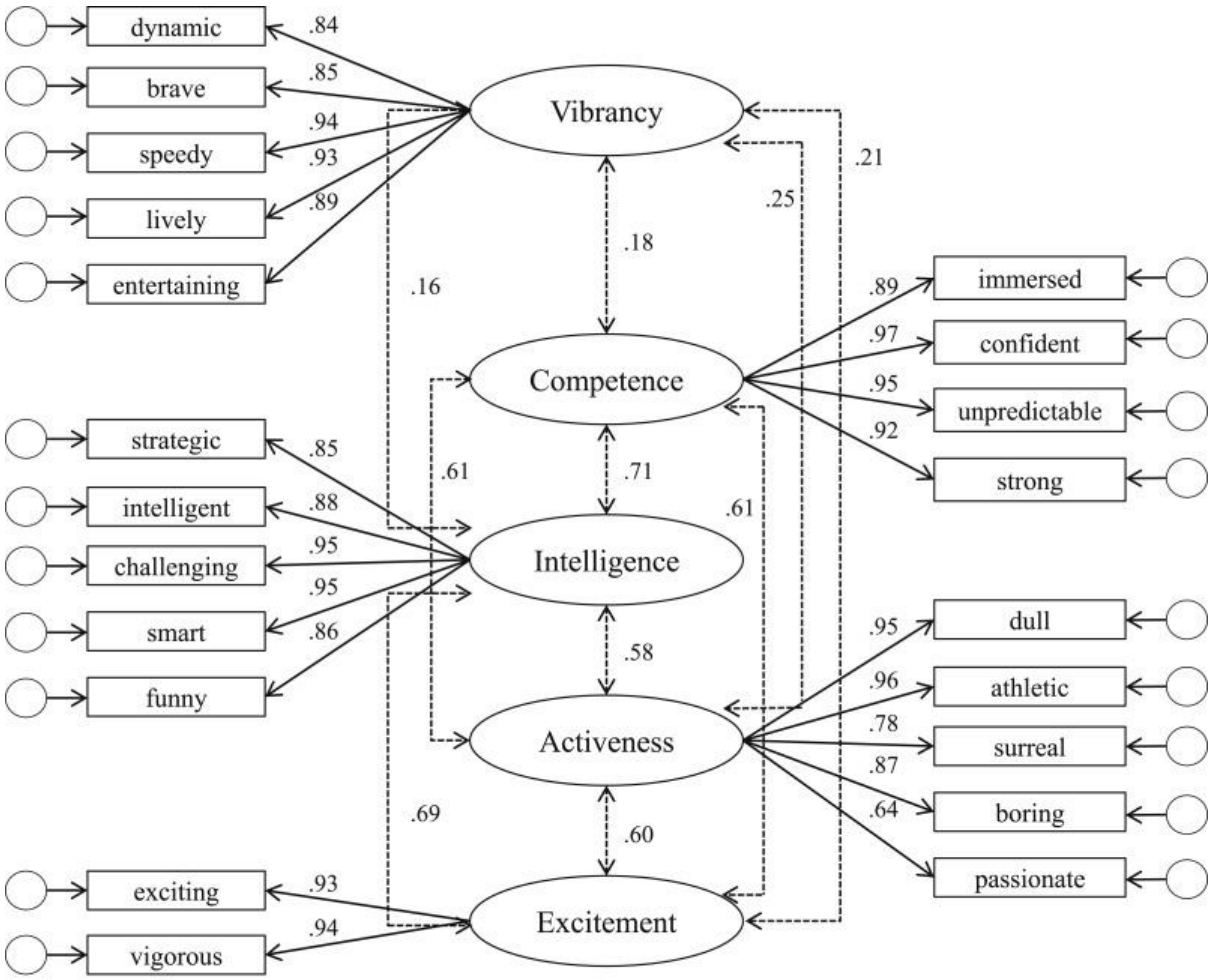
Wise, Kevin, Paul D. Bolls, Hyo Kim, Arun Venkataraman, and Ryan Meyer. 2008. "Enjoyment Of Advergames And Brand Attitudes". *Journal Of Interactive Advertising* 9 (1): 27-36. doi:10.1080/15252019.2008.10722145.

10. Appendices

Appendix I: Rise of Gaming Revenue



Appendix II: Advergaming Brand Personality Dimensions

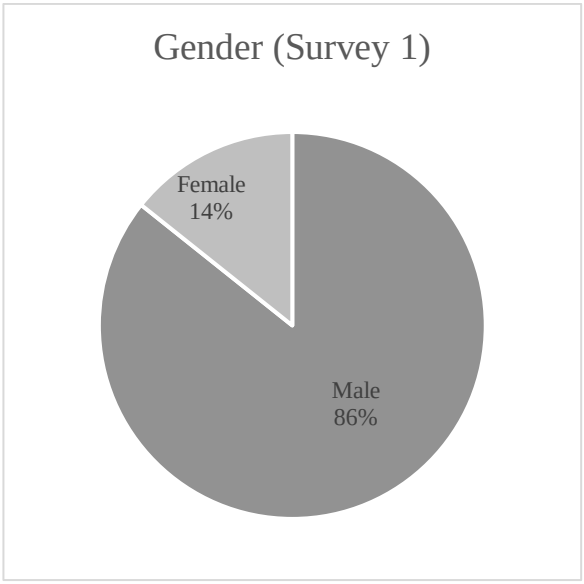


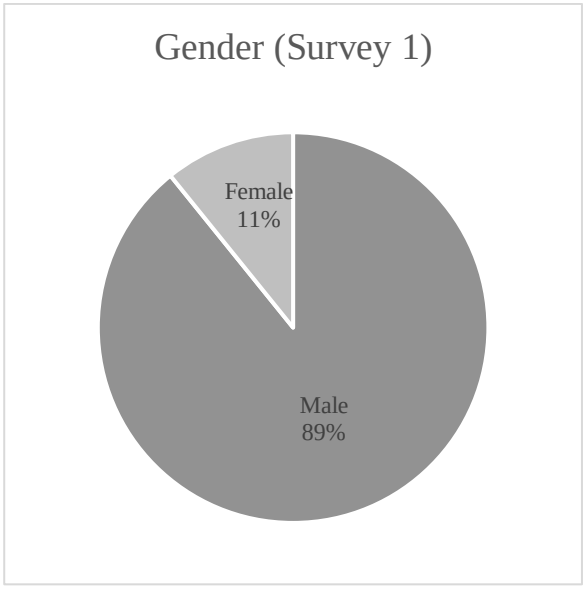
Model fit: $\chi 2/df = 1.95$ ($\chi 2 = 336.826$, $df = 173$), TLI = .96, CFI = .97, RMSEA = .070
Notes: All coefficient values are standardized and statistically significant ($p < .001$).
Dotted lines represent correlations

Appendix III: Sample Survey 1 and Survey 2

Survey 1	Survey 2

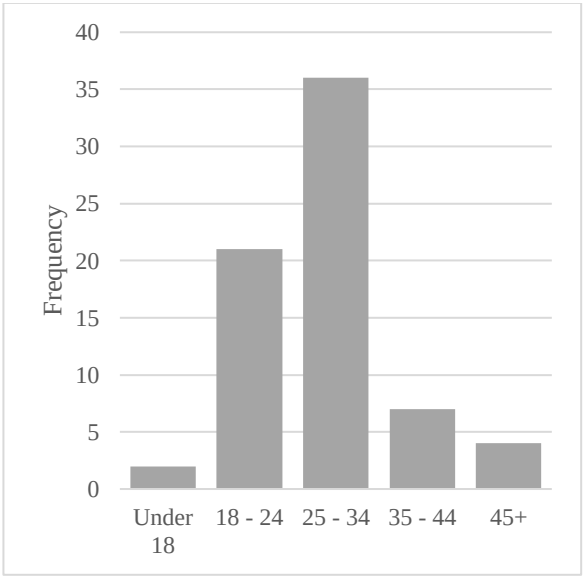
Gender Distribution

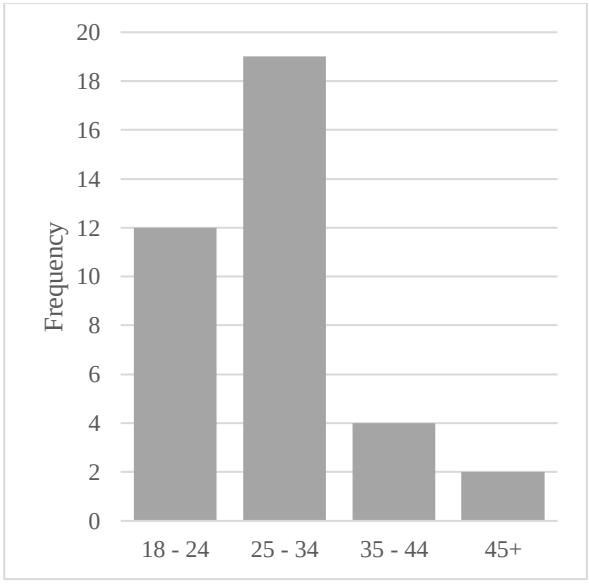




Survey 1	Survey 2

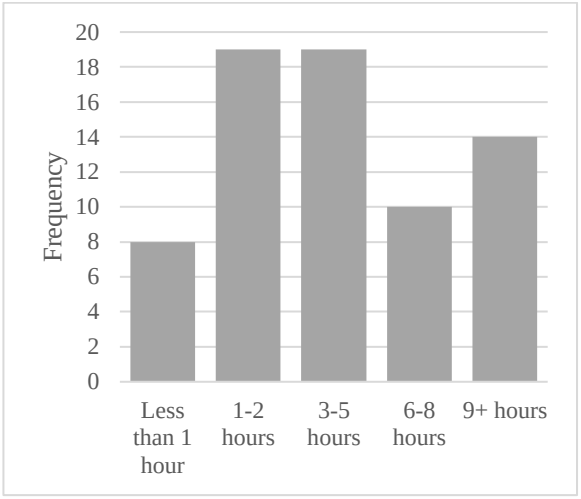
Participant Age

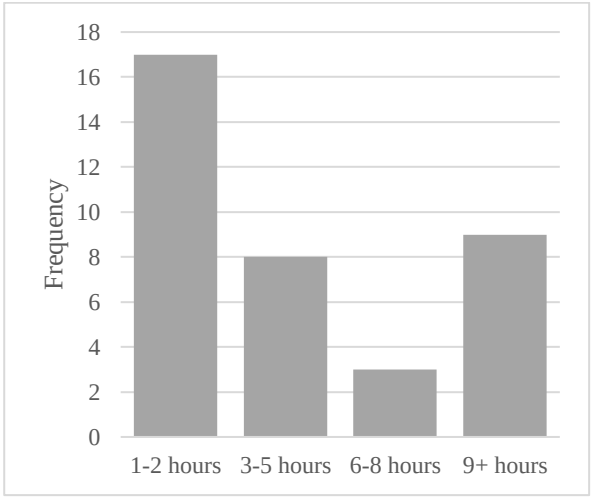




Survey 1	Survey 2

Weekly Hours Played





Nationality Distribution

	Survey 1		**Survey 2**	
	Frequency	**%**	**Frequency**	**%**
India	4	5.8%	2	5.4%
Portugal	18	26.1%	10	29.7%
Norway	17	24.6%	11	27.0%
France	2	2.9%	1	2.7%
Greece	2	2.9%	2	5.4%
Italy	3	4.3%	1	2.7%
USA	7	10.1%	3	8.1%
Colombia	1	1.4%	1	2.7%
UK	2	2.9%	2	5.4%
Nepal	1	1.4%	1	2.7%
Philippines	1	1.4%	1	2.7%
Sweden	1	1.4%	1	2.7%
U.A.E	1	1.4%		
Ireland	1	1.4%		
Turkey	1	1.4%		
Georgia	1	1.4%		
Kurdish	1	1.4%		
Trinidad & Tobago	1	1.4%		
China	1	1.4%		
Vietnam	1	1.4%		
Spain	1	1.4%		
Netherlands	1	1.4%		
	69	100%	37	100%

Note: One person did not fill in nationality in Survey 1 hence n=69 instead of n=70

Appendix IV: Survey 1

Introduction

Dear participant,

My name is Mariana Martins da Silva and I am a MSc International Management student at Nova School of Business and Economics. The following questionnaire aims to collect data for the purpose of my master thesis. The data will be collected anonymously and remain that way.

This study is split into two separated parts with one week in between each. Both parts will ask for your opinion on a cosmetics brand.

Your participation in this research study is voluntary. You may choose not to participate. If you decide to participate in this research, you may withdraw at any time.

It will take less than **10 minutes** to complete the survey. Your help will be appreciated and will contribute to academic literature advances within the gaming sphere.

Thank you very much in advance for your time and help.

For any additional information, please reach out to me at 46578@novasbe.pt

By continuing, you indicate that:
- You have read the above information
- Voluntarily agree to participate
- Are at least 18 years of age

Participant Exclusion Question

How many hours a week do you spend gaming?

- 1-2 hours
- 3-5 hours
- 6-8 hours
- 9+ hours
- None
- Less than 1 hour

If participants answered “none” they were immediately taken to the end of the survey.

Stimuli for Participants that Identify as Female

1. Initial fictional brand description

Imagine a cosmetics brand named "Beautify" that sells lipstick, eyeshadow, mascara and eyeliner. Over the past 10 years, the brand has released 3 products per year, with relatively similar shades, thus failing to diversify. All products have simple packaging and focus mostly on the ingredient benefits. "Beautify" tends to follow the general industry trends rather than being an industry leader. It is known for its old-fashioned TV and print ads. Additionally, "Beautify" has not explored the digital sphere nor built a strong social media following.

2. Fictional brand with *Fortnite* Partnership description

"Beautify" has announced it will partner with Epic Games -- one of the most popular gaming providers worldwide -- within the Fortnite game.

Fortnite is a fast-paced, action-packed game with 350+ million monthly active users worldwide. Over the past years, it has created partnerships with Balenciaga, Marvel, Air Jordan and Stranger Things. It has also done virtual in-game concerts with Ariana Grande, Marshmello and Travis Scott, thus always being on top of the latest trends.

"Beautify" will release a new cosmetics bundle for which, upon purchase, consumers receive a code to unlock a new character within Fortnite (i.e., "skin" in Fortnite vocabulary).

Given the gaming partnership, please rate how you perceive "Beautify" the cosmetics brand.

Stimuli for Participants that Identify as Male

1. Initial fictional brand description

Imagine a skincare brand named "Force" that sells shaving creams, moisturisers, scrubs and beard oils. Over the past 10 years, the brand has released 3 products per year, with relatively similar features, thus failing to diversify. All products have simple packaging and focus mostly on the ingredient benefits. "Force" tends to follow the general industry trends rather than being an industry leader. It is known for its old-fashioned TV and print ads. Additionally, "Force" has not explored the digital sphere nor built a strong social media following.

2. Fictional brand with *Fortnite* Partnership description

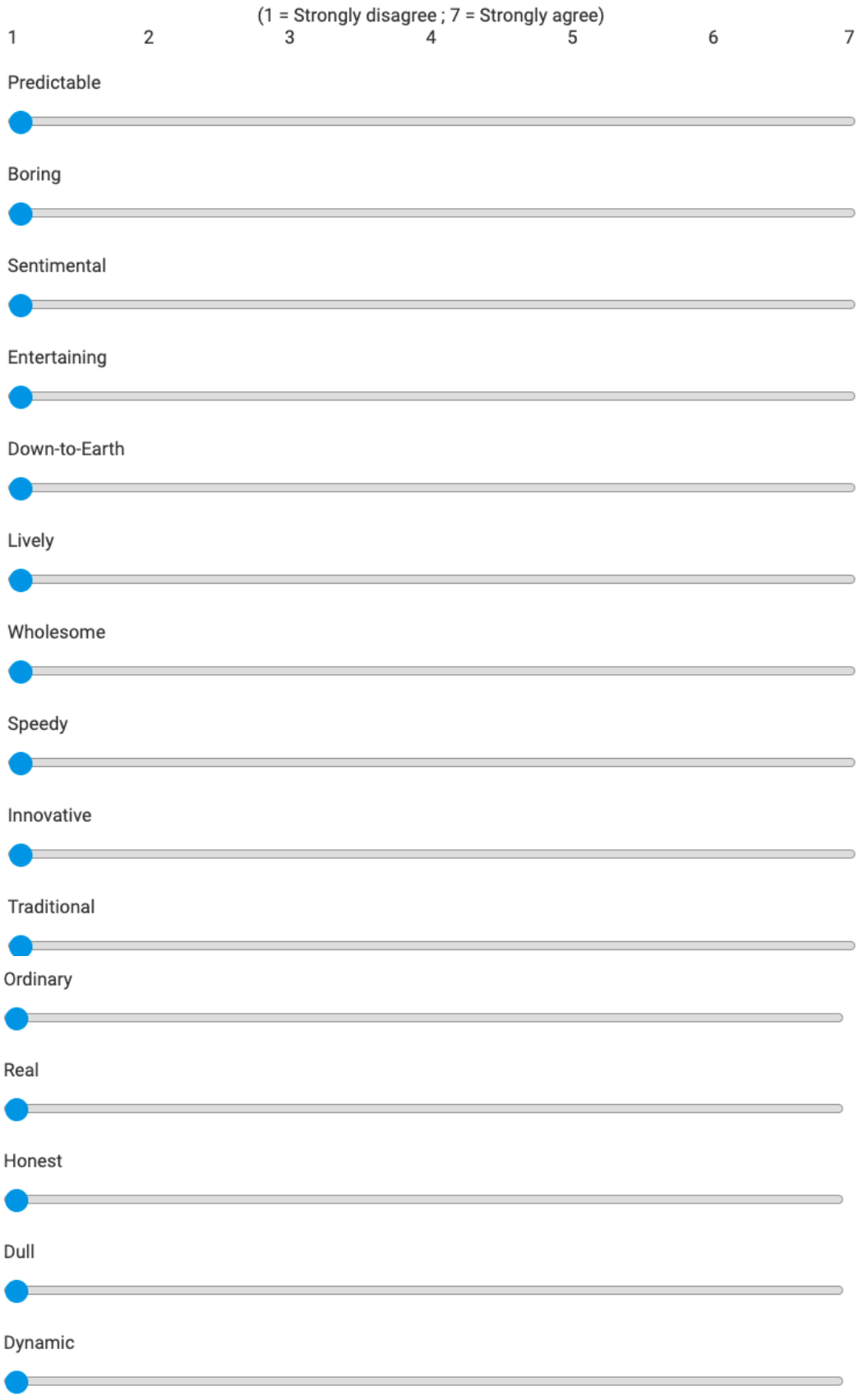
"Force" has announced it will partner with Epic Games -- one of the most popular gaming providers worldwide -- within the Fortnite game.

Fortnite is a fast-paced, action-packed game with 350+ million monthly active users worldwide. Over the past years, it has created partnerships with Balenciaga, Marvel, Air Jordan and Stranger Things. It has also done virtual in-game concerts with Ariana Grande, Marshmello and Travis Scott, thus always being on top of the latest trends.

"Force" will release a new skincare bundle for which, upon purchase, consumers receive a code to unlock a new character within Fortnite (i.e., "skin" in Fortnite vocabulary) .

Given the gaming partnership, please rate how you perceive "Force", the skincare brand.

Randomized 15 Brand Personality Traits



Demographic Questions

Age

- Under 18
- 18 - 24
- 25 - 34
- 35 - 44
- 45+

Nationality

Are you a game developer and/or work in the gaming industry?

- Yes
- No

Appendix V: Email Sent to Participants

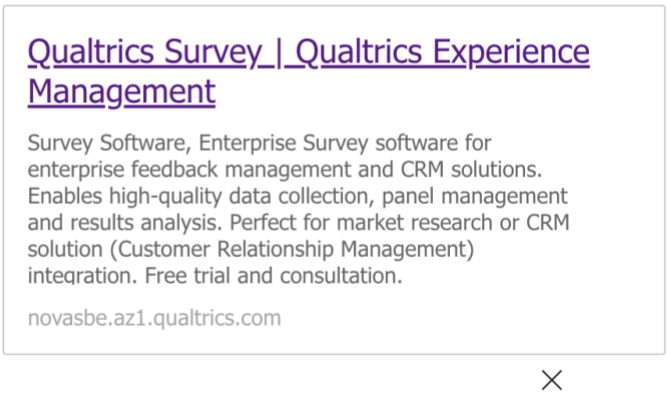
Sat. Master Thesis Survey Part 2

Dear Participant,

My name is Mariana Martins da Silva and I am a MSc International Management student at Nova School of Business and Economics. You are receiving this email as you have accepted to be contacted for the **second half of my master thesis experiment**. You should have completed the first part around a week ago.

The second part of the experiment also consists of a survey that should take a **maximum of 5 minutes**. By completing the second survey you have the ability to win a €25 Amazon giftcard.

Please access the link below to fill out the survey:
https://novasbe.az1.qualtrics.com/jfe/form/SV_bDGH6Tz2aMJBrr8



If you at any point wish you withdraw from the experiment, please email me back.

Thank you so much in advance,
Mariana Martins da Silva

Appendix VI: Survey 2

Introduction

Dear participant,

My name is Mariana Martins da Silva and I am a MSc International Management student at Nova School of Business and Economics. The following questionnaire aims to collect data for the purpose of my master thesis. The data will be collected anonymously and remain that way.

This survey corresponds to the second part of the experiment. You should have responded to the first part of the experiment survey around a week ago.

Your participation in this research study is voluntary. You may choose not to participate. If you decide to participate in this research, you may withdraw at any time.

It will take less than **5 minutes** to complete the survey. Your help will be appreciated and will contribute to academic literature advances within the gaming sphere.

Thank you very much in advance for your time and help.

For any additional information, please reach out to me at 46578@novasbe.pt

By continuing, you indicate that:
- You have read the above information
- Voluntarily agree to participate
- Are at least 18 years of age

Participant Exclusion Question

Have you conducted the first part of this experiment?

Yes

No

If participants answered “no”, they were immediately taken to the end of the survey.

Stimuli Female

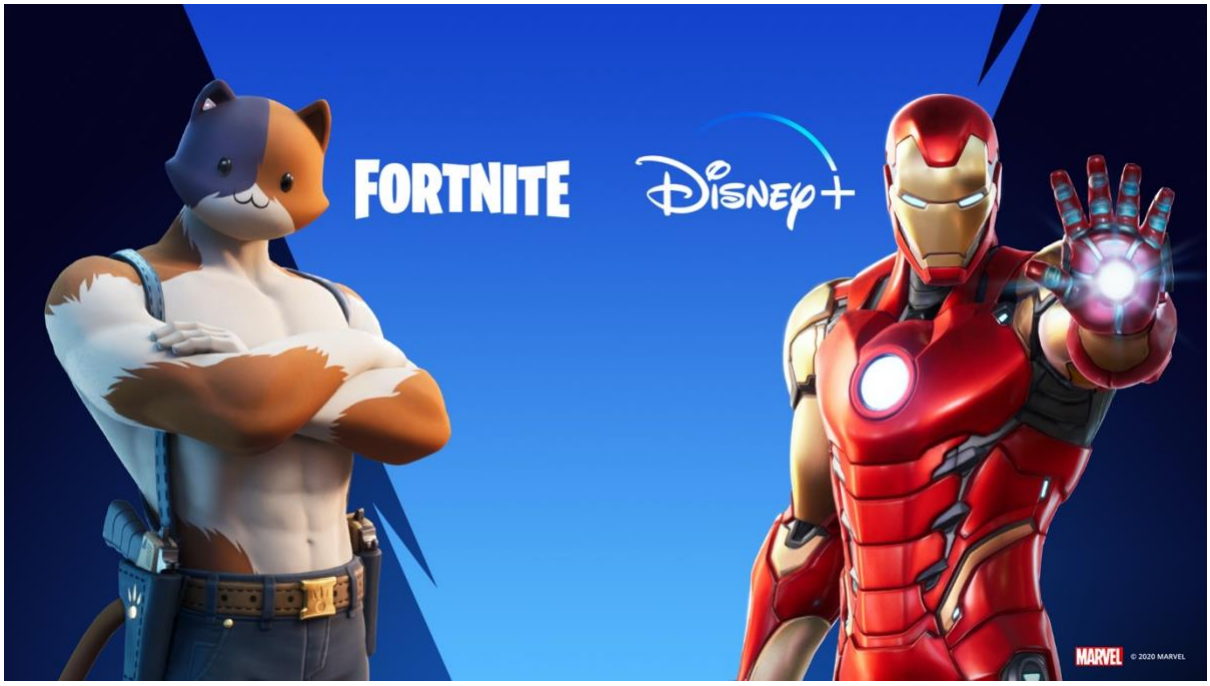
Please base your answers based on your recall of the "Beautify" cosmetics brand discussed in the first part of the experiment conducted last week.

Stimuli Male

Please base your answers based on your recall of the "FORCE" skincare brand discussed in the first part of the experiment conducted last week.

Appendix VII: Previous *Fortnite* Partnerships & Marketing Collateral

Fortnite x Disney+ (Business Wire 2020)



Fortnite x NBA (Global Esports News 2022)

Appendix VIII: Brand Personality Scales and Dimensions Used

Brand Personality Dimension	Inactiveness	Sincerity	Vibrancy
Trait 1	• Dull	• Honest	• Dynamic
Trait 2	• Boring	• Wholesome	• Speedy
Trait 3	• Predictable	• Sentimental	• Lively
Trait 4	• Traditional	• Real	• Entertainment
Trait 5	• Ordinary	• Down-to-Earth	• Innovative

Appendix IX: Cronbach's Alpha

Control – No Partnership Scale

Inactiveness

		N	%
Cases	Valid	70	100.0
	Excluded[a]	0	.0
	Total	70	100.0

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

Reliability Statistics

Cronbach's Alpha	Cronbach's Alpha Based on Standardized Items	N of Items
.497	.499	5

Sincerity

		N	%
Cases	Valid	70	100.0
	Excluded[a]	0	.0
	Total	70	100.0

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

Reliability Statistics

Cronbach's Alpha	Cronbach's Alpha Based on Standardized Items	N of Items
.660	.667	5

Vibrancy

		N	%
Cases	Valid	70	100.0
	Excluded[a]	0	.0
	Total	70	100.0

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

Reliability Statistics

Cronbach's Alpha	Cronbach's Alpha Based on Standardized Items	N of Items
.851	.862	5

After Partnership -- Short-term Scale

Inactiveness

Case Processing Summary

		N	%
Cases	Valid	70	100.0
	Excluded[a]	0	.0
	Total	70	100.0

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

Reliability Statistics

Cronbach's Alpha	Cronbach's Alpha Based on Standardized Items	N of Items
.788	.793	5

Sincerity

Case Processing Summary

		N	%
Cases	Valid	70	100.0
	Excluded[a]	0	.0
	Total	70	100.0

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

Reliability Statistics

Cronbach's Alpha	Cronbach's Alpha Based on Standardized Items	N of Items
.750	.747	5

Vibrancy

Case Processing Summary

		N	%
Cases	Valid	70	100.0
	Excluded[a]	0	.0
	Total	70	100.0

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

Reliability Statistics

Cronbach's Alpha	Cronbach's Alpha Based on Standardized Items	N of Items
.829	.829	5

1-Week After – Long-Term Scale

Inactiveness

Case Processing Summary

		N	%
Cases	Valid	37	34.6
	Excluded[a]	70	65.4
	Total	107	100.0

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

Reliability Statistics

Cronbach's Alpha	Cronbach's Alpha Based on Standardized Items	N of Items
.832	.838	5

Sincerity

Case Processing Summary

		N	%
Cases	Valid	37	34.6
	Excluded[a]	70	65.4
	Total	107	100.0

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

Reliability Statistics

Cronbach's Alpha	Cronbach's Alpha Based on Standardized Items	N of Items
.829	.826	5

Vibrancy

Case Processing Summary

		N	%
Cases	Valid	37	34.6
	Excluded[a]	70	65.4
	Total	107	100.0

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

Reliability Statistics

Cronbach's Alpha	Cronbach's Alpha Based on Standardized Items	N of Items
.950	.950	5

Appendix X: Paired Sample T-Test

T-Test

Paired Samples Statistics

		Mean	N	Std. Deviation	Std. Error Mean
Pair 1	Activeness_Control	5.2686	70	.92494	.11055
	Activeness_Partnership	2.9543	70	1.11650	.13345
Pair 2	Sincerity_Control	3.9914	70	.98005	.11714
	Sincerity_Partnership	3.3743	70	1.00256	.11983
Pair 3	Vibrancy_Control	2.3400	70	.99933	.11944
	Vibrancy_Partnership	4.4886	70	1.17886	.14090

Paired Samples Correlations

		N	Correlation	Significance One-Sided p	Significance Two-Sided p
Pair 1	Activeness_Control & Activeness_Partnership	70	-.076	.267	.534
Pair 2	Sincerity_Control & Sincerity_Partnership	70	.265	.013	.027
Pair 3	Vibrancy_Control & Vibrancy_Partnership	70	.040	.373	.745

Paired Samples Test

		Paired Differences					t	df	Significance One-Sided p	Significance Two-Sided p
		Mean	Std. Deviation	Std. Error Mean	95% Confidence Interval of the Difference Lower	Upper				
Pair 1	Activeness_Control - Activeness_Partnership	2.31429	1.50268	.17960	1.95598	2.67259	12.885	69	<.001	<.001
Pair 2	Sincerity_Control - Sincerity_Partnership	.61714	1.20229	.14370	.33047	.90382	4.295	69	<.001	<.001
Pair 3	Vibrancy_Control - Vibrancy_Partnership	-2.14857	1.51502	.18108	-2.50982	-1.78733	-11.865	69	<.001	<.001

Appendix XI: *Inactiveness* Repeated Measures Results

Control vs. Partnership (Short-term)

	Mean	Std. Deviation	N
Activeness_Control	5.281081	.8569448	37
Activeness_Partnership	2.8541	.92934	37

Tests of Within-Subjects Effects

Measure: Activeness_Control_Partnership

Source		Type III Sum of Squares	df	Mean Square	F	Sig.	Partial Eta Squared
Time	Sphericity Assumed	108.974	1	108.974	122.417	<.001	.773
	Greenhouse-Geisser	108.974	1.000	108.974	122.417	<.001	.773
	Huynh-Feldt	108.974	1.000	108.974	122.417	<.001	.773
	Lower-bound	108.974	1.000	108.974	122.417	<.001	.773
Error(Time)	Sphericity Assumed	32.046	36	.890			
	Greenhouse-Geisser	32.046	36.000	.890			
	Huynh-Feldt	32.046	36.000	.890			
	Lower-bound	32.046	36.000	.890			

Control vs. 1-Week after (Long-term)

	Mean	Std. Deviation	N
Activeness_Control	5.281081	.8569448	37
Activeness_LT	2.9730	1.27642	37

Tests of Within-Subjects Effects

Measure: Activeness_Control_LT

Source		Type III Sum of Squares	df	Mean Square	F	Sig.	Partial Eta Squared
Time	Sphericity Assumed	98.556	1	98.556	76.099	<.001	.679
	Greenhouse-Geisser	98.556	1.000	98.556	76.099	<.001	.679
	Huynh-Feldt	98.556	1.000	98.556	76.099	<.001	.679
	Lower-bound	98.556	1.000	98.556	76.099	<.001	.679
Error(Time)	Sphericity Assumed	46.624	36	1.295			
	Greenhouse-Geisser	46.624	36.000	1.295			
	Huynh-Feldt	46.624	36.000	1.295			
	Lower-bound	46.624	36.000	1.295			

1-Week after with Co-Variates
(Weekly Number of Hours Gamed & Game Developer)

Tests of Within-Subjects Effects

Measure: Activeness_Control_LT

Source		Type III Sum of Squares	df	Mean Square	F	Sig.	Partial Eta Squared
Time	Sphericity Assumed	6.312	1	6.312	4.804	.035	.124
	Greenhouse-Geisser	6.312	1.000	6.312	4.804	.035	.124
	Huynh-Feldt	6.312	1.000	6.312	4.804	.035	.124
	Lower-bound	6.312	1.000	6.312	4.804	.035	.124
Time * Hours_spent_gaming	Sphericity Assumed	1.548	1	1.548	1.178	.285	.033
	Greenhouse-Geisser	1.548	1.000	1.548	1.178	.285	.033
	Huynh-Feldt	1.548	1.000	1.548	1.178	.285	.033
	Lower-bound	1.548	1.000	1.548	1.178	.285	.033
Time * Game_Developer	Sphericity Assumed	.154	1	.154	.117	.735	.003
	Greenhouse-Geisser	.154	1.000	.154	.117	.735	.003
	Huynh-Feldt	.154	1.000	.154	.117	.735	.003
	Lower-bound	.154	1.000	.154	.117	.735	.003
Error(Time)	Sphericity Assumed	44.676	34	1.314			
	Greenhouse-Geisser	44.676	34.000	1.314			
	Huynh-Feldt	44.676	34.000	1.314			
	Lower-bound	44.676	34.000	1.314			

Appendix XII: *Sincerity* Repeated Measures Results

Control vs. Partnership (Short-term)

	Mean	Std. Deviation	N
Sincerity_Control	4.0324	1.01052	37
Sincerity_Partnership	3.4108	1.00548	37

Tests of Within-Subjects Effects

Measure: Sincerity_Control_Partnership

Source		Type III Sum of Squares	df	Mean Square	F	Sig.	Partial Eta Squared
Time	Sphericity Assumed	7.149	1	7.149	6.868	.013	.160
	Greenhouse-Geisser	7.149	1.000	7.149	6.868	.013	.160
	Huynh-Feldt	7.149	1.000	7.149	6.868	.013	.160
	Lower-bound	7.149	1.000	7.149	6.868	.013	.160
Error(Time)	Sphericity Assumed	37.471	36	1.041			
	Greenhouse-Geisser	37.471	36.000	1.041			
	Huynh-Feldt	37.471	36.000	1.041			
	Lower-bound	37.471	36.000	1.041			

Control vs. Partnership (Long-term)

	Mean	Std. Deviation	N
Sincerity_Control	4.0324	1.01052	37
Sincerity_LT	3.4811	1.02682	37

Tests of Within-Subjects Effects

Measure: Sincerity_Control_LT

Source		Type III Sum of Squares	df	Mean Square	F	Sig.	Partial Eta Squared
Time	Sphericity Assumed	5.624	1	5.624	6.192	.018	.147
	Greenhouse-Geisser	5.624	1.000	5.624	6.192	.018	.147
	Huynh-Feldt	5.624	1.000	5.624	6.192	.018	.147
	Lower-bound	5.624	1.000	5.624	6.192	.018	.147
Error(Time)	Sphericity Assumed	32.696	36	.908			
	Greenhouse-Geisser	32.696	36.000	.908			
	Huynh-Feldt	32.696	36.000	.908			
	Lower-bound	32.696	36.000	.908			

1-Week after with Co-Variates
(Weekly Number of Hours Gamed & Game Developer)

	Mean	Std. Deviation	N
Sincerity_Control	4.0324	1.01052	37
Sincerity_LT	3.4811	1.02682	37

Tests of Within-Subjects Effects

Measure: Sincerity_Control_LT

Source		Type III Sum of Squares	df	Mean Square	F	Sig.	Partial Eta Squared
Time	Sphericity Assumed	2.738	1	2.738	3.248	.080	.087
	Greenhouse-Geisser	2.738	1.000	2.738	3.248	.080	.087
	Huynh-Feldt	2.738	1.000	2.738	3.248	.080	.087
	Lower-bound	2.738	1.000	2.738	3.248	.080	.087
Time * Hours_spent_gaming	Sphericity Assumed	2.820	1	2.820	3.346	.076	.090
	Greenhouse-Geisser	2.820	1.000	2.820	3.346	.076	.090
	Huynh-Feldt	2.820	1.000	2.820	3.346	.076	.090
	Lower-bound	2.820	1.000	2.820	3.346	.076	.090
Time * Game_Developer	Sphericity Assumed	.599	1	.599	.711	.405	.020
	Greenhouse-Geisser	.599	1.000	.599	.711	.405	.020
	Huynh-Feldt	.599	1.000	.599	.711	.405	.020
	Lower-bound	.599	1.000	.599	.711	.405	.020
Error(Time)	Sphericity Assumed	28.660	34	.843			
	Greenhouse-Geisser	28.660	34.000	.843			
	Huynh-Feldt	28.660	34.000	.843			
	Lower-bound	28.660	34.000	.843			

Appendix XIII: *Vibrancy* Repeated Measures Results

Control vs. Partnership (Short-term)

	Mean	Std. Deviation	N
Vibrancy_Control	2.2162	.82108	37
Vibrancy_Partnership	4.5081	1.27506	37

Measure: Vibrancy_Control_Partnership

Source		Type III Sum of Squares	df	Mean Square	F	Sig.	Partial Eta Squared
Time	Sphericity Assumed	97.176	1	97.176	90.481	<.001	.715
	Greenhouse-Geisser	97.176	1.000	97.176	90.481	<.001	.715
	Huynh-Feldt	97.176	1.000	97.176	90.481	<.001	.715
	Lower-bound	97.176	1.000	97.176	90.481	<.001	.715
Error(Time)	Sphericity Assumed	38.664	36	1.074			
	Greenhouse-Geisser	38.664	36.000	1.074			
	Huynh-Feldt	38.664	36.000	1.074			
	Lower-bound	38.664	36.000	1.074			

Control vs. Partnership (Long-term)

	Mean	Std. Deviation	N
Vibrancy_Control	2.2162	.82108	37
Vibrancy_LT	4.0757	1.62436	37

Tests of Within-Subjects Effects

Measure: Vibrancy_Control_LT

Source		Type III Sum of Squares	df	Mean Square	F	Sig.	Partial Eta Squared
Time	Sphericity Assumed	63.965	1	63.965	34.331	<.001	.488
	Greenhouse-Geisser	63.965	1.000	63.965	34.331	<.001	.488
	Huynh-Feldt	63.965	1.000	63.965	34.331	<.001	.488
	Lower-bound	63.965	1.000	63.965	34.331	<.001	.488
Error(Time)	Sphericity Assumed	67.075	36	1.863			
	Greenhouse-Geisser	67.075	36.000	1.863			
	Huynh-Feldt	67.075	36.000	1.863			
	Lower-bound	67.075	36.000	1.863			

Measure: Vibrancy_Control_LT

Source		Type III Sum of Squares	df	Mean Square	F	Sig.	Partial Eta Squared
Time	Sphericity Assumed	3.216	1	3.216	1.680	.204	.047
	Greenhouse-Geisser	3.216	1.000	3.216	1.680	.204	.047
	Huynh-Feldt	3.216	1.000	3.216	1.680	.204	.047
	Lower-bound	3.216	1.000	3.216	1.680	.204	.047
Time * Hours_spent_gaming	Sphericity Assumed	1.934	1	1.934	1.010	.322	.029
	Greenhouse-Geisser	1.934	1.000	1.934	1.010	.322	.029
	Huynh-Feldt	1.934	1.000	1.934	1.010	.322	.029
	Lower-bound	1.934	1.000	1.934	1.010	.322	.029
Time * Game_Developer	Sphericity Assumed	.000	1	.000	.000	.988	.000
	Greenhouse-Geisser	.000	1.000	.000	.000	.988	.000
	Huynh-Feldt	.000	1.000	.000	.000	.988	.000
	Lower-bound	.000	1.000	.000	.000	.988	.000
Error(Time)	Sphericity Assumed	65.084	34	1.914			
	Greenhouse-Geisser	65.084	34.000	1.914			
	Huynh-Feldt	65.084	34.000	1.914			
	Lower-bound	65.084	34.000	1.914			