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What we do not know about advergames: a literature review

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Introduction: This study presents the findings of a systematic literature review on the academic study of advergames. The evolution of the marketing paradigm has recently opened new avenues for the study of advergames, such as understanding how the brand narrative could be used within a game to achieve diverse marketing objectives, their value for brand engagement through games, or new applications of the specific characteristics of emerging platforms for advergaming. Therefore, this study aims to provide an overview of the state of the art in the academic study of advergames to identify necessary expansions of academic attention to advergames to encompass the full capabilities of branded entertainment and advergame design.

Methods: We conducted a systematic literature review of 122 studies on the topic of advergames published between 2005 and 2021, indexed in the Web of Science Core Collection.

Results: The results show that academic studies on advergames primarily focused on two key research areas: (1) investigating the impact of advergames on children's health through the promotion of food products (2) and examining the effects of advergames on purchase intention. However, there was a lack of emphasis on two other important themes: (3) brand narratives and innovative forms and (4) the effects on brand loyalty.

Discussion: The results of this study highlight the need for a more flexible analytical approach that considers the evolving marketing ecosystem and provides theoretical insights to explore the effectiveness of advergames from a different perspective while identifying gaps in the existing literature.

KEYWORDS

advergame, literature review, thematic analysis, marketing, persuasion, digital games

1. Introduction

This study presents the results of a systematic literature review of existing studies on advergaming. Since marketing communication techniques keep evolving, it is a necessity for brands to explore different communicative opportunities to reach and impact their audiences. Advergames, defined as digital games “specifically designed for a brand with the aim of conveying an advertising message” (de la Hera, 2019, p. 31), allow for the delivery of persuasive messages in an interactive and playful environment. These games emerged with the intention of reaching the audience from a different angle, becoming an alternative advertising channel to traditional media that are commonly saturated by advertising formats. However, the complexity and inherent characteristics of digital games present multiple variables to be taken into account to understand how advergames can be used to persuade consumers (de la Hera, 2019).

With the dominance of the videogame industry in the general entertainment domain, games with persuasive purposes receive greater attention (de la Hera, 2019). Over the last 20 years, the possibilities, pitfalls, and criticisms of games for advertising purposes have been discussed from a variety of perspectives and have become a topic of increasing academic attention (see Jami Pour et al., 2020; van Berlo et al., 2021). Furthermore, the evolution of the marketing paradigm opened new avenues for the study of advergames (Vashisht et al., 2019), such as understanding how the brand narrative could be used to achieve diverse marketing objectives (e.g., Villén Higuera, 2017), their value for brand engagement (e.g., Martí Parreño et al., 2015), or the specific characteristics of emerging platforms (e.g., Sanjuán Pérez et al., 2014). Therefore, it is relevant to understand what we know about advergames as a marketing strategy and what is still missing, considering the constant evolution of the marketing paradigm. Previous literature reviews on advergames have specifically focused on identifying the specifications and characteristics of advergames (e.g., Vashisht et al., 2019; Jami Pour et al., 2020; van Berlo et al., 2021). While these earlier reviews deftly discuss the ontological nature of advergames, a historiographical organization of the different approaches for the analysis of this topic remains absent. A more recent literature review has identified a shift in attention in more recent studies (van Berlo et al., 2021). However, a more recent quantitative analysis of the literature conducted by van Berlo and colleagues has identified a shift in attention in studies investigating advergames as a marketing strategy, and this shift seems to respond to recent changes in the marketing paradigm.

This study aims to critically analyze the evolution of the academic study of advergames from a qualitative perspective. The main purpose is to identify the research domains in which the academic study of advergames has been focused to point out gaps in the literature, taking into consideration the recent evolutions in the marketing paradigm. This study, therefore, aims to provide an overview of the state of the art in the academic study of advergames to identify necessary expansions of academic attention to advergames in order to encompass the full capabilities of branded entertainment and advergame design. Therefore, the purpose is to qualitatively complement the study conducted by van Berlo and colleagues (2021) and also complement it by identifying necessary expansions of academic attention to advergames in order to encompass the full capabilities of branded entertainment and advergame design. This study answers the following research question: *What has been the evolution of the academic study and advergames, and what are the gaps in the literature taking into consideration the recent evolutions in the marketing paradigm?*

As digital games improve in quality and persuasive games dealing with complex issues become more prevalent (Minár, 2016), understanding different approaches and their relationship with traditional approaches to advergames requires a generalized overview. Advergames can have diverse goals, ranging from simple brand recognition to providing opportunities for consumers to experience products (Martens et al., 2022). Consequently, acquiring a more structured comprehension of this phenomenon and identifying areas that require further exploration become socially relevant endeavors.

2. Evolution of the marketing paradigm

Advergames gained mainstream traction due to changes in the marketing paradigm. First, one of the main causes of the necessity to innovate in new marketing forms is the saturation of traditional media. Advertising strategies that follow a traditional perspective are usually linked to the repetition of a persuasive message that ends in a fatigue phase, where the recipient of the message is irritated and tired of receiving this kind of messages (Navarro Bailón, 2008). At this stage, persuasive messages are less believable and less effective (Duncan and Caywood, 1996). This realization of saturation coincided with the modification of habits and the use of different screens by the audience (Scolari, 2014). These two factors created new consumption modalities that forced brands to adapt their communication strategies to reach an empowered consumer that has more possibilities and different ways of consuming content (Rodríguez Fidalgo et al., 2017, p. 30). The search for an approach to reach the potential customer caused a forced evolution in marketing communication that paid attention to a different way of interaction with the audience. One of the changes brought by this change in the marketing ecosystem was the proliferation of narrative branded messages where the content that is shared is the main element of the message (Rodríguez Fidalgo et al., 2017), rather than repetition for brand recall.

The consideration of design and the creation of content as key elements in marketing campaigns opens interesting research areas for persuasive communication in organizations, such as transmedial campaigns that create a “discursive hybridity” (Marzal Felici and Casero Ripollés, 2017), where the audience turns into an active player that has to interact and follow the discourse created by the brand. The creation of marketing campaigns developed for an active and critical audience generated new marketing strategies that create a brand narrative designed to be told throughout multiple formats and media (Jenkins, 2006; Marzal Felici and Casero Ripollés, 2017; Rodríguez Fidalgo et al., 2017). Digital games, in this context, emerge as an opportunity to host persuasive messages that avoid traditional media by creating interaction with the audience.

As a result of these unavoidable changes in the communicative dynamics of society, the concept of marketing also underwent changes to accommodate and cater to these non-traditional strategies. This shift altered paradigms that had been in place since the industrial age and kept going throughout what Philip Kotler et al. call the information age and values-driven era (Kotler et al., 2010, p. 4). The evolution of these marketing paradigms is represented by three stages that Kotler et al. (2010) identify as Marketing 1.0 (product-centered), 2.0 (consumer-oriented), and 3.0 (values-driven). The main difference between these three perspectives is the perceived value of the customer as a key element in marketing strategies. During the industrial age, in which mass-produced products were marketed as commodities, the marketing paradigm shifted to a more communicative approach to respond to the demands of more active consumers. From that moment on, the marketing paradigm evolved into what we know as marketing 2.0, in which consumers became the center of the new marketing strategies. The rise of the internet brought a paradigm shift, marketing 3.0, in which the focus is no longer

on the product that caters to the needs of a consumer but instead on the communication of values that appeal to consumers through products. Although this last, values-driven stage, tends to romanticize media practices that enhance participation and interaction between companies and clients (Schäfer, 2008), these trends create new venues to design effective communicative elements focused on a dialogue (Aguilera Moyano and Baños, 2016) that needs to be effectively moderated and coordinated by following a planning process that integrates the different advertising and communicative strategies followed by the brand (Ang, 2014). It is in this latest era—the value-driven era—that the interactive nature of digital games holds the most promise.

The Integrated Marketing Communication (IMC) perspective is one of the processes that followed these different stages in marketing and whose tenets influenced several approaches to advergames. IMC follows a Marketing 3.0 perspective by creating a coherent message that is conveyed using multiple communication channels and benefiting from the unique characteristics of specific media channels and media formats to convey the message (Arens, 2000; Jiménez Castillo, 2006; Cauberghe and De Pelsmacker, 2010). IMC, as a communication strategy process, uses data and interaction to reach the audience according to their necessities. The analysis and understanding of the inherent characteristics of each communication channel and format help companies generate an integrated and consistent message that shares the brand identity based on congruent strategies (Duncan and Caywood, 1996; Madhavaram et al., 2005; Batra and Keller, 2016).

Taking into consideration the unique communicative characteristics of digital games, Terlutter and Capella (2013) proposed the possibility of using games as part of the Integrated Marketing Communication approach, not only taking into consideration the communicative strategy of the brand but also focusing on the social and individual factors of the player. This approach presented a broader point of view to identify and measure the variables, effects, and effectiveness of advergames. This inclusive perspective was followed by other authors who started studying advergames from a broader perspective (e.g., Vashisht et al., 2019; Stolley et al., 2021; van Berlo et al., 2023), while other studies were specifically focused on the specifications of advergames (e.g., Vashisht et al., 2019; Jami Pour et al., 2020; van Berlo et al., 2021). In this study, we contribute to the work advanced by these studies by taking into consideration the evolution of the marketing paradigm discussed in this section as a way to contextualize the evolution of the academic study of advergames, which also helped us identify gaps in the literature.

3. Methods

To give an answer to the research question of this study, we conducted a systematic literature review of 122 academic studies published between the years 2005 and 2021 on the topic of advergames and branded games.

The sampling procedure was divided into four steps (see Figure 1). In the first step, we ran a search in the Web of Science Core Collection (WoS) and further supported this search by consulting Scopus results. We based our search procedure on the PRISMA recommendations (Page et al., 2021). We looked for

studies that analyze the phenomena of advergames or branded games as a main topic or as a comparison to other marketing techniques (such as in-game advertising, TV commercials, or print ads). We decided to use as few exclusions as possible in the terminology. For this reason, we included the term “branded game” in our search to avoid the exclusion of relevant papers that named the object of the study differently. We consequently used the following searching string: (TI = adverga*) OR (AB = adverga*) OR (AK = adverga*) OR (KP = adverga*) OR (TI = “branded game”) OR (AB = “branded game”) OR (AK = “branded game”) OR (KP = “branded game”). The search was conducted by examining the title, abstract, and keywords (including author keywords and Keyword Plus) to retrieve items directly related to the object of study. In our search, we did not use year limitations. However, we excluded “Early Access” to focus on studies that were published until February 2022, when the search was conducted. This search produced 310 results.

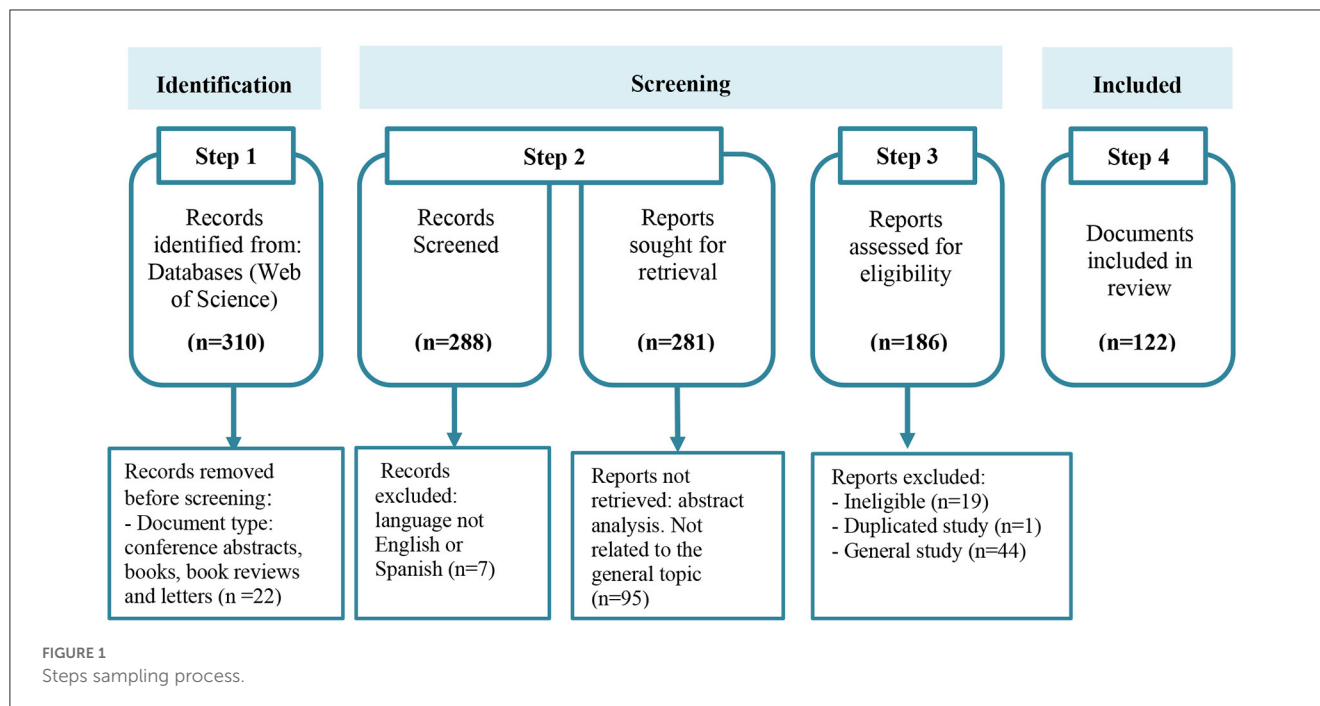
Based on these results, in the second phase of the process, conference abstracts, book reviews, and letters were excluded. Books were also excluded because their content was already represented in the sample in the form of a book chapter. After applying the exclusion criteria related to the document type, 288 documents remained. In the third step, the titles and abstracts of these documents were scanned to assess to what extent they fit with the object of study. As part of the inclusion criteria, we selected documents that discussed the use of digital games designed or created by a specific brand for persuasive/marketing purposes. Moreover, we limited our selection to documents written in English or Spanish, considering the language proficiency of the researchers. After this step, 186 documents were selected for a deeper analysis of their content. The fourth step excluded some articles that we did not have full access to. Furthermore, we excluded those in which advergames or branded games were only mentioned as an example without discussing the concept further. This step yielded a final sample of 122 documents.

3.1. Data analysis

The analysis of the final sample, consisting of 122 articles, was conducted using the six-step thematic analysis approach proposed by Braun and Clarke (2006). This method is used to find patterns across a whole data set instead of separate data items, which fits the historiographic nature of the current study.

For the first and second steps of familiarizing ourselves with the data and generating the initial codes, we coded the data setup according to three main characteristics: (a) the object of analysis and variables analyzed; (b) the target involved in the analysis and concrete characteristics (e.g., age, country, or genre); and (c) the kind of methodology used in each study codified.

The third step of the thematic analysis, which consists of searching for themes, was supported by a quick bibliometric analysis of the metadata gathered from the WoS database. We decided to support this systematic review with bibliometric results because it is a recommended method for analyzing a considerable amount of data and helps to create distinctions between emerging areas in a field through network analysis (Donthu et al., 2021). The data were imported to the software VOSviewer for a visual



representation of the co-occurrences between author keywords, as observed in Figure 2. VOSviewer was also used to visualize the related research areas as a way to identify specific clusters and purposes of the studies.

Consequently, the fourth and fifth steps consisted of the review of the visualized codification and the naming of clusters through an interpretation of the data with the idea of finding common themes identified in the data set.

3.2. Operationalization

The codification and further organization of codes into sub-themes and themes was performed following the theoretical framework of the shifting marketing paradigm discussed under Section 2. This is because we coded the studies taking into consideration their focus on their Marketing 1.0 (product-centered), 2.0 (consumer-oriented), or 3.0 (values-driven) approach. Furthermore, taking into consideration the purpose of this review, during the coding process we paid special attention to the identification of marketing practices that could fit into the missing gaps associated with the evolution of the marketing ecosystem (such as integrated marketing communication practices). Finally, we also took into consideration the characteristics of the game as a communicative tool (such as the marketing purposes of the game, specific characteristics of the brand, and effects on the audience).

4. Results

After the codification, we identified four main themes in the literature analyzed: (1) effects of advergames on children ($n = 54$),

(2) effects of advergames on purchase intention ($n = 47$), (3) effects of advergames on brand narratives ($n = 28$), and (4) effects of advergames on brand loyalty ($n = 19$) (see Table 1). The analysis showed that 68% of the literature analyzed was represented by the first two themes. Among the studies analyzed, it was found that only 32% of the sample specifically addressed the utilization of advergames for promoting brand narratives or brand loyalty.

First, the first theme identified comprises studies that explore the effects of advergames on children's health, mainly to prevent obesity; the second theme consists of studies on the effectiveness of advergames on purchase intention. The third theme gathers studies on the effects of advergames on brand narratives and how advergames could work by linking them to other brand strategies. Finally, the fourth theme gathers the documents that explore the effects of advergames on brand loyalty through human-centric messages, where advergames host social causes that would turn into branding effects.

Figure 3 shows a visualization of the years when the studies were published. The first theme we identified has been commonly present throughout the years. A similar pattern was identified for theme 2, where studies on the effects of advergames on purchase intention have started gaining importance since 2013. The third theme started gaining presence in 2013 and kept a similar number of publications until 2021 (until the end of the study). Finally, the fourth theme gained more prominence in 2019. The temporary division of these themes aligns with the evolution of the marketing paradigm, moving from product-focused strategies to value-driven approaches, although there is striking continuity observed in the product-focused first theme. The different themes will be elaborated upon to show their content, limits, and possible gaps.

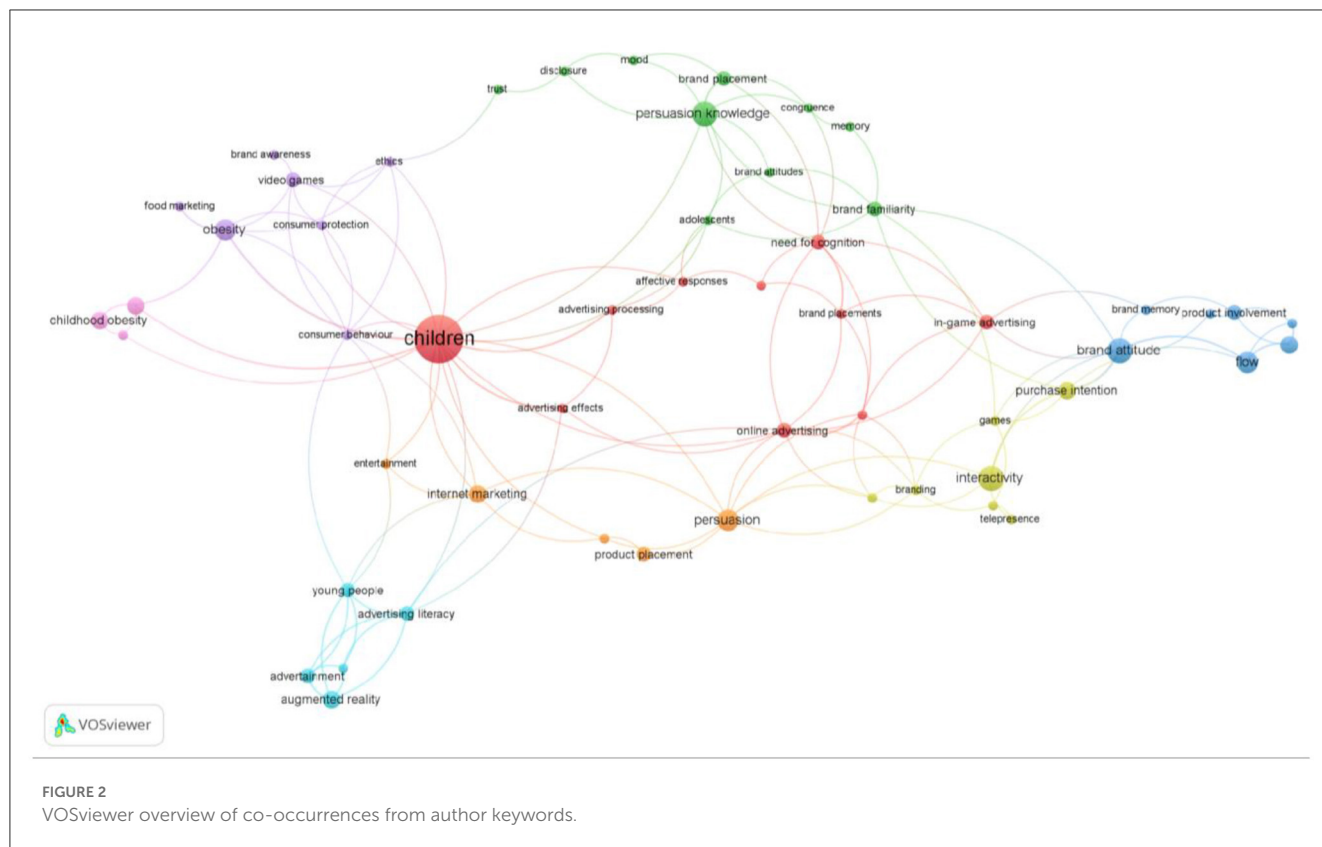


TABLE 1 Themes identified from the systematic literature review.

Categories	Number of documents and main codes	Example in literature
Group 1 Effects of advergames on children	(N = 54) Quantitative (33) Qualitative (9) Case study (5) Theoretical analysis (9) Mixed Method (1) Literature review (3)	<i>Our findings indicate that a large number of foods with low nutritional value are being marketed to children via advergames. A standardized system of food marketing guidance is needed to better inform the public about the healthfulness of foods advertised to children (Weatherspoon et al., 2013) This study showed that exposure to food cues in advergames influences caloric intake and that these food cues hamper self-regulation when young children are rewarded to refrain from eating (Folkvord et al., 2014)</i>
Group 2 Effects of advergames on purchase intentions	(N = 47) Quantitative (33) Qualitative (2) Theoretical analysis (1) Literature review (1)	<i>The findings of this study support the effect of brand interactivity on consumers' attitudes and purchase intentions. Importantly, brand interactivity had a negative effect on attitudes toward the advergame. However, this result can be explained by the interaction between brand interactivity and the type of game (Lee et al., 2014)</i>
Group 3 Effects of advergames on brand narratives	(N = 28) Quantitative (17) Qualitative (5) Case study (5) Theoretical analysis (5) Literature review (2)	<i>By adopting an interdisciplinary approach, our findings have implications for practitioners regarding how people from different cultures process information acquired in interactive environments (Hernandez and Minor, 2015) (...) the parodic-ironic stance of these games offers an affinity space to strengthen the shared sensibilities of the multifaceted taste culture of the brand's fans (Courbet et al., 2016)</i>
Group 4 Effects of advergames on brand loyalty	(N = 19) Quantitative (8) Qualitative (6) Case study (4) Theoretical analysis (5)	<i>The current study adds to this literature by showing that, contrary to previous findings, prominent placement embedded in an advergame for public good actually led to positive evaluations of the company as well as favorable attitudes and WOM intention toward the game (Sung and Lee, 2020)</i>

4.1. Effects on children's health

This theme encompasses studies that paid attention to concerns associated with the effects of advergames usage on children's health, which represent almost half of the analyzed articles (N = 54 studies out of 122). Among these documents, 35 of them were

focused on the study of the effects of advergame usage to promote food products (e.g., Cicchirillo and Lin, 2011; Thomson, 2011; Folkvord et al., 2016; Bragg et al., 2018). Variables explored within this theme include repetition (Agante and Pascoal, 2019) or the effects of impulsivity and its influence on susceptibility to the food advertised (Folkvord et al., 2014). Within this theme, we identified

STUDIES THROUGHOUT THE YEARS

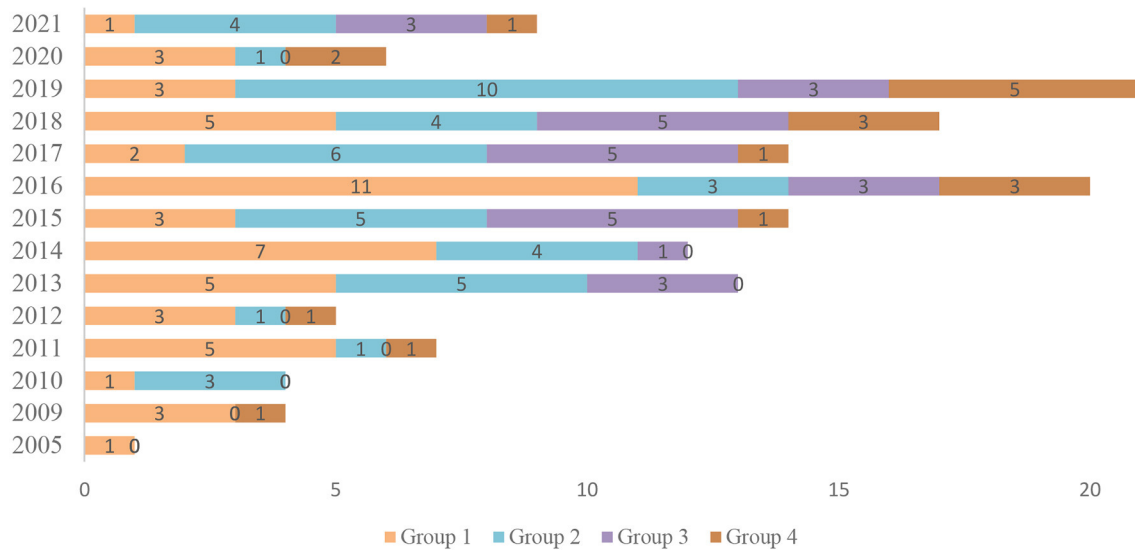


FIGURE 3
Studies on advergames throughout the years grouped per theme.

two sub-themes: (1) the study of the effects of the promotion of food products associated with childhood obesity; and (2) the study of children's capabilities to identify persuasive strategies within advergames promoting food products with associated health risks.

In concrete terms, we found a particular academic interest in exploring the effects of the use of advergames for the promotion of food products associated with childhood obesity ($n = 15$) (e.g., Weatherspoon et al., 2013; Folkvord et al., 2014; Bragg et al., 2018). For instance, the study by Paek and colleagues (2014) found that most of the food products that were promoted by brands through advergames were classified as unhealthy, and only half of the advergames analyzed by the authors had information about a healthy lifestyle.

Within this theme, there is also a representative number of articles ($n = 19$) discussing the necessity of better understanding the capacity of children to identify the persuasive strategies used within advergames to propose avenues to further regulate this practice (e.g., Folkvord et al., 2017). In concrete terms, eight of these articles refer to the need to foster "advertising literacy" in relation to advergames. In this respect, the results of the study conducted by Thomson (2011) suggest that, given the limited capabilities of children to recognize the persuasive purpose of commercial content, some tactics used within advergames to advertise unhealthy food could be dubious from an ethical perspective, suggesting the necessity of criticizing how these commercial messages were regulated. This same reflection was followed by the authors of other studies included in this theme (e.g., Grossman, 2005; Quilliam et al., 2011; Paek et al., 2014; Staiano and Calvert, 2014), which shows there has been a common academic concern about this problem. Among this sub-theme, we found an article with the most citations among the sample (193 citations by February 2022), the article written by

Mallinckrodt and Mizerski (2007), which analyzes the effects of advergames on children by studying their preferences when playing an advergame that advertised cereals.

From this perspective, the analysis conducted by An et al. (2014) paid special attention to advertising literacy games and how they could help children perceive advergames as advertising. The results showed that playing educational games enhanced their advertising literacy and improved their critical attitudes toward persuasive content. In the same vein, the analysis by An and Kang (2013) delved into the way advergames on websites explicitly present information about the commercial intent. After studying 164 websites, the study found that 82 of them contained a total of 542 advergames targeting children. Only 20% of the websites, however, provided an explanation about the commercial purpose of the game (An and Kang, 2013).

Quantitative analysis ($n = 33$) was the most common methodological approach within this theme (e.g., Evans et al., 2013; Cicchirillo and Mabry, 2016; Esmailpour et al., 2018; Putnam et al., 2018; Cho and Riddle, 2021). In concrete terms, the most recurring research method is between-subject experimental studies ($n = 15$). For example, one of the experiments focused on the repetition effects of exposing children to unhealthy products through advergames (Agante and Pascoal, 2019). Another example was the study focused on the comparison of the effects of advergames and TV ads on children and how persuasion knowledge was identified by the player (Panic et al., 2013). The results of our study therefore coincide with the findings by Jami Pour and colleagues (2020), who found that most of the research published used a quantitative approach, while qualitative methods were barely used. These findings concurred with the characteristics of this cluster, which represents the majority of data units analyzed with quantitative results.

The second most recurring article format was theoretical analysis ($n = 9$) (e.g., Grossman, 2005; Thomson, 2011; Bragg et al., 2018). An example of this is the study by Staiano and Calvert (2012), who examined the problematic experiences of children in the digital world and the necessity of educating this specific target group on the persuasive character of these games, usually related to food with poor nutritional content (Staiano and Calvert, 2012, p. 71).

This theme deals with the effect of advergames on children, as they are often criticized for advocating poor health choices or discussing the ethical dimension of tricking children into making purchases. With a clear product focus and lack of attention to an active consumer, these studies mirror the marketing 1.0 trend, echoed further through the predominance of quantitative methods. It is worth noting that this theme maintains a critical perspective on the effects of advergames, whereas the marketing paradigm has largely shifted to value-driven approaches in the context of Marketing 1.0. The critical assessment of the efficacy of advergames on children seems to be a prevalent topic in the discourse.

4.2. Effects on purchase intention

The second category comprises studies that report on the effectiveness of advergames on purchase intentions ($n = 47$). In concrete terms, the purpose of the studies within this theme was to identify how specific variables could have an effect on brand recall ($n = 22$) and attitudes toward the brand ($n = 19$) after playing advergames.

Specific elements of the game, such as brand placement ($n = 11$), characteristics of game characters ($n = 4$), and interactivity with the brand ($n = 2$), were studied as variables in the experiments analyzed. To illustrate this, the experiment by Vashisht and Pillai (2016) examined how the specifications of the game (such as speed) and the congruence between the brand and the game identities had an impact on purchase intention. The main findings showed that slow-paced advergames with prominent brand placement had more effects on purchase intention. Another example is the study conducted by Sreejesh and Anusree (2017), which focused on how anthropomorphism and interaction interfered with the gamer's cognition demand to influence brand attention, brand recall, and brand recognition. The results showed that a high cognition demand was related to higher brand attention and memory.

The study of the effects of advergames on memory and brand recall was commonly found in this theme, linked to how players experienced the brand in this entertaining context and the impact of this on purchase intention (e.g., Ortega-Ruiz and Velandia-Morales, 2011; Yeu et al., 2013). Gross (2010), for example, studied the relationships between game-product congruity and implicit and explicit memory, and how these variables influenced the effectiveness of delivering persuasive messages through these games.

Finally, another relevant aspect explored within these studies in this theme is the relationship between the interactive characteristic of advergames and its relationship with brand recall (Sreejesh et al., 2021) and purchase intention (Goh and Ping, 2014; Lee et al., 2014).

The experiment conducted by Bellman and colleagues (2014), for example, paid attention to the immersive nature of advergames and how this could create effective persuasive messages. The study compared advergames to traditional messages (television commercials) and interactive commercials and focused on the effects of telepresence in the three cases. The results confirmed that telepresence increased the effectiveness of persuasive messages as measured by attitudes toward the brand (Bellman et al., 2014, p. 280).

As in theme 1, the predominant method in this case is quantitative analysis ($n = 33$), and 19 of them were experiments. However, in contrast to theme 1, the qualitative, theoretical, and literature review studies are greatly outnumbered by quantitative measures. Although theme 1 also relied on the critical interpretation of the effects of advergames, theme 2 focuses on illustrating significant persuasive effects and purchasing goals.

This theme discusses the specific characteristics of advergames as advertising format. While this perspective also follows a Marketing 1.0 focus, through quantitative findings that are product-driven, a dawning Marketing 2.0 trend can also be identified that focuses more on ensuring consumer retention and instilling purchasing intention. Concretely, the games were analyzed in isolation, with a focus solely on the format itself, regardless of other communicative strategies of the brand. Although other advertising forms were also analyzed in specific cases, it was with the purpose of comparing their effectiveness in terms of brand recall or purchase intention. However, consumer necessities are not commonly present in these studies.

By following the marketing 2.0 perspective, emotional and functional values are also identified when analyzing these studies. While this appears to address a consumer, the focus on consumer necessities is mostly oriented to a product-centered and purchase perspective because some aspects, such as brand familiarity, are analyzed with the purpose of influencing choices after placing a brand element in a playful, entertaining context.

4.3. Effects on brand narratives

The third theme included studies that explore the effects of advergames as a tool that expands the brand narrative and creates a consistent message that is communicated throughout other formats. This theme comprises 28 studies in total, which is a number significantly smaller than the ones of the two previous themes, although this could be justified by the historical evolution of the marketing paradigm.

In concrete terms, these studies explore how the game and the context in which it is played have an impact on the brand narrative that is used in the marketing strategies of the brand beyond the advergame itself. Advergames are therefore studied as part of a broader integrated marketing communication strategy (Terlutter and Capella, 2013; Vashisht et al., 2019). Furthermore, aspects such as the cultural context in which they are used as a communication channel are taken into consideration when exploring their effects (Hernandez and Minor, 2015). For example, Gurney and Payne (2016) studied how the narrative of the

Adult Swim audiovisual products expanded their values through a specific type of advergames that the authors called “paracasual” advergames. In their study, the authors explore how parody is created within the advergame and used to create content that is later used outside of the game as part of an integrated marketing communication campaign.

The studies analyzed within this theme explore the effects and characteristics of advergames, taking into consideration the context in which these games are played as well as their players, such as prior experiences with the brand, actions from the player with friends, or links to other communicative actions performed by the brand (i.e., [Hernandez and Minor, 2015](#); [del Moral Pérez et al., 2016](#); [Gurney and Payne, 2016](#); [de la Hera, 2019](#); [Vashisht et al., 2019](#); [Martín Ramallal and Micaletto Belda, 2021](#)).

In addition, it is pertinent to note the presence of studies that explore advergames that promote products other than food and beverages. As we mentioned in the first two themes identified, most of the articles scrutinized in this review were regarding food products ($n = 35$). The diversity of studies present within this theme shows an evolution toward a broader approach to the academic study of advergames. An example of this is the study conducted by [Renard and Darpy \(2017\)](#), who explored the virality and word-of-mouth aspects of advergames promoting holiday apartments.

In another study, [de la Hera \(2019\)](#) analyzed a game designed for a car company. This analysis dived into the persuasive dimensions used by the brand in the game and examined the role and use of the game in the brand’s broader marketing campaign. The game was analyzed as a strategic part of a broader integrated marketing communication campaign, serving as a tool to build the brand narrative for the campaign.

Finally, two studies in this group analyzed specific advergames designed for audiovisual products ([Kinard and Hartman, 2013](#); [Gurney and Payne, 2016](#)). In particular, the study by Kinard and Hartman paid special attention to the way the brand is integrated into the game and how prior experiences of players with the brand influenced the effects of these games on their players. In this case, the authors focused on advergames from entertainment brands. The results showed the relevance of marketers paying attention to the knowledge and relationships that exist between the brand and audiences before playing the game. The results showed, for example, that advergames with a high level of brand placement seemed to be more successful when the brand wanted to introduce new content (i.e., new plot or character).

Although quantitative methods were still predominant within this theme ($n = 17$), we could identify a broader number of studies using qualitative methods ($n = 5$) and theoretical analysis ($n = 4$) in comparison to the previous two themes. This presents a heterogeneous compilation of studies that presented a growing trend from 2015 until 2019 and emerged again in 2021 (see [Figure 3](#)).

Returning to the marketing stages, this theme represents studies that follow the marketing 2.0 trend more fully than the second cluster. In this trend, consumers are seen as wellinformed and connected to information sources. Moreover, they also produce information, and the brand image is defined by the audience. In short, consumers are located at the center of activities, and brands

listen to their necessities by creating valuable content. Although the consumer takes a more central position, the focus is still on supplying and creating a consumer need or purchase intention. This implies complexity in their campaigns and a bigger analysis of what they say and how consumers receive and react to those messages to ensure the creation of empathy and trust for the brand.

4.4. Effects on brand loyalty

Finally, the fourth theme identified in this analysis consists of studies that explore the long-term effects of advergames on brand loyalty ($n = 19$). Although this theme has some relations with the third one, in this case the documents gathered focused on the emotions and experiences related to the brand and the game rather than analyzing the external elements or context of the subject of analysis to understand the game as an element in a marketing campaign.

We identified two sub-themes within this theme: studies that explore the relationship between advergames and brand engagement ($n = 7$) and studies that explore the relationship between advergames and social interactions ($n = 10$). For instance, the study by [Wanick et al. \(2018\)](#) explored how cultural characteristics from two different countries (Brazil and the UK) had an impact on how familiarity and experience with the brand could affect engagement with the brand to promote a long-term relationship between consumers and brands. Another example is the study conducted by [Bossetta \(2019\)](#), who examined Political Campaigning Games as a contemporary digital campaign tool for elections. The author analyzed these games in a systematic way to study the content of these games and how context is necessary to create engagement with the brand and ideas.

Within this theme, some studies also paid attention to ethical aspects related to the use of advergames linked to social purposes to foster brand loyalty. For example, [Neri \(2019\)](#) addressed the ethical considerations of advergames and how they can be understood from a “strictly commercial point of view” (p. 121) and also be used to communicate the social values of the brand. Here, the author highlighted the importance of finding balance between the advertising objectives and the generation of a relationship of trust. Neri identified the possibility of promoting values that have a social impact owing to the possibility of interaction and the creation of spaces where audiences can discuss them. In the same vein, the reflections from [Sung and Lee \(2020\)](#) focused on the analysis of advergames with purposes beyond sales. In their study, they analyzed prosocial advergames and the impact of these narratives on brand loyalty. The experiment showed that the players who experienced a prosocial narrative responded more favorably not only toward the game but also toward the brand that was related to it. This positive result was also supported by [Coombs and Holladay \(2015\)](#). In this case, the authors focused on the use of an advergame to host a social cause related to fight hunger and how these games can communicate Corporate Social Responsibility actions and their link to social media.

This theme encompasses studies with diverse purposes. In terms of the research methods employed, the studies comprising this theme were almost equally divided among quantitative ($n =$

8), qualitative ($n = 6$), and theoretical analysis approaches ($n = 5$). Although this theme, compared to the former ones, is not widely mentioned in the literature, the use of this theme has been growing since 2016 and is included in different studies that represent the current marketing paradigm, focused on human and environmental necessities and the brand's responsibilities.

The studies that include this theme are a good reflection of the evolution of the marketing paradigm during the marketing 3.0 phase, where the consumer is identified as a human with values and necessities that companies can fulfill. A functional but also emotional value is present, as is the link to the audience through an appeal to values. Experiences, emotions, and interaction are values that are commonly identified in this theme, where persuasive purposes are achieved by understanding the consumer's needs with a goal to instill identification with what the brand stands for, more so than purchase intention.

5. Discussion

This study presented the results of a systematic literature review of 122 academic publications on the topic of advergames to answer how branded games have been studied from 2005 to 2021 and what main topics were found and discussed in academia. From this review, several gaps in the studies of advergames could be identified, which will be discussed below as suggestions for future research. The review showed that the academic study of advergames has been mostly focused on exploring the effects of advergames on vulnerable audiences and how these games could be designed as a persuasive product that is studied in isolation to test specific variables that could improve purchase intention or brand recall among audiences. Studies focused on the analysis of advergames as a communicative tool and their effects related to the integrated communication strategies of the brand, their effects on the context in which the game is played, and the incorporation of messages related to social values in advergames, although less prevalent in the sample, were identified as a growing trend in the literature.

Through a review of the 122 studies on advergames, we identified four main themes that were labeled as follows: effects of advergames on children's health, effects of advergames on purchase intention, effects of advergames on brand narrative, and effects of advergames on brand loyalty. The first theme includes studies on the use of advergames for the promotion of food products and their impact on children. The analysis showed that these studies take a protective perspective, focusing on criticisms of the efficacy of the advergames or scrutinizing attention to the product or the ethicality of the adgame as a possible successful marketing communication tool. Specifically, the capability of players to identify the persuasive purposes of the advergames and their effects on health (obesity) were recurring topics. Furthermore, the predominance of quantitative studies in this theme follows the marketing 1.0 approach, which neglects the agency of the customer. Despite the evolution of marketing from 1.0 to 3.0 and its associated shift from product-centered attention to value-driven approaches in recent years, the first theme comprised of studies on the effects of advergames on children's health has remained represented throughout the studied period.

While updated with theoretical reflections (e.g., Bragg et al., 2018), this continued critical perspective highlights an ongoing concern regarding advergames. This echoes the incremental evolution of the marketing paradigm, never completely eclipsing earlier versions but always expanding the narrative.

The second theme is represented by studies that are focused on exploring the effects of advergames on purchase intentions. These texts analyzed under this theme are particularly focused on exploring traditional marketing purposes such as brand recall and product placement. Lacking the critical note from the first theme, these publications often focused on student population experiments. Interestingly enough, this particular target group is approached as a much more promising market segment in which the efficacy of the marketing, albeit through traditional strategies, is of greater importance than ethical considerations and persuasion knowledge. One particularly relevant gap in this theme is, however, the lack of consideration of the specific characteristics of digital games as a communication channel as a variable to take into consideration when assessing the effects of these games. Solely approaching advergames as a mere interactive communication channel for the brand disregards the persuasive potential of digital games and, consequently, the relevance of specific variables that should be taken into consideration when exploring the effects of these games.

The third theme is composed of papers that study the incorporation of brand narratives in advergames as part of broader marketing campaigns in which the same brand narratives are used and conveyed. In contrast to the studies that belong to the previous theme, studies within this theme pay attention to how specific characteristics of advergames and the context in which they are played, as well as the broader marketing campaign in which they are framed, should be taken into consideration when studying their effects. From a marketing perspective, advergames are considered within these studies as another communicative tool that is included in an integrated marketing communication campaign. With an increased consideration of digital games as a communication channel and the consideration of the role of an active audience, the studies in this theme seem to be the natural response to the changes in the marketing paradigm, from marketing 1.0 to marketing 2.0, in which a consumer-centric approach is taken. This shift in perspective is accompanied by a growing interest in connecting the studies of advergames with theories and frameworks from the field of game studies, opening avenues for further elaboration of the design specificities of advergames.

The studies that comprise the fourth theme are representative of the changes that marketing 3.0 brought to the marketing paradigm. Following the reflections from Neri (2019), the key to what advergames can or cannot do is related to ethics: the reflection on how to create "humanist advertisements," but also how brands could promote "responsible consumption or strengthen networks of values, both economic and social, in the context of a more participatory society" (Neri, 2019, p. 122). This also links to the concept of "goodvertising" (Minár, 2016), where brands take a step further and decide to be relevant to society as a result of the evolution of the necessities of the audience. This fourth theme encompasses studies that examine the values and benefits of creating a sense of belonging (Scandroglio et al., 2008), which

reinforces the relationship between the brand and the consumer (Solana, 2010, p. 51).

The results of this study allow us to claim that, although the study of advergame has evolved into a more diverse and interdisciplinary perspective since its inception in 2005, this study reveals that the study of the use of digital games in marketing is usually conducted by studying advergames without paying attention to the context in which they are played. As the authors Van Berlo et al. discussed in their systematic study of gamified advertising (van Berlo et al., 2023, p. 7), further research on the context of gaming needs to be addressed. Concretely, the social context is an area that could be interesting to analyze in depth due to the positive effects that word of mouth has in advergames (Roettl et al., 2016; Renard and Darpy, 2017; Zhao and Renard, 2018).

5.1. Gaps in the literature and suggestions for future research

This reflection leads us to pinpoint specific gaps in the literature that could be translated into future research opportunities and possible paths to explore advergimes. First of all, theme 1 was heavily focused on specific sectors, in particular the food industry, and concrete approaches such as the impact of games on children's health. The overall predominance of attention given to this approach disregards the study of other relevant applications of advergames and limits the representativeness of the study of the effectiveness of this practice. A clear gap in the literature is therefore due to the exploration of the effects of advergames on other aspects that go beyond their impact on children's health or on customers' purchase intentions. For instance, it would be relevant to study the relevance of advergames to promote other audiovisual content, such as TV series. Gurney and Payne (2016, p. 178), who studied advergames to promote television programming blocks, helped to create content and redefine existing definitions and understandings of advergames until that moment.

Second, from our results, we can identify a lack of analysis regarding advergames from an integrated marketing communication perspective. This marketing approach has been useful in managing and coordinating various communicative efforts across multiple communication channels (Madhavaram et al., 2005). Furthermore, the analysis of the contextual effects of advergames on players represent another gap in the research. While there are some recent exploratory articles exploring this topic, further detailed should be needed to fully understand the potential impact of branded games on brands and how their connection to other communication formats could be beneficial for the effectiveness of advergames. Building on these last reflections, the use of advergames in transmedial campaigns is an approach that, although mentioned in some of the studies analyzed (i.e., Martín Ramallal and Micaletto Belda, 2021), deserves broader academic attention to understand its marketing potential. This gap highlights the continued study of advergames as isolated marketing strategies. We claim, therefore, that future studies should pay more attention.

Finally, although some studies are focused on advergames on specific devices, such as mobile advergames (i.e., Okazaki and Yagüe, 2012; Catalán et al., 2019), the evolution of new technologies

presents a necessity to explore from an academic perspective how advergames are exploiting the potential of new platforms and technologies such as virtual reality or augmented reality. This evolution of advergames and technologies also asks for a revised typology and nomenclature of branded games to create a comprehensive and updated vision of the object of analysis.

To conclude, we identified some articles in which the study of advergames was conducted from a human-centered perspective (i.e., Sung and Lee, 2020). This is a significant evolution of the study of advergames that represents an adaptation of advergames and their study to the Marketing 3.0 perspective (Kotler et al., 2010). This perspective implies a strong contrast from the dominant theme presented in this review, and it could open new avenues to explore the effects of linking branded content to social issues through interactive content. These studies dive into the use of advergames as a tool to engage the audience and create immersive experiences that end up creating a long-term relationship.

The concept of corporate social responsibility is evident in these studies. From this perspective, advergames are considered a communicative tool that can communicate valuable messages, aiming to reestablish a sense of care and protection for the audience from an ethical standpoint. This inclusive perspective on advergames highlights their potential to be utilized in non-profit campaigns, expanding their role beyond purely promotional purposes.

Consequently, we believe that these gaps in the literature should be addressed in future research to create a proper understanding of advergames for academics and professionals in the game and marketing sectors. Concretely, game designers and advergame experts could take advantage of the specification of typologies and possibilities of games in the marketing ecosystem if the effectiveness of advergames is scrutinized from an interdisciplinary perspective, where game design plays an important role in communicating brand necessities. This exploration needs to be conducted using quantitative and qualitative methods to present a rich overview of the possibilities of branded games in the current marketing ecosystem by focusing on consumer requirements.

Based on this development, we expect a closer interaction between studies of advergames and game studies. The exploration of the design of the medium or further persuasive analyses in different, less apparent advertising contexts, such as those in branded content (e.g., Martens et al., 2022), offers new avenues for the academic study of advergames.

Data availability statement

The original contributions presented in the study are included in the article/supplementary material, further inquiries can be directed to the authors.

Author contributions

LC performed the initial analysis of games and contributed with first version of the manuscript which was further edited by TD. All authors contributed to the conception and design of the study, submitted and revised manuscript, read, and approved the submitted version.

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Conflict of interest

The authors declare that the research was conducted in the absence of any commercial or financial relationships

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