Assessing the Relationship Between Gamified Advertising and In-App Purchases: A Consumers' Benefits-Based Perspective

Abstract

Nowadays, consumers purchase more and more products and services through mobile apps. In this perspective, to improve sales -as well as to better obtain the attention of a younger audience (i.e. Millennials)- marketers are adopting gamification as a strategic marketing lever. Thus, gamified advertisings -which are advertising characterized by high interactivity and game-like features- have become a trending topic. Building on Use and Gratification Theory (UGT) and Theory of Planned Behavior (TPB), the present research wishes to explore how consumers' experience deriving from Gamified Advertising (GAMEX) could contribute to the creation of consumers' benefits and their intention to purchase using a mobile app. In this regard, the authors will also observe how gamification could also shape the attitude toward advertising. Results show how consumer benefits and attitude toward advertising influence the relationship between gamification and in-app purchase intention. Investing in gamification is therefore a significant antecedent in increases in sales.

Introduction

Over the last decade, the Internet has profoundly affected consumer experience and how consumers interact and respond to stimulus coming from companies (Kumar & Anjaly, 2017). Indeed, the

availability of internet on portable devices -such as smartphones and tablets- presented a whole new set of opportunities to any business wishing to be in touch with customers during their purchase journey (Grewal *et al.*, 2016). Mobile devices indeed are handy portable and consumers could use them anywhere and anytime. Such a technological diffusion has therefore changed consumers habits (Laroche *et al.*, 2013); the advent of social media and mobile applications have in fact empowered consumers, which nowadays wish to participate to marketing communication by expressing their opinion through user-generate-contents (UGCs; Mayrhofer *et al.*, 2020).

The disruptive importance of mobile devices on marketing strategies is clearly observable. First, mobile devices are always on and always on you (McLean *et al.*, 2020), thus they allow to solve the so-called crisis of immediacy as consumer could purchase a good in any moment and in any places (Parise et al., 2016). Similarly, such devices allow a business to send alerts in any moment to a consumer (Aramendia-Muneta & Olarte-Pascual, 2019). Next, mobile channels offer consumers the possibility to share their impressions about a specific purchase (i.e. using posts, photos or messages), which is particularly important in the case of hedonic goods such as fashion ones (Kim & Ko, 2012; Youn & Kim, 2019).

A pivotal role in the change of the mode consumers act has also been played by the emergence of a new consumers' cohort comfortable within the online life (i.e. onlife, Floridi, 2015), namely Millennials. Millennials -the consumers cohort born between 1982 and 2002 (Zollo *et al.*, 2020) - are the first generation of digital native and technological savvy consumers wholly capable to appreciate the potential of mobile devices (Hur *et al.*, 2017). Specifically, they are capable to easily switch between digital life on online media, games, or communities existing in their mobile devices and real-world life (Munsch, 2021).

In this regard, due to this intertwining of digital and real lives, traditional advertising strategies to communicate with consumers are nowadays proving inappropriate (Chu *et al.*, 2019). Millennials seeks entertainment and interactivity even in advertisings, and they wish to be completely absorbed and astonished by marketing communications (Yun *et al.*, 2019). While performing an online activity,

millennials' level of attention tends to be lower than in real life, as an example, they simply swipe between one advertising and another one in social media (Smith, 2019). A possible solution to this dilemma that marketers are experiencing was initially represented by data-driven advertising (a.k.a. advertisings messages customized according to consumers' preferences analyzed trough Big Data Analytics; Rialti *et al.*, 2018a). Yet, even extremely customized advertisings lack interactivity and engagement potential capable to attract millennials and keep the active while observing an advertising. Hereby, gamification of advertising emerged as a cutting edge to deal with new exigent consumers.

Gamification is a marketing strategy based on including into a message, a boutique or an e-commerce platform, traits typical of games. I.e., a gamified marketing strategy should be based on point scoring, reward systems, experience-related badges, competition with others, and rules of play (Hofacker *et al.*, 2016; Huotari & Hamari, 2017). The essence of gamification stands then in transforming a complex message in a game capable to engage consumers. Hence, gamification is fundamental to catch the attention of online consumers, and to transmit them information about the brand and its products while they are playing a game. Such a phenomenon occurs as humans are naturally prone to learn through game capable to stimulate their creativity (Bidmon, 2017). In the mobile era, gamification is more and more included into advertising. Indeed, mobile devices are naturally prone to make people play and interact with a screen. More and more companies are in this regard sending consumers messages with the possibility to create avatars, participate to challenges, and relate with aficionados of a specific product or brand (Van Noort *et al.*, 2014).

Notwithstanding the growing number of researches on gamification in marketing, how gamified advertising could influence consumers' behavior is still to be thoroughly assessed. Extant research, indeed, mostly focused on consumers' willingness to accept gamified mobile applications and communications (Hamari & Koivisto, 2015). Yet, these researches scantly focused on the outcomes of gamification (Eppman *et al.*, 2017). In addition, the researches focusing on outcomes missed to develop and test a journey model capable to explore how the gamification of advertising

could increase advertising effectiveness and sales (Hsu & Chen, 2018). To compel with this gap, the aim of the present research is to explore how gamification of advertising could increase advertising effectiveness and motivate consumer to purchase products through mobile apps. To do so, the authors focused on the importance of virtual benefits that consumer may obtain from "playing" a gamified advertising. Thus, the guiding research question of the present research is:

RQ: Does gamification of advertising influence consumers' attitude toward advertising, advertising effectiveness and consumers' intention to purchase? Which is the role of consumers' perceived benefits in this relationship?

To reply the aforementioned research question, a structural model has been developed and tested. A partial least squares structural equation modeling (PLS-SEM) analysis a been performed on a sample of 315 UK, Canada and US based respondents. The most of them belonged to the Millennials' cohort.

Aside from this introductory section, the paper is structured as follow. The second paragraph contains the theoretical background and the hypotheses development. In particular, the choice of Katz *et al.* (1973) Uses and Gratification Theory in gamification context has been justified. The third one contains the methodological procedure. The fourth one, instead, provides the statistical results of our analysis. The fifth paragraph concerns theoretical and managerial implication. Next, the final one is about the principal limitations of the research and suggestions for future research.

Theoretical background

Uses and Gratification Theory

Uses and Gratification (U&G) Theory is one of the most influential and popular communication theories explaining consumer motivation to use various media and their behavior with them (i.e., usage) (Katz *et al.*, 1973; Lin, 1996; Ruggiero, 2000). U&G theory explains that consumers are drawn

to media activities (i.e., television, radio, internet) to gratify various socio-psychological benefits grouped under five macro-categories of needs: *cognitive*, *personal integrative*, *social integrative*, and *hedonic* (e.g., Dholakia *et al*., 2009; Nambisan & Baron, 2009; Verhagen *et al*., 2015). The satisfaction of cognitive needs involves the use of media for the acquisition of relevant information and learning; the personal-integrative dimensions implies that individuals use media to satisfy their need for status or reputation or self-confidence; the social-integrative involves the use of media to build relationships (i.e., make friends) and interact with other people; the hedonic dimension involves the use of media to obtain benefits such as evasion, entertainment, and pleasure (e.g., Verhagen *et al*., 2015; Zollo *et al*., 2020).

U&G was developed to study consumer motivation and usage of traditional mass media, such as television. However, the theory has been adopted to explain users' motivation/benefits derived from various digital media, such as user-generated media (Shao, 2009). Scholars have used U&G theory to investigate consumer participation in online communities (Zaglia, 2013; Verhagen *et al.*, 2015), adoption of food delivery apps (Ray *et al.*, 2019), value co-creation in innovation-based brand communities (Nambisan & Baron, 2009), the motivation for browsing of social media pages (Gao & Feng, 2016), contributing to micro-blogs (Liu *et al.*, 2020), photo sharing on social networking sites (Malik *et al.*, 2016), and luxury brand social media pages (Zollo *et al*., 2020).

Hence, Uses and Gratifications' (U&G) relevance to explain the benefits consumers obtain from their participation in digital environments is quite established in the literature. Nonetheless, less research has been conducted on the outcomes of the benefits received through participation, i.e., apart from few exceptions (e.g., Zollo *et al.*, 2020). Furthermore, there is scant research on the attitudinal consequences of consumer participation in digital environments. Specifically, no study has adopted the U&G theory in the context of gamification, and specifically, to explain the attitude towards gamified advertising. Below the authors elaborate the hypotheses of this study.

Research Model and Hypothesis Development

Gamification experience (GAMEX) is a relatively new concept in the marketing context. Eppmann, Bekk, and Klein (2018, p. 100) define gamification experience in non-game conditions as "the positive emotional and involving qualities of using a gamified experience". GAMEX is a multi-dimensional concept comprises six dimensions: *Enjoyment*, *Absorption*, *Creative Thinking*, *Activation*, *Absence of Negative Affect*, and *Dominance* (Eppmann *et al.*, 2018). Enjoyment is a core driver of gamification experience, users may not be willing to play a game unless they experience enjoyment. Absorption, the second dimension, represents the cognitive engagement that users feel immersed and unconscious from the real environment. The third dimension, creative thinking, indicates that the experiential aspect of the game relates to imagination and exploration. The fourth dimension, "activation", is designated to the gamified experience to encourage users' behaviors. The fifth dimension, absence of negative feelings, refers to the positive emotion of the gamified experience. Dominance, the final dimension, refers to the users' feeling when they are in charge.

In general, people tend to respond negatively to advertisements (Obermiller & Spangenberg 2000), especially when they are perceived as particularly intrusive of their privacy (Yoon *et al.*, 2011), such as digital advertising (Goldfarb & Tucker, 2011). For gamified advertising, hedonic value is an important factor for developing positive advertisement attitudes (Poels, Janssens, and Herrewijn 2013). Soares and Pinho (2014) report that perceived enjoyment of advertising on online social networks affects social identity and group norms, hence strengthening group dynamics and intentions. Similarly, scholars proved gamification effectiveness in the services marketing context, where perceived enjoyment was found to be the strongest predictor of intention to engage in the gamification process (Yang *et al.*, 2017). Previous studies also reveal that gamified loyalty programs enhance customer engagement (Hollebeek *et al.*, 2021). The authors propose that gamifying the advertising message can improve consumers' emotional and hedonic experiences with advertising, contributing to developing a positive attitude toward the advertisement. Thus, the authors postulate:

H1: GAMEX positively influences attitude toward advertising.

Prior research studied gamification to satisfy intrinsic customer needs (Francisco-Aparicio *et al.* 2013). Scholars argue that people use gamification features for hedonic, social, and utilitarian benefits (Hamari & Koivisto 2015). The presence of customer benefits according to the U&GT framework (Katz *et al.*, 1973), in its four pillars (cognitive benefits, social-integrative, personal-integrative, and hedonic), can motivate the viewers to develop a positive attitude towards the gamified advertising. Gamification features can likely influence customer autonomy, competence, and goal achievement needs (Xi & Hamari 2020). Gamified advertising experience is likely to be related to all types of customer benefits. The greater the extent of gamified advertising experience, the greater would be the opportunities to see more information and learn about the advertising content, thus, facilitating a positive advertising attitude. Similarly, the primary basis for members to relate to one another is their affiliation with gamified advertising, which may help establish common values, resulting in a positive attitude toward gamified advertising.

Advertising-related GAMEX can improve brand attitude only if they provide benefits to their users. Drawing on U&G, the authors argue that the advertising brand attitude will be positively affected if consumers receive cognitive, social integrative, personal-integrative, hedonic benefits by using GAMEX. The benefits viewers derive from GAMEX by the diversity of gamification features can stimulate viewers' cognitive, affective, personal, and social benefits that improve their likeability of the embedded advertising. Therefore, the authors postulate that:

H2: Consumers' benefits significantly mediate the effect of advertising-related GAMEX on attitude toward the advertising. Specifically:

H2a: Advertising-related GAMEX significantly impacts on consumers' benefits.

H2b: Consumers' benefits significantly impacts on attitude toward advertising.

The Theory of Planned Behavior suggests that attitudes affect intention, and that intention leads to actual behavior (Ajzen, 1991). An attitude towards a behavior is an individual favorable or unfavorable evaluation of the behavior in question (Ajzen, 1991). Previous studies have indicated consumers' smartphone advertising attitude influences advertiser brand attitude and purchase intention (Lee *et al.*, 2017). Gamified advertising is considered to be more persuasive than non-gamified advertising (van Berlo *et al.*, 2021), and scholars discuss that gamification can potentially impact consumers' purchase intention (Hofacker *et al.*, 2016). Gamified advertising in mobile applications has the ability to convey more information and details than non-mobile advertising tools (Seaborn & Fels 2015). Scholars reveal that trust in in-app advertising influences viewers' intention to watch in-app advertisements, which, together with trust and behavioral control, affect behavioral intentions (Cheung & To, 2017). Hence, gamified advertising's attitude is contemplated to increase consumers' likelihood to purchase through mobile applications. Therefore, the authors postulate that:

H3: Attitude toward advertising positively influences in-app purchase intention.

Advertising effectiveness indicates the effect of advertising on sales and profit (Arnold *et al.* 1987). Extant research demonstrates that advertising effectiveness leads to greater consumers' attitudinal and behavioral band loyalty (Maity & Gupta 2016). Accordingly, engaged customers are more willing to perceive gamified advertisements favorably (Hogberg *et al.*, 2019). However, there is a scarcity of research on the mediation role advertising effectiveness can play between consumers' attitude toward advertising and purchase intention through mobile applications. Following the above thought, advertising attitude can be better to enhance consumer purchase intention via mobile applications if the advertising is highly effective. Therefore, the authors postulate that:

H4: Advertising effectiveness significantly mediates the effect of attitude toward advertising on in-app purchase intention. Specifically:

H4a: Attitude toward advertising significantly impacts on advertising effectiveness.

H4b: Advertising effectiveness significantly impacts on in-app purchase intention.

Hypothesized structural model

To reply to the proposed research question, building on the previous four hypotheses, the following structural model has been developed (see Figure 1). In this regard, GAMEX deriving from gamified advertisings has been considered as the principal independent variable. The authors hypothesized that GAMEX may foster the development of consumers' benefits in virtual environment and, in turn, a positive attitude toward advertising capable to influence consumers' perceived advertising effectiveness. Increased intention to purchase products after the exposure to gamified advertising has been considered as the final outcome of these paths. Hence, by testing the proposed structural model the authors wish to explore the potential effect of GAMEX on purchase intention through psychological mechanisms occurring in consumers' mind.

Insert Figure 1 here

Method

Sampling process and research instrument

An online consumer survey was created in early 2021 and pre-tested by 10 students enrolled in marketing courses at the University of Florence (Italy) and by 5 academic experts in the field of social media marketing to ensure the questionnaire was easy to understand, clear, complete, and with no errors or ambiguous terms. These procedures are important to avoid non-response bias (Rogelberg & Stanton, 2007). After the pre-tests, no changes were made to the survey. To reduce social desirability bias, the authors additionally followed the guidelines by Podsakoff *et al.* (2003), such as carefully indicating the main purpose of the survey in the cover letter, which also ensured the anonymity of

respondents as well as the confidentiality and independence of researchers. Moreover, to reduce common method variance the authors used the "separation of measurements" procedure (Podsakoff *et al.*, 2003, p.887). Specifically, the "proximal separation" between measures of predictors and criterion variables was used (Podsakoff et al., 2012, p.550), thus separating the items related to independent variables – such as *Adverstising related Gamex* – from the ones related to dependent variables – such as consumers' *Intention to make in-app purchases*.

The final survey was distributed in March 2021 using the Prolific platform (Rialti *et al.*, 2017). The authors were able to recruit a sample of 320 respondents following these selection criteria: 1) Millennials (aged 20-41 in 2021), 2) actively using mobile apps on their smartphones, 3) daily engaged in gamified social media activities, 4) following their favorite brands using gamification as a marketing strategy[1]. After discarding incomplete questionnaires, the final valid sample size was 315 which represents a statistically significant sample size for our hypothesized conceptual model (see Table 1 for demographics and descriptive statistics).

Insert Table 1 here

As shown in Table 1, our respondents were consumers belonging to the Millennials cohorts, which represent the generations of digital natives and tech-savvy highly engaged in social media activities (Zollo *et al.*, 2020; 2021a). The sample comprises consumers that use mobile app on their smartphones more than once day (75.5%) and specifically use mobile for shopping on a weekly basis

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[1] To be sure participants understood what GAMEX is, we proposed the following well-known examples of gamified adv, such as: 1) *Nike Sneakers*: Nike Reactland is an immersive experience that gamified the in-store product trial to actively engage potential customers which have the possibility to play this running game ; *Sony Playstation*: the famous console launched a hunting game through main social media and retailers websites, so customers might play this game and get offers and benefits in case of wins. Participants were asked to keep in mind a GAMEX example throughout the whole survey.

(50.5%). When asked to name the gamified app they used the most, our respondents answered the following social media: Instagram, Facebook, Twitter, Snapchat, Whatsapp, Youtube, TikTok.

Measures

We developed a structured questionnaire composed of 61 items all previously validated by the pertinent literature. All the survey items are reported in Appendix A.

Adverstising related Gamex (i.e. gameful experience) was operationalized as a second-order construct made of six sub-dimensions adapted from Eppman *et al.* (2018), such as: *enjoyment* (i.e., "I enjoyed playing the advergame very much"); *absorption* (i.e., "Playing in the advergame made me forget where I am"); *creative thinking* (i.e., "While playing the game I felt creative"); *activation* (i.e., "While playing the game I felt excited"); *absence of negative affect* (i.e., While playing the game I felt frustrated"); *dominance* (i.e., "While playing the game I felt influential").

Consumers' benefits was measured as a second-order construct composed of four sub-dimensions following Nambisan & Baron (2009) original instrument: *cognitive benefits* (i.e., "I expect to enhance my knowledge in the brand's customer community about the product and its usage"); *social integrative benefits*, (i.e., "The brand's community expands my personal/social network"); *personal integrative benefits* (i.e., "I expect to enhance my status/reputation as product expert in the brand's customer community"); *hedonic benefits* (i.e., "I participate in the brand's customer community to derive fun and pleasure").

Attitude toward advertising was captured through the 11-item scale validated by Fortin & Dholakia (2005) (i.e., "The advertising is fun to watch").

Intention to make in-app purchases was measured with the 4-item instrument by Hsu and Lin (2016) (i.e., "I will frequently purchase in-app products and services in the future").

Advertising effectiveness was operationalized as a 7-item scale by Maity & Gupta (2009) (i.e., "Ability to keep customers informed about new schemes/events through advertisements").

Data analysis

Our hypothesized research model (Figure 1) was tested using partial least squares structural equation modeling (PLS-SEM) (Hair *et al.*, 2020; Henseler *et al.,* 2014; Sarstedt *et al*., 2016). Such a variance-based SEM technique was appropriate for our research for several reasons: a) the sample size is quite small (n = 315); b) the research model to be tested is complex in terms of direct, indirect, and multi-mediating effects; c) the score of latent variables was used to evaluate the predictive power of the model. The PLS-SEM analysis was conducted using SmartPLS (v.3; Ringle *et al.*, 2015).

Results

Preliminary analysis

The constructs' reliability and validity are reported in Table 2.

Insert Table 2 here

As shown in Table 1, all Cronbach's alpha values of the scales were higher than 0.7 as required, indicating acceptable constructs' reliability. Moreover, both Jöreskog rho and CR values (>0.75) indicated satisfactory values of internal consistency and reliability of the constructs. Finally, all AVE values showed good convergent validity of the constructs.

The correlation and discriminant validity analyses are reported in Table 3a and 3b.

Insert Table 3a here

As shown in the correlation matrix, all the Pearson's *r* values were significant (p<0.01) indicating that the constructs used in the study were positively correlated. Moreover, the Fornell-Larcker criterion indicated that discriminant validity among constructs is reached.

Finally, Tables 3b shows the Heterotrait-monotrait ratio (HTMT) analysis.

Insert Table 3b here

As shown in the table, all values were below the cut-off value of 1.0 thus indicating constructs' distinctiveness and discriminant validity. The only exceptions were the values stressed in bold, showing a shared variance between constructs slightly above the threshold value.

Overall, our hypothesized model showed a satisfactory fit measure indicated by the value of standardized root mean square residual (SRMR = 0.086) being less then 0.10 as required (Hu and Bentler, 1999).

Structural model

The hypothesized structural relationships (Fig. 1) were tested through a bootstrapping procedure using SmartPLS (v.3). The statistical program computed 5000 bootstrap subsamples and 95% lower levels confidence intervals (LLCIs) and upper levels confidence intervals (ULCIs) around the estimates of indirect effects (Zollo *et al.*, 2020). Results of the structural model are reported in Figure 2.

Insert Figure 2 here

As illustrated in the figure, our two second-order constructs – namely, *Advertising related gamex* and *Digital environment consumer benefits* – presented significant factor loadings (statistical associations) with their sub-dimensions (as indicated by the values in italic).

Advertising related gamex positively influenced *Attitude toward advertising* ($\beta = +0.655$; $p<0.01$), thus supporting *H1*. The conditions for the first mediation analysis were all met: first, the independent variable (*GAMEX*) was significantly related with the mediating variable, C*onsumer benefits* ($\beta = +0.653$; $p<0.01$), thus supporting *H2a*; next, the mediating variable was related to the dependent variable, *Attitude* ($\beta = +0.280$; $p<0.01$), providing statistical support to *H2b*; finally, the original relationship between the independent and dependent variable has to be reduced or become non-significant to have partial or total mediation, respectively: because in our case the influence between *GGAMEXamex* and *Attitude* was reduced ($\beta = +0.472$; $p<0.01$) thanks to the effect of *Consumer benefits*, we had a partial mediation effect and thus *H2* was partially supported by the analysis.

Attitude toward advertising positively influenced *In-App purchase intention* ($\beta = +0.464$; $p<0.01$), thus providing empirical support for *H3*. Again, all the conditions for supporting the second hypothesized mediating effect were met: *Attitude* was significantly and strongly related to *Advertising effectiveness* ($\beta = +0.769$; $p<0.01$), which in turn positively influenced *Intention* ($\beta = +0.467$; $p<0.01$); hence, *H4a* and *H4b* were supported, respectively; the original influence between *Attitude* and *Intention* became non-significant ($p>0.10$) thanks to the effect of *Advertising effectiveness*, thus indicating a total mediating effect and fully supporting *H4*. This means that *Advertising effectiveness* is the mechanism able to totally explain the relationship between consumers' *Attitude toward advertising* and their *In-App purchase intention*.

Finally, our proposed model presented a high explanatory power as indicated by the R^2 values, which showed the % of variance explained of the dependent variables, such as *Advertising effectiveness* (R^2 =59.1%). All the hypotheses results are reported in Table 4.

Insert Table 4 here

Discussion and Managerial Implications

The present research assessed the importance of gamification in modern advertising strategies. Consumers' experience deriving from gamification could in fact increase their purchase intention (Hofacker *et al.*, 2016). Such occurrence, anyway, may happen only whether the game included in the advertising is capable of triggering positive emotions in consumers, which in turn may become experiences that consumers wish to replicate (Zollo *et al.*, 2021b). Thus, while developing a gamified advertising, marketers should focus on including characteristics capable to increase game interestingness and enjoyableness (Rodrigues *et al.*, 2016). In the case a game is capable to catch the entire attention of a consumer, it will be indeed capable to engage him/her in the game-related activities and consequently deliver its promotional message (Leclercq *et al.*, 2018). Consumers extremely absorbed into an enjoyable activity could effectively feel the same sensations usually experience during a flow status, therefore they will be extremely receptive in term of communicated messages (Hamari & Koivisto, 2015).

Findings show how this phenomenon occurs as gamification of advertising generate cognitive, social integrative, personal integrative and hedonic benefits in consumers' minds (Zollo *et al.*, 2020). Consumers, by playing an advergame, thus feel part of a broader social construct which resemble an online brand community, whose participation may positively influence their perception of promoted

brands and products (Rialti *et al.*, 2017; 2018b). In turn, such benefits may influence consumer attitude toward the advertising -gamified advertisings could in fact entertain and provide hedonic benefits to consumer, i.e. in the form of sales promotions- and overall advertising effectiveness (Terlutter & Capella, 2013).

In this regard, our research extends the literature on the topic by shedding some lights on gamification of advertisings as a lever capable to push sales. Specifically, first of all, previous research mostly focused on the importance of platform design in gamification advertising (Huotari & Hamari, 2017; Thorpe & Roper, 2018). Similarly, it was observed how it was possible to design gamified advertising strategies. Research thus neglected the effects of gamification in advertising in term of consumers' psychology and subsequent behavior. Furthermore, results on the importance of gamification in advertising were sometimes contrasting, or not explicating in significant way the effects of such a strategy (Gao & Feng, 2016). Second, our research explores the micro-linkages between gamified advertising induced experience and purchase intention. In detail, the authors observed to which extent gamification is capable to foster consumer intention to purchase a specific product (Hwang & Choi, 2017). It emerged how attitude toward the advertising and advertising effectiveness deriving from consumers' perceived benefits represent significant intermediate factors between exposition to advertising and willingness to purchase the promoted product. Third, the focus of this research is represented by millennials and Generation Y., which are principal emerging consumer cohorts. These two consumers' cohorts are the most techno-savvy generations of any time, as they are composed by digital natives (Zollo *et al.*, 2020; 2021a). Thus, understanding their preferences may allow marketer to get a competitive edge capable to satisfy the need of the future generations of consumers. Finally, our research explored the effects of gamification in advertising building on the Katz *et al.* U&G Theory (1973). Such an approach represents a novelty in gamification research. In fact, the most of research on this topic relied either on the TAM (Technology Acceptance Model; Davis & Venkatesh. 1996) or the SOR (Stimulus-Organism-Response theory; Mehrabian & Russell, 1974) to investigate why consumers were willing to accept the use of gamified

mobile applications or advertising (Gatautis *et al.*, 2017; Hwang & Choi, 2017). The use of such an approach represent a novelty in this stream of research. In fact, existing literature pointed out how gamification may be related to hedonic value for consumers (Hamari and Koivisto, 2015). Yet, how such a hedonic value may influence the way consumer act was to be assessed, in particular to what concerns its effect on purchase intention.

To what concern managerial implications, instead, our findings provide some relevant insights for marketers. A deeper understanding of the way gamification act on consumer minds could in fact allow to develop innovative advertising strategies for the future. Accordingly, the first relevant insight that emerged concerns which are the most relevant elements influencing consumers' advertising related gamification experience. Gamification experience in fact derived at most from enjoyment, absorption, creative thinking and activation. Marketers should therefore develop gamified advertisings capable to completely absorb consumers' attention, provide amusement, and make them active enough to be extremely receptive of the real advertising message (Trang & Weiger, 2021). To do so, marketers need to rely on education specialists and educationalists more than on IT professionals. Playing a game is in fact one of the most common ways human beings learn new skills and information, in particular when someone is actively involved in learning the rules of the game (Whittaker *et al.*, 2021). Thereby, it emerges how developing an advertising capable to make consumers learn something new about a product and a brand will be the next great challenge in marketing strategy (Yang *et al.*, 2017). In this perspective, the authors recommend marketers to initially focus on product characteristics and develop the game around them. Such an approach may help consumers in evaluating the product and gather all the necessary information to finalize their selection. Putting the attention on providing consumers precious information about the product and its potential usages through the game is then fundamental. Anyway, it is fundamental to consider that learning how the game works should not represent a burden for consumer. Ease of use should then be a prerogative. Second, it emerged how consumer develop a positive attitude toward the advertising whether they may obtain some kind of benefits from GAMEX. In fact, results show that GAMEX

could principally trigger consumers' perceptions concerning hedonic, social integrative and personal virtual benefits; which in turn influence attitude toward advertising (Eppman *et al.*, 2017). In short, it is possible to assess that whether consumers' feel part of a community of "adver-gamers" their fit with the advertising will increase, and they will also be more receptive in respect of the any communication from the brand (Robson *et al.*, 2015). This occurrence is also reinforced by the influence that advertising attitude has on perceived advertising effectiveness. The authors suggest marketers, then, to focus on the development of digital communities of "adver-gamers" (Zollo *et al.*, 2020). In particular, whether the gamified advertising also contain some kind of rewarding systems (i.e. badges, scorers etc…) linked to consumer proficiency in game-like activities, consumers will naturally be prone to share their results online to show their skills within the community (Choi *et al.*, 2017; Rialti *et al.*, 2018c). In this way, the potential of gamified advertising as an attractor will increase as the message will go viral (Seo *et al.*, 2018). To do so, therefore, marketers should follow two steps, first of all developing a gamified advertising including a reward system, and next allow consumers to share their performance. Another interesting solution is related to the possibility for consumers to get coupons in the case their game performance is remarkable. Such an approach may act directly as a sale promotion as consumer may decide to purchase a product at the end of the game session.

Building on existing literature, and on the proposed implications, what the authors may then assume that gamification potential is enormous in the current marketing environment. Specifically, gamification as a marketing strategy may allow to communicate more information than ever to consumers. This is particularly true whether these strategies are targeting millennials. In fact, millennials attention level is usually lower than the one of older consumers, and they tend to shift their preferences very quickly making traditional advertisings obsolete (Taylor, 2018). Games, instead, hold the potential to catch their attention, thus they hold the potential to communicate this consumers' cohorts with information about brand's heritage and product functionalities while entertaining them.

Conclusions, Limitations and Suggestions for Future Research

Gamification is going to increasingly shape the future of advertising. Indeed, as consumers' nowadays desire more than ever to be part of the contents they are consulting online, proposing them games in advertisings' place may involve them in the right manner (Taylor, 2018). Modern consumers (in particular millennials), do not in fact appreciate anymore mono directional communication, they wish to have the possibility to interact with the brand. Consequently, introducing game-like features could allow them to co-create the brand (Rialti *et al.*, 2018b).

In this regard, the present research unpacked the relationship between consumers' experiences deriving from gamification in advertising and its effects. It differentiates from existing literature as the authors focused on the observation of the effect that gamification could have on the effectiveness of advertising and subsequent purchase intention. Despite our relevant findings, this research presents some limitations. First, the authors considered only respondents living in the UK. Thus, future research should consider also different contexts (i.e., by performing a cross-country analysis). Second, the sample is entirely formed by millennials. It will then be relevant to observe whether different consumer cohorts – such as older (Baby Boomers) or younger (Generation Z) – may have different perceptions of gamification (Hamari & Koivisto, 2014). Third, online game characteristics like ease of use and usability on personal devices may play a relevant role in making the game attractive for consumers (Hamari & Koivisto, 2015). Hence, future research should accordingly include these relevant antecedents of gamification advertising usage by consumers. Similarly, future research should also consider different possible outcomes of gamified advertisings such as brand engagement, brand loyalty, and e-WOM (Zaglia, 2013). Finally, our research was survey-based, thus we suggest future scholars to use different methods to empirically test our framework, such as experimental settings.

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