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To cite this article: Luca Matteo Zagni, Rebecca Pera & Linda D. Hollebeek (24 Aug 2026): Game On or Game Over? The Influence of In-Game Advertising on Consumer Engagement, Journal of Advertising, DOI: [10.1080/00913367.2026.2712518](https://doi.org/10.1080/00913367.2026.2712518)

To link to this article: <https://doi.org/10.1080/00913367.2026.2712518>



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Published online: 24 Aug 2026.



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Game On or Game Over? The Influence of In-Game Advertising on Consumer Engagement

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ABSTRACT

In-game advertising (IGA) is a controversial practice. Whereas emphasize its potential to enhance player engagement, others highlight its disruptive nature. Addressing this tension, this qualitative study, based on netnography and in-depth interviews, explores how IGA influences players' emotional engagement. The findings show that emotional engagement is the interpretive mechanism through which players construct the meaning of IGA, shaping whether advertising preserves immersion or is experienced as a commercial intrusion. These interpretations are shaped by players' experiences of advertising attributes (content, format and style, frequency, and length), enabling us to distinguish between narrative plausibility and narrative interaction as complementary mechanisms through which advertising becomes integrated into—or disrupts—the gaming experience. Managerially, the findings suggest that brands should design IGA around players' emotional experiences, creating interactive advertising that strengthens immersion rather than interrupts it.

The ads shouldn't be there. We get bombarded regularly by ads in our everyday lives. We pay money to play video games and escape from the daily bullshit. This is a bridge too far. They have crossed the line by adding ads into our sacred place. Not worthy of outrage? I think we should be MORE outraged. They don't even have the excuse of saying, "This is how we keep it free." It's not free. That's the point. We pay money and still get harassed. They are trying to have their cake and eat it too. If we don't stand against this, it will be the new norm.—ktheKey, r/gaming (July 2020)

This comment illustrates consumers' sentiment when in-game advertising (IGA)—defined as the integration of advertisements (e.g., through product placement, banner-ads, content sponsorship, interstitial advertisements, or video-ads) into video-games (Terlutter and Capella 2013; Welden et al. 2025a)—disrupts their

gaming experience, yielding negative engagement. With at least 3.3 billion players globally, gaming has become a dominant form of entertainment, generating \$475 billion in revenue in 2024 (Newzoo 2024; Statista 2024). In this market, IGA reached \$110 billion in 2024 and is projected to grow to \$169.4 billion by 2029 (Statista 2025).

Through IGA, brands transcend traditional advertising by actively shaping player experiences, enhancing immersion, reinforcing player goals, and/or expanding the experiential horizon beyond the game (Welden et al. 2025b). These fantasy worlds enable actions that are impossible offline, allowing brands to co-create new identities and narratives with players (De Regt, Plangger, and Barnes 2021), highlighting the importance of IGA.

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📄 Supplemental data for this article can be accessed online at <https://doi.org/10.1080/00913367.2026.2712518>.

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Whereas congruent ads with the game enhance realism and players' attitude-toward-the-ad, perceived misaligned, repetitive, or intrusive ads may frustrate players and elicit reactance (Van Berlo, Van Reijmersdal, and Waiguny 2023). However, thematic, visual, and functional IGA congruity (Lee and Faber 2007) is inherently subjective and differs across players (Chang et al. 2010; Poels, Janssens, and Herrewijn 2013). To assess IGA effectiveness, previous research has prioritized quantitative cognitive metrics, including recall and recognition (Ghosh, Sreejesh, and Dwivedi 2021; 2022; Schmidt and Eisend 2015), affording limited attention to emotional engagement and qualitative IGA perspectives (Araujo et al. 2020; Van Berlo, Van Reijmersdal, and Waiguny 2023). Specifically, prior research has tended to emphasize consumer behavior or marketing strategies through the lens of traditional digital environments, overlooking the unique challenges posed by the multi-layered, immersive nature of video-gaming ecosystems (Hussain et al. 2025; Welden et al. 2025a).

Fragmented literature and information asymmetry across gaming actors (players, developers, streaming platforms, online communities, and infrastructure providers) limit access to experiential and emotional data and, ultimately, understanding of players' real-time perception of IGA as either a lever for, or an intrusion of, their experience (Welden et al. 2025a). The immersive, interactive nature of video-gaming draws players so deeply into the experience that they tend to lose track of time and place. This state, known as flow, involves focused attention, effortless concentration, a sense of control, reduced self-awareness, time distortion, and intrinsic enjoyment (Csikszentmihalyi 1990). During flow, gameplay emotions transfer to IGA, improving user associations and typically raising its effectiveness (Ghosh 2016; Ingendahl et al. 2023; Ingendahl, Brückner, and Vogel 2025; Mau, Silberer, and Constien 2008).

Although this literature stream has assumed the game experience as the origin of users' IGA evaluations, the reverse dynamic has been largely overlooked, exposing an important gap. Specifically, given the capacity of IGA to disrupt the user experience, it may trigger players' psychological reactance (Brehm 1966; Malhotra, Mishra, and Saxena 2021; Stewart and Pavlou 2002) or resistance to an ad's persuasive intent, thereby undermining user engagement (Brehm and Brehm 2013; Hollebeek et al. 2021). For example, players voiced frustration when Ubisoft and EA included ads in *Assassin's Creed Odyssey* and *UFC 4*, prompting both companies to apologize.

Bridging this gap, this study examines the role of IGA in enhancing (vs. undermining) gamers' emotional engagement in online communities, which is core in shaping their cognitive and behavioral responses (Herrewijn and Poels 2013). By integrating the concepts of flow (Csikszentmihalyi 1990) and psychological reactance (Brehm 1966; Malhotra, Mishra, and Saxena 2021; Stewart and Pavlou 2002), we address two central research questions:

Research Question 1: How does IGA influence consumers' emotional engagement with video-games?

Research Question 2: What IGA attributes enhance or reduce players' emotional engagement with the game?

To explore these opposing perspectives on the effect of IGA on online gamers' engagement, we respond to the call of Van Berlo, Van Reijmersdal, and Waiguny (2023) by adopting a qualitative approach grounded in immersive netnography and in-depth interviews (Kozinets and Gretzel 2024). Considering the social and conversational dynamics generated by IGA across social platforms, netnography is suited to explore the research questions because it facilitates exploration of how users' emotional responses to IGA are co-constructed by broader cultural meanings and practices surrounding digital gaming subcultures (Kozinets 2019a; Wang, Lee, and Hsu 2017).

This research makes two main contributions to the gaming, consumer engagement, and advertising literatures. First, building on Welden et al. (2025a), we address key informational asymmetries in the gaming ecosystem that limit advertisers' understanding of players' emotional and cognitive responses to IGA. We move beyond a binary perspective of IGA as being either positive or negative (Welden et al. 2025b) by developing a process model of emotional engagement that shows how players' subjective evaluations of the experiential value of IGA determine whether it is perceived as either disruptive or enhancing.

We further uncover how players interpret and emotionally respond to IGA, highlighting the pivotal role of emotional engagement in shaping their overall positive (for positively perceived IGA) or negative (for negatively perceived IGA) engagement with the game. We thus extend the work of Poels, Janssens, and Herrewijn (2013) by assessing how players' emotional engagement with IGA unfolds across these authors' evaluative levels, and by showing that positive and negative engagement emerge through opposite patterns across these levels, with mild and intense responses arising at the instance- and system-levels in

reverse directions. Finally, we complement dominant affect-transfer perspectives in IGA research, which assume that gameplay shapes brand evaluations (e.g., Ingendahl, Brückner, and Vogel 2025; Weiger et al. 2025), by revealing a co-occurring reverse pathway: IGA can significantly shape how players experience the game.

Second, we advance prior research on congruity and product placement (Russell 2002; Verberckmoes et al. 2016) by reconceptualizing congruity as a configurational, interactive mechanism. Rather than treating congruity as a static fit between brand and context, we show that players interpret IGA through a combination of attributes (content, format and style, frequency, and length) that jointly shape whether advertising preserves flow or triggers psychological reactance. We introduce a key conceptual distinction between narrative plausibility (coherence with the game world and storyline) and narrative interaction (the extent to which players can use the brand in gameplay), extending prior notions of narrative realism (De Pelsmacker, Dens, and Verberckmoes 2019; Verberckmoes et al. 2016).

We next discuss key theoretical foundations and outline the proposed conceptual development, followed by an overview of the methodology. We then outline the main results and discuss pertinent implications of this research.

Theoretical Background

In-Game Advertising

Owing to the inherently interactive nature of video-games, IGA has emerged as a prominent advertising strategy (Chaney et al. 2018). Brands integrate IGA through product placements, banners, interstitials, or sponsored events (Van Berlo, Van Reijmersdal, and Waiguny 2023). Because the medium is itself a contextual cue that shapes how an ad is perceived (Dahlén 2005), IGA differs from traditional formats: whereas traditional ads confine audiences to passive engagement, reducing their effectiveness (Becker et al. 2023; Panic, Caubergh, and De Pelsmacker 2013), IGA entails two-way interactions that enhance immersion and engagement (Hollebeek, Glynn, and Brodie 2014). Yet interactivity can also disrupt engagement. When ads are perceived as intrusive, as often occurs in other digital contexts (e.g., social media, live-streaming), they interrupt flow and fuel psychological reactance and/or ad avoidance. Raising user-perceived control (e.g., through personalization) can reduce these adverse effects (Lee, Choi, and Kim 2025; Song

et al. 2026; Zagni, Rizzo, and Filieri 2026). To this end, brands are required to adapt to the structure of the game (Welden et al. 2025b).

In-game advertising has its roots in product placement in traditional media, where effectiveness hinges on seamless content integration. Russell's (2002) tripartite typology of product placement distinguishes visual, auditory, and plot connection dimensions. Whereas perceived congruent placements align with viewers' schemas and reinforce brand associations, incongruent ones activate persuasion knowledge and reduce effectiveness, especially under repeated exposure (Cowley and Barron 2008; Homer 2009; Russell 2002); effective integration also requires alignment with the narrative's affective tone (Gillespie, Muehling, and Kareklas 2018).

In the gaming context, these issues render congruity a multidimensional construct comprising: (1) *game congruity*, the degree to which the brand "fits" the game world and storyline; (2) *functional congruity*, the alignment between product use and in-game actions (Gwinner and Eaton 1999); (3) *lifestyle/image congruity*, the match between brand symbolism and the identities or lifestyles portrayed in the game; and (4) *advertising congruity and prominence*, or IGA esthetics (Chaney et al. 2018; Lee and Faber 2007). Collectively, these dimensions determine the extent to which a brand is perceived as a seamless game world element or an intrusion (Chang et al. 2010; Lewis and Porter 2010).

Players assess IGA strategies at two levels (Poels, Janssens, and Herrewijn 2013): First, the *system-level* assesses whether IGA is viewed as acceptable (e.g., whether it serves to finance games, increase realism, or fuel materialism). Second, the *instance-level* focuses on an ad's immediate experiential fit (e.g., billboard/pop-up; Hussain, Islam, and Rehman 2023). Here, players can create attribute connections between IGA and the endorsed brand, converting their experiential engagement into (more favorable) brand attitudes (Ingendahl, Brückner, and Vogel 2025). Whereas IGA characteristics are pivotal at the instance level, across game worlds, congruity is a complex, context-dependent concept (Poels, Janssens, and Herrewijn 2013).

When perceived congruence is high, IGA is typically viewed as less intrusive (Verberckmoes et al. 2016) because it aligns with the game (e.g., theme/esthetics; Welden et al. 2025a). However, perceived congruity unfolds in a nonlinear fashion: high alignment enables fluid encoding, whereas moderate misalignment can stimulate deeper elaboration and attention (Lee and Faber 2007), limiting cognitive assessments of IGA effectiveness.

At the system level, players can evaluate ads through believability, the perceived trustworthiness of the ad (Poels, Janssens, and Herrewijn 2013), a “macro” belief that can backfire. Despite its benefits, advertisers must carefully use branded elements (e.g., to minimize triggering player reactance/frustration), hindering IGA effectiveness (Hollebeek et al. 2021). Because much IGA research centers on cognitive metrics (Ghosh, Sreejesh, and Dwivedi 2021, 2022; Yang et al. 2006), brands should instead nurture users’ positive gaming experiences (e.g., by boosting brand attributes/minimizing intrusiveness; Ingendahl, Brückner, and Vogel 2025; Wang and Chou 2019; Welden et al. 2025b). To this end, adoption of an emotion-centric perspective facilitates understanding of how IGA shapes users’ affective engagement (Hollebeek et al. 2021; Urbonavicius, Hollebeek, and Simanavičiūtė 2025).

Engagement with Video-Games

Engagement, users’ cognitive, emotional, and behavioral resource investment in video-gaming (Hollebeek, Srivastava, and Chen 2019), is vital in video-gaming and may emerge positively (by supporting the brand) or negatively (by detracting from the brand; Hollebeek and Macky 2019). Players engage with video-games through a continuous loop of action and feedback, whereby dynamic interactivity and player control sustain attention while amplifying emotional investment (Paschmann et al. 2025; Welden et al. 2025b). Developers monetize this aspect as repeat/ongoing usage, generating an in-app ad inventory for publishers (Paschmann et al. 2025; Rutz, Aravindakshan, and Rubel 2019). These intertwined threads underscore emotional engagement as a pivotal yet underexplored driver for IGA effectiveness (Urbonavicius, Hollebeek, and Simanavičiūtė 2025).

Correspondingly, our primary focus is on *emotional* engagement (Claffey and Brady 2019) because emotions are key in gaming experiences. These emotions encompass joy, love, fear, and anger, and are essential for generating consumers’ game-related enjoyment and engagement (Holbrook and O’Shaughnessy 1984). Prior research has shown that positive emotions influence immersive, social, and flow experiences, influencing game satisfaction and retention (Albatati et al. 2023). Moreover, positive emotions (e.g., enthusiasm/amusement), which are partly socially constructed (Mimoun, Trujillo-Torres, and Sobande 2022), tend to enhance gaming performance (Behnke, Gross, and Kaczmarek 2022). These responses highlight an IGA

duality, where its effectiveness depends on players’ subjective interpretations and contextual integration with the game. This duality embodies the affect transfer mechanism, where gameplay emotions spill over to the embedded brand through the overall play experience (Ingendahl, Brückner, and Vogel 2025; Mau, Silberer, and Constien 2008).

Synergizing Flow and Psychological Reactance

We explore gamers’ responses to IGA by integrating the concepts of flow and psychological reactance. Flow (Csikszentmihalyi 1990) facilitates optimal engagement, mainly when perceived alignment exists between the game and the IGA (De Pelsmacker, Dens, and Verberckmoes 2019), emphasizing the positive connection between gamers and their video-game (Welden et al. 2025a). This alignment shapes cognitive and affective responses (Vermeir et al. 2014). Without flow, consumers are more likely to exhibit low or negative emotional engagement with their game (Cheah, Shimul, and Phau 2022).

Flow preservation with IGA is contingent on perceived congruity (Lewis and Porter 2010; Welden et al. 2025b). When IGA creates a cognitive conflict, it hampers perceived realism and is seen as a disruption that triggers psychological reactance (Malhotra, Mishra, and Saxena 2021). This mismatch diverts players’ finite cognitive resources from gameplay toward managing the intrusion, yielding resistance, lowered performance, and frustration (Hollebeek et al. 2021; Martí-Parreño, Bermejo-Berros, and Aldás-Manzano 2017). Beyond the gaming context, ads have also been shown to evoke reactance in freemium services, highlighting that reactance hinges more on users’ sense of violation than on medium-specific characteristics (Riedel et al. 2025).

Reactance thus manifests as players’ defensive responses to IGA, negatively affecting their attitude toward the game and/or the advertised brands (Malhotra, Mishra, and Saxena 2021; Tran and Strutton 2013) and typically leads them to skip perceived intrusive content where possible (Becker et al. 2023; Hussain et al. 2025) (see Online [Supplementary Table 1](#) for an overview of key studies).

Methodology

To examine the role of IGA in shaping gamers’ emotional engagement (Research Question 1) and the attributes that enhance or hinder it (Research Question 2), we adopt a qualitative approach

grounded in immersive netnography and interactive in-depth interviews (Kozinets and Gretzel 2024).

Netnography

Netnography is a participant-observational research method based on online fieldwork that aims to understand cultures and communities in digital environments (Kozinets 2020). Adopting this approach, we examine how meanings and emotional responses are socially constructed in online gaming communities. These meanings and emotional responses emerge through interaction among community members rather than being confined to individual perspectives. As IGA widely triggers public discussions on specific platforms, this approach allowed us to capture the unfolding of users' collective engagement (Belk 2017; Kozinets and Gretzel 2024).

This study unfolded in four interrelated phases (see Figure 1). Prior to data collection, we conducted an exploratory industry scoping phase (Phase 0) involving professional conversations with stakeholders, including publishers, developers, and brand representatives. To inform the netnographic design, we also reviewed industry reports and publicly available media articles addressing IGA controversy to ground our understanding in current industry practices, helping us refine the focal concepts for the netnographic study, which was conducted from August 2022 to December 2024.

In Phase 1, we conducted prolonged netnographic immersion, that is, a participatory engagement period within gaming communities aimed at developing contextual familiarity before systematic data collection. This approach allowed us to understand the discursive practices or the recurring ways in which community members discuss, interpret, and negotiate IGA meanings, and how these naturally emerge within platform-specific norms. Following Kozinets (2020), we first assessed and observed ongoing discussions to identify recurring themes and community language before systematic data extraction. The first author, an active gamer, engaged daily with gaming communities by following discussions, observing interactions, commenting when appropriate, and keeping a structured reflective research journal that documented observations, emerging themes, theoretical reflections, and methodological decisions. This journal served as the primary mechanism for reflexive transparency, in which researchers make their assumptions and potential biases explicit, complemented by ongoing team discussion.

After seven weeks of immersion across five Reddit communities, Phase 2 (the investigative phase; Kozinets 2020; Kozinets and Gretzel 2024) focused on systematically extracting rich online traces, including textual posts and comments, likes and shares, images, videos, and other user-generated digital artifacts related to IGA that members had independently created. We selected two Reddit communities for their high activity and sustained discussion of IGA: r/Gaming and r/AssholeDesign, each representing distinct discursive contexts. r/Gaming (est. 2007; about 39 million members) provides a broad, mainstream, cross-platform discussion space where IGA emerges in general gaming conversations. In contrast, r/AssholeDesign (est. 2014; about 3 million members) frequently features content critiquing exploitative or profit-driven design practices, including monetization strategies in mobile and console games.

While r/AssholeDesign amplifies critical discourse around IGA, it also captured concentrated expressions of dissatisfaction and resistance. To avoid overrepresenting critique-oriented perspectives, we triangulated these discussions with r/Gaming, where IGA appears in broader, mainstream conversations. Recognizing the discussion-driven nature of Reddit, we further expanded the data at the end of 2023 to include TikTok and YouTube, compiling an extensive dataset of approximately 3,000 online traces, including social media reels, photo carousels, videos, and selected conversations and comments, complementing Reddit's textual content. Through short-form videos and longer user-generated content, we observed community interactions and behavioral aspects of IGA engagement.

We analyzed content posted by influential gaming creators across TikTok and YouTube, including DriftOrTV (100k followers, nearly 7 million Likes), RageReviewYT (80k followers, nearly 4 million Likes), and NakeyJakey (more than 2 million subscribers) (Weiger et al. 2025). Unlike many creators focusing solely on gameplay streaming, their content extends to gaming culture and technology-related topics, including IGA. These insights offered a broader perspective on how gaming audiences engage with IGA. These platforms differ structurally and culturally, privileging visual and influencer-driven engagement (vs. threaded debate). This multi-platform design introduced variation in communicative norms and emotional expression, enhancing contextual diversity and reducing the risk of platform-specific bias (Kozinets 2019b).

Although we collected thousands of additional posts, the thematically focused dataset comprised 730

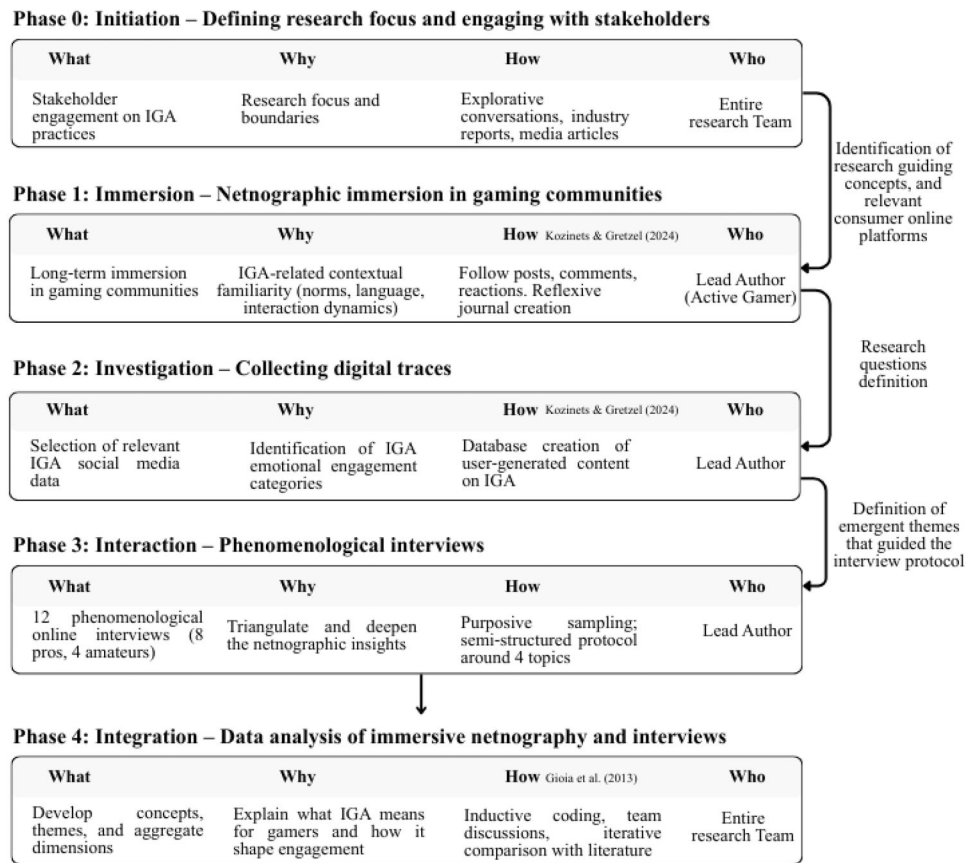


Figure 1. Methodological roadmap: Immersive netnography and phenomenological interviews.

contributions (270 from Reddit, 245 from TikTok, and 185 from YouTube) that met the criterion of primary relevance, interpreted as explicit discussion of IGA and related emotional or behavioral responses, excluding broader gaming-related content and ensuring an analytical focus on how IGA shapes emotional engagement. We also sought to raise transferability, the extent to which the findings can be applied in other contexts (Kozinets and Gretzel 2024), by examining multiple gaming genres, including fantasy (e.g., Fortnite), sports (e.g., NBA 2K), and realistic games (e.g., GTA/Yakuza). Our netnographic data also covers games across gaming platforms, including mobile, PC, and console gaming.

In-Depth Interviews

In Phase 3, we added in-depth interviews to triangulate and deepen our findings (Kozinets and Gretzel 2024). Conducted in an experience-rich context that encourages participants to revisit and articulate their lived experiences beyond the immediacy of public online discourse, the interviews allowed us to explore both positive and negative engagement. This approach

mitigates the potential bias arising from the tendency of dissatisfied users to express themselves more vocally in online environments. They also clarified how specific IGA attributes shape behavioral responses (e.g., coping strategies) across player types and helped identify players' expectations of "ideal" IGA strategies that preserve flow and reinforce the gaming experience.

We conducted 12 online phenomenological interviews (Creswell and Poth 2016) to explore participants' lived experiences of IGA among gamers exhibiting differing expertise, goal orientations, and engagement levels. Using criterion-based purposive sampling (Guba and Lincoln 1994), participants were selected based on their gaming activity, IGA experience, and their willingness to share insights. The lead author contacted participants via private messages following their netnographic posts or comments. To ensure the validity of the results, the sample prioritized professional gamers and content creators (eight) over amateurs (four), who were already well-represented in the netnographic phase.

The lead author designed a semi-structured protocol that was guided by the netnographic insight into four main topics (see Online Appendix A): (1) how

IGA affects the gaming experience (e.g., by discussing and illustrating users' positive/negative engagement with IGA); (2) participants' responses to specific identified IGA characteristics (e.g., by discussing/illustrating IGA content, format, style, frequency, and length); (3) users' coping mechanisms in the case of negative IGA engagement (e.g., by discussing its consequences to them); and (4) the "ideal" IGA experience (e.g., by discussing/illustrating how IGA can improve gamers' engagement).

Interviews were in English, and respondents remained anonymous (see [Online Appendix B](#)). The authors transcribed the interviews, yielding 172 pages of interview transcripts, in which respondents' identities were disguised with pseudonyms. This study was reviewed and approved by the Ethics Committee of the University of Turin (protocol no. ETHICS-UNITO478), and was conducted in accordance with the Declaration of Helsinki. For the in-depth interviews, participants provided informed written consent and were assured anonymity and confidentiality. For the netnographic study, only publicly available data was analyzed, and any identifying information was anonymized to protect users' privacy.

Data Analysis and Results

Following the well-established Gioia method (Gioia, Corley, and Hamilton 2013), Phase 4 focused on data analysis. The method is beneficial when developing or explicating (new) constructs, as in our case, to unpack the meanings of IGA. The analysis proceeded through three iterative stages, illustrated in the [Online Appendices](#).

In the first-order analysis, we inductively categorized gamers' emotional responses to IGA from the netnographic data, which was also integrated with that from the in-depth interviews. We initially categorized how the data related to specific IGA aspects could be grouped. The second-order analysis aggregated themes and delineated the overarching patterns between IGA attributes and emotional engagement.

We reached a consensus through team discussions. For instance, early distinctions between irritation, discontentment, and annoyance were collapsed into the category of IGA-related irritation (see [Online Appendix C](#)). This process ensured analytical rigor by integrating the emergent themes (acceptance, enthusiasm for positive emotional engagement; irritation and harassment for negative emotional engagement) with theoretical insights. We then examined how identified IGA attributes (i.e., content—format and style—

frequency and length) influence gamers' positive and negative engagement. Finally, in the third phase, we compared the netnographic and the interview data. In an iterative data-analytical process (vs. the literature), we aggregated the second-order concepts into theoretical meanings around the association of IGA attributes, emotional engagement, and the gaming experience (i.e., preservation, immersion, hindrance, and disruption). Our adoption of different data sources allowed us to triangulate the findings for enhanced validity (Guba and Lincoln 1994). We continued collecting data until theoretical saturation was reached, the point at which no significant new insight emerged from further data (Glaser and Strauss 1967).

Players' Emotional Engagement with IGA

The findings suggest that gaming represents a significant cultural space fostering belonging and identity (Hollebeek and Belk 2021). Consumers often describe the game as a "sacred place," reflecting its key role in shaping emotional engagement. This deep commitment extends beyond individual games, embracing the broader gaming ecosystem and fostering a strong sense of community, further motivating engagement (Cheah, Shimul, and Phau 2022). In the following quote, Leonardo discusses how IGA significantly shapes the player-game relationship in this sacralized space, either by enriching or undermining engagement:

To me, advertising is always placed between you and your experience with the game. Its integration is analogous to the distinction between maintaining the thread of a discussion by continuing the topic being discussed and opting to deviate completely from it by introducing a new topic. If you stay on topic, you continue the flow; if you deviate, you disrupt it. —Leonardo, professional player/content creator, interview

Building on this "dual" premise, we first focused on understanding the role of IGA in shaping consumers' emotional engagement (Claffey and Brady 2019). We then identified how different IGA attributes interact to positively or negatively shape consumers' emotional responses and either boost or detract from their gaming experience.

Negative Emotional Engagement

The findings reveal that gamers expect the industry to integrate IGA in free-to-play video-games, treating it as a proxy for payment. However, adverse consumer

responses occur when paid products incorporate ads. When IGA enters this personalized space, it feels like a direct intrusion into their environment (see [Online Appendix C](#)). This sentiment is captured by one respondent:

I've always associated IGA with something negative, like I'm being sold to. When companies pay for ads in gaming, they're trying to buy my attention, my ideas, me as a whole! So I don't like seeing it, especially in a game I've paid for.—Kath, professional player/content creator, interview

The intensity of gamers' negative emotional engagement differs. Two primary forms of negative engagement disrupting gameplay emerge: mild irritation and perceived harassment. First, regarding *irritation*, consumers perceive IGA as a hindrance, an unfair interruption, or “noise” that diverts their attention from their game (Naumann, Bowden, and Gabbott 2020). The netnographic findings reveal that participants express widespread dissatisfaction with being subjected to IGA, even if it does not severely disrupt the gameplay experience:

I was so close to landing the final blow, an awful ad popped up, breaking the rhythm, and just like that, I didn't make it. My great frustration lingered longer than the ad itself. Annoyed, I rushed to skip it, done, but the immersion was broken. I grumbled and then, back to the game.—Elia07, r/gaming (January 2023)

This mild irritation arises at the instance-level (Poels, Janssens, and Herrewijn 2013), reflecting players' momentary frustration when an ad interrupts the flow of gameplay (Abbasi et al. 2021). Such responses often surface as complaints or negative electronic word-of-mouth, framing IGA as an unwelcome intrusion. Yet the response tends to be short-lived: players typically skip the ad and return to the game, experiencing a brief break in immersion rather than a whole rejection of the experience itself. However, IGA can backfire, fueling skepticism about its effectiveness and eroding trust in advertisers (Hollebeek et al. 2021; Hollebeek and Macky 2019). The following comment illustrates this concern:

Personally, I wouldn't want to advertise this way if I were a company such as Adidas. It doesn't take a genius to know that people won't like having ads in their \$60 game, and having your brand associated with those ads is probably just giving them the reverse of the desired effect.—Mejake, Reddit, r/assholedesign (June 2020)

Our investigation suggests that the more intense negative emotion of *harassment* emerges frequently. Specifically, gamers experience heightened frustration, driven by a sense of betrayal at the system-level

(Poels, Janssens, and Herrewijn 2013) and the perception that IGA deceives them, especially for paid games. In the netnographic study, Crabidasher expresses in r/assholedesign (May 2023):

The future is NOW. We're literally paying people to advertise to us.

Whereas mild irritation yielding hindrances may not break the flow, more intense negative emotions tend to disrupt this state (Csikszentmihalyi 1990), harming the gaming experience and overall engagement. Players often reach a breaking point when their frustration escalates to anger toward game providers, as reflected in the netnographic statement by alpaca-men (TikTok, May 2024):

HELL NO!! If that happens, I'm not playing the game anymore and getting a refund.

And:

If a game I bought WITH MONEY had ads like this, I would be absolutely livid. This is utterly ridiculous.—Browsnight, r/assholedesign (July 2020)

Likewise, gamers experience a strong sense of psychological reactance (Brehm and Brehm 2013; Hollebeek et al. 2021), perceiving IGA as an intrusive violation and feeling hunted in their sacred game world. This perceived harassment typically feels out of their control, leaving them feeling powerless. In the netnographic study, members expressed a sense of disconnection between players and producers, arguing that producers lack an understanding of players' needs and expectations:

They seem to have forgotten why we play.—Lou_Manatte, r/gaming (August 2023)

Consumers thus feel betrayed and frustrated by IGA:

It's heartbreaking to see one of my most favorite companies do stuff like this and tarnish the name they once held so high.—FredyFela, TikTok (June 2024)

In turn, negative behavioral engagement toward the game often manifests in electronic word-of-mouth (e.g., by calling it a “scam”) or by engaging in calls-to-action (e.g., by pirating/boycotting the game or the studio), as illustrated by the following quotes from the netnographic study, and by the TikTok video content displayed in [Figure 2](#):

Unfortunately, bad practices like this won't stop until people start boycotting their games. It is absolutely damaging the gaming industry if crap like this becomes commonplace.—HungryDad, r/gaming (September 2023)

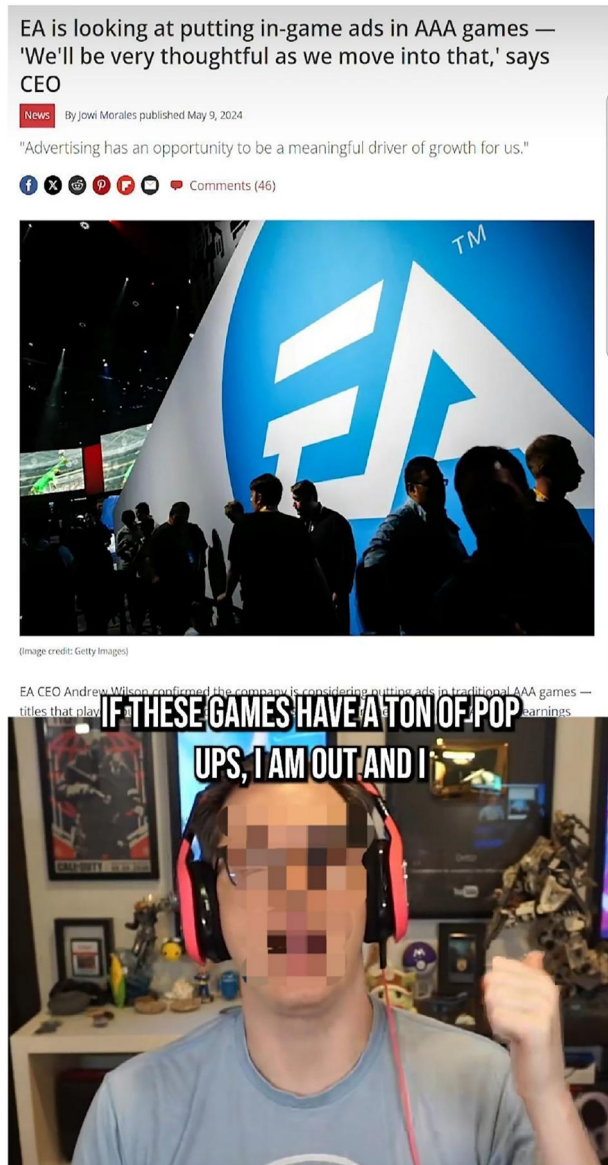


Figure 2. Illustrative example: Negative emotional engagement with IGA (TikTok, May 2024, Drift0rTV).

And:

If games will have ads in the future, I'll make sure to never buy the advertised products.—fanbo89, TikTok (July 2024)

Furthermore, internal conflict may arise in the community (e.g., from failing to address IGA), as illustrated by the preceding and subsequent quotes. Members may protest against game producers but also against fellow members who are perceived to foster harmful and unethical practices that impact their gaming experience, transforming what is deemed a sacred space into a toxic environment (Bernritter et al. 2025). One member states:

For people who buy any EA game from now until the end of time: When will you learn? Stop buying their shit. Let them dissolve, and the talent go to other companies who won't put profits over everything.—Aarodh, r/assholedesign (October 2020)

Our findings show that perceived intrusive and exploitative IGA disrupts flow and triggers psychological reactance (Brehm and Brehm 2013; Hollebeek et al. 2021; Malhotra, Mishra, and Saxena 2021), translating into behavioral coping strategies such as ceasing to buy games and the advertised brands, and engaging in piracy.

Positive Emotional Engagement

The findings highlight two positive emotional engagement subtypes with IGA (see [Online Appendix D](#)). Notably, positive emotional engagement typically appears milder than negative reactions, often framed as “unpopular opinions.” First, a sense of *acceptance* reflects gamers' recognition of IGA. At the system-level (Poels, Janssens, and Herrewijn 2013) the community acknowledges its benefits, including supporting game development and helping to maintain stable retail prices, as the netnographic data show:

Unpopular opinion: This game is excellent, and it takes much money to keep it up with the times. Without loot boxes and ads, the game wouldn't be as good as it is now. I've been playing 2k since the first one dropped almost 20 years ago, and it is constantly evolving and takes a giant team to accomplish what they have accomplished.—ajwest115, r/assholedesign (May 2020)

They also recognize the tradeoff by viewing IGA as a necessary compromise, as one netnographic comment suggests:

If it supports developers in creating a good game experience, and doesn't break the games (having you stop playing to watch ads or something stupid like that), I'm perfectly fine with that... I understand.—Nison5, r/gaming (August 2023)

Thus, IGA can be effective by preserving the player experience without significantly enhancing it, while avoiding disruption. Instead, it may even prompt mildly positive electronic word-of-mouth (Hollebeek, Hammedi, and Sprott 2023) because players recognize and share the value it adds to the gaming experience.

Second, a deeper, more positive emotional engagement, rooted in enthusiasm, emerges when players evaluate IGA on an instance-level (Poels, Janssens, and Herrewijn 2013) and it is seamlessly woven into the game's storyline or context. In these instances, players interact with ads organically, perceiving them

as a natural and integral part of their gaming experience. This positive response is largely driven by heightened immersion, particularly when IGA enhances the game's realism (Poels, Janssens, and Herrewijn 2013). A Reddit user illustrates:

I like it, makes the game more immersive as though I'm watching a real UFC match that has ads during some fights. Tempted to buy the game now.—Cawkmontwitch, r/assholedesign (February 2020)

And:

I love it! It's presented exactly like in the UFC or NBA. The ads are there to help maintain a feeling of immersion. When was the last time you watched a basketball game and didn't see commercials? Now the NBA games are more lifelike than ever.—Samuele, professional gamer/content creator, interview

The findings reveal that consumers engage positively with IGA when it fosters meaningful connections between players and brands, often raising their intent to purchase the advertised products. For example, one amateur player shared:

I've always been a fan of the original Star Wars films, but I wasn't interested in the newer series on Disney+. Then Fortnite released the Mandalorian skin, and after using it in the game, I felt re-engaged with the Star Wars universe. That's when I activated the Disney+ trial and started watching the new series, The Mandalorian.—Alessandro, amateur player, interview

Overall, IGA can evoke both positive and negative engagement; however, negative reactions are usually stronger. Players accept IGA more readily when it is perceived as a fair tradeoff for game development or when it is seamlessly integrated, enhancing realism (Poels, Janssens, and Herrewijn 2013) and reducing intrusiveness (Malhotra, Mishra, and Saxena 2021; Zagni, Rizzo, and Filieri 2026). In such cases, IGA fosters positive engagement and self-brand connections (Albatati et al. 2023), encouraging electronic word-of-mouth, longer playtime, and purchase intentions.

We next examine how specific IGA attributes interact to either (1) enhance flow and positive emotional engagement, or (2) induce perceived disruption and negative emotional engagement (Research Question 2).

IGA Attributes Triggering Emotional Engagement

Building on prior research identifying brand-game congruity, brand placement, and narrative realism as key determinants of players' responses to IGA (e.g., De Pelsmacker, Dens, and Verberckmoes 2019;

Verberckmoes et al. 2016; Vermeir et al. 2014), this research extends this understanding by showing how IGA attributes (see [Online Appendices E and F](#)) operate in and shape players' experiential and emotional dynamics in gaming. Based on the findings, we develop a typology of IGA's constitutive nature, including its content, format and style, frequency, and length, as discussed further in following text.

The What: Content

In IGA, *content* refers to the subject matter ("what") integrated into the game, encompassing the advertisement's meaning, message, and product type. In this sense, IGA content must be coherent with the game's narrative and perceived as relevant to players (Hollebeek and Macky 2019). This narrative plausibility ensures that the advertisement aligns with the game world, providing a seamless experience.

In contrast, players evaluate IGA content negatively when it is perceived to clash with the game world. This dissonance stems from a mismatch between the ad and the game's narrative, triggering psychological reactance and disrupting flow and engagement. The following comment emphasizes how IGA becomes disruptive when its message contradicts the internal coherence of the game world:

If I'm playing a game in a city and there are ads on billboards, I don't care, or like Pepsi in the fridge, stuff like that may be fine. While if I play The Witcher and see someone ask for a Budweiser, then we've got a problem.—Triecebe, r/gaming (February 2023)

Although taverns exist in The Witcher and serve specific in-game functions, a character asking for a modern-day Budweiser feels anachronistic because it introduces a product that does not belong to the game's fantasy story and environment. Conversely, IGA can enhance the game experience by serving narrative plausibility with the game's world-building logic. Integrating IGA content into a game can enhance its realism (Poels, Janssens, and Herrewijn 2013) and deepen players' connection to it:

I remember playing Yakuza 3, I think, where you can go to a bar or restaurant and try every type of real whiskey or food they have. Each one had a description attached. I loved those details, which made me feel much more immersed.—violet3r, r/gaming (September 2023)

In addition to narrative plausibility, the findings indicate that IGA content can enact narrative interaction, whereby story-doing (De Regt, Plangger, and

Barnes 2021)—when players actively interact with the IGA content to accomplish a task—enhances their feelings of immersion and transportation into the game narrative. Participants provided examples of players using branded Monster Energy drinks to restore their energy. This branded tool is not inherently consistent with a post-apocalyptic world; rather, its presence is justified because of the utility it affords through an in-game interaction narrative. For instance, one professional player highlights how a branded in-game event became part of the game's interactive affordances:

Gillette created a gaming arena in Fortnite as a sponsor of the Italian championship. Even though shaving has nothing to do with the game, products became part of the environment, such as the “Razor Tower” to fight in, giant razors to jump across, and oversized shaving cream packs to hide behind. Rather than mere ads, these elements’ utility enhanced immersion. In Fortnite, utility was also evident with branded cars that offer different strategic choices: the Mercedes was slower but carried four players, while the McLaren or Porsche were faster but only carried two. Whether positive or negative, the experience was memorable because it was useful.—Emanuele, professional player/content creator, interview

Here, the functional role of the branded content (the map and the vehicles) takes precedence over whether the ad fits with the narrative structure of the game, underlining how IGA utility can make ads more acceptable to players, even when the branding feels incongruent with the game world. By integrating branded content as part of players’ progress through the game, ads are transformed into valuable interactive tools, reinforcing the benefits of narrative interaction. This example highlights how IGA can become a positive feature when it enables story-doing, turning the advertisement into an active component of the player’s journey. Beyond raising ad acceptability, narrative interaction can also create a symbolic connection between players and the brand (Ingendahl, Brückner, and Vogel 2025), reinforcing brand familiarity and shaping long-term associations:

An in-game branded item should be both useful and meaningful, like a magical potion in the hero’s journey. For example, when I was a kid playing Pokémon Snap, I would have associated the brand with quality and the game itself if the final camera had been a Canon camera. Later, when choosing a real camera, I’d likely have picked Canon because it would feel like I had already used it.—Samuele, professional player/content creator, interview

Whereas narrative interaction strengthens players’ personal journey, it can also emerge at the collective

level, where community-created language and references become meaningful touchpoints for IGA:

In Valorant, you only speak one universal language: the in-game slang. On one map, players call an area “Pizza.” It would be cool to see, for example, Domino’s Pizza there. I would remember it. And if I later had to choose a place to eat pizza with other Valorant players, I’d choose Domino’s because it’s in the game.—Kath, professional player/content creator, interview

We thus disentangle the concept of narrative realism (De Pelsmacker, Dens, and Verberckmoes 2019; Verberckmoes et al. 2016) in IGA content through narrative plausibility and narrative interaction, two mechanisms that differentially shape players’ gaming experiences. Whereas narrative plausibility enhances the coherence of the game world, narrative interaction empowers players to actively engage with branded content, deepening emotional engagement.

The How: Format and Style

Beyond content, IGA format and style are also crucial in reinforcing narrative plausibility. Format refers to the mode of integration (e.g., banners, billboards, product placement), and style encompasses the ad’s visual and textual design. Even when the advertised product content is coherent with the game world, its format and style must align with the game’s atmosphere and aesthetic. Narrative plausibility is particularly relevant in games featuring a strong storyline, where visual coherence enhances perceived realism. For example, one player highlights how a mismatched style can break immersion, despite the product being plausible within the game’s timeline (Verberckmoes et al. 2016):

When the IGA is a game element, so not a non-skippable video, coherence is still needed because otherwise the first feeling of annoyance, even if mitigated, remains. This is because otherwise, it disrupts the gameplay experience. For example, while walking around Fallout in an apocalyptic landscape, if I see a perfect, new, undamaged Coke ad with a fridge underneath telling me to buy Coke. In that case, it would kill my immersion in the game.—Samuele, professional player/content creator, interview

When considering visual IGA characteristics, placement in the gaming environment is also crucial in shaping gaming experiences. When IGA is integrated out of context (e.g., when it becomes the focal point of the game) and out of narrative plausibility, it can be perceived as an “ad container.”

If you stop the game, or put it in ridiculous places, then it becomes an ad on the game instead of an in-game ad.—edav26, r/gaming (June 2023)

And:

They could've kept the ads on the ring's floor, as that doesn't bother me at all. The sweeping ads to start and end the replay are too much, and the little pop-up above the score/timer is bullshit. I'm a game designer, and that little ad draws the eye there during active gameplay, which is a terrible idea from a design perspective unless your goal was to get people to look there (since it's an ad).—SuperSelf, r/assholedesign (October 2021)

Conversely, aligning the visual characteristics of IGA with those of the game ensures that players perceive the integration of IGA into the game as (more) natural and unobtrusive, given its seamless fit, yielding negligible psychological reactance, as the netnographic study shows: “If you advertise Coca-Cola in a cyberpunk game, then make it a cyberpunk soda!” (Nion5, r/gaming, August 2023). Moreover, as a professional player and content creator, Linky (professional gamer/content creator, interview) explained, brands need to place products in locations where they would realistically appear, including the game's environment, and design their packaging to match the era (e.g., 1980s), adding to the perceived authenticity of and immersion in the game world:

Doritos and Mountain Dew are both in Call of Duty: Cold War. They integrate it pretty well, too. It's just sort of laying around in places where it would naturally be, and they'd use the packaging from the 80s.

The When: Frequency and Length

The frequency of IGA, or the rate at which IGA (re)occurs, represents a key determinant of users' perceived intrusiveness and engagement. Frequency and length determine the “when” to integrate IGA effectively. Although repetition may enhance brand recall and recognition (Martí-Parreño, Bermejo-Berros, and Aldás-Manzano 2017), the findings indicate that frequency and length are subordinate to the IGA attributes of content, format, and style. Players tend to be more positively receptive to a higher IGA frequency when the IGA content aligns with the game:

If the in-game advertising is gaming related (e.g., the energy drink or gaming sleeve or mouse), it will not bother me at all, I would be interested even if I see it often. For example, I remember Valorant's gaming chair whose in-game advertisement was there, and I looked it up online.—Kath, professional player/content creator, interview

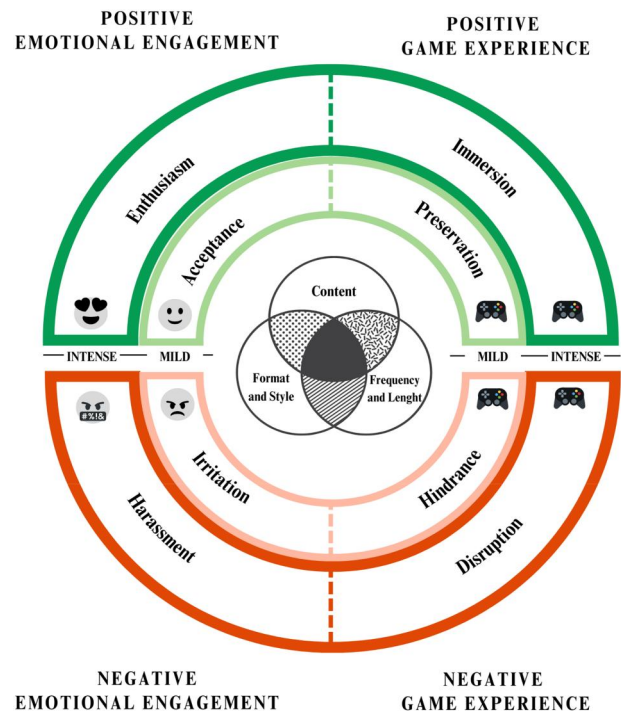


Figure 3. Conceptual model.

When players are repeatedly exposed to IGA that does not align with the game narrative, our results confirm those of Malhotra, Mishra, and Saxena (2021), which suggest that IGA can generate psychological reactance. The findings indicate that IGA generates psychological reactance in players by reducing their perceived realism of the game and/or disrupting their immersion, as expressed by karvet84 (r/gaming, July 2023):

YES! Those continuous Metro books and posters in every single corner of the Metro game series severely break the immersion for me.

Immersion is disrupted, in particular, when games force players to over-engage with IGA, as Phantomfang (r/gaming, June 2023) expressed:

As long as it's done well, I'm happy with it, I'd rather see a can of monster 20 times in my futuristic game over a thirty-second unskippable ad THAT DOESN'T PAUSE YOUR TIMING-BASED GAME.

Such forced over-engagement makes players perceive the game as a commercial rather than a true game. Similarly, bad timing can reduce perceived agency and negatively affect the gaming experience, as Gabriele (amateur player, interview) voiced:

Bad timing can turn fun into a forced commercial.

Indeed, players express intense frustration when IGA becomes the core of the game, effectively turning it into an advergame, through which advertisers promote their brands. As Dalmahr (r/gaming, June 2023) illustrates:

If the ad is essential to gameplay, I hate it.

Overall, although frequent IGA does not necessarily raise players' negative emotional engagement, game producers and advertisers should ensure its perceived contextual relevance (Hollebeek and Macky 2019). Figure 3 conceptualizes IGA as a context-dependent mechanism in which specific advertising attributes influence emotional engagement by either preserving flow or triggering psychological reactance, ultimately shaping players' behavioral responses toward both the game and the brand.

Discussion

This research addressed how IGA influences players' emotional engagement with video-games and assessed the role of specific IGA attributes in either enhancing or reducing it. Our work complements prior IGA research by adopting a qualitative lens of players' emotional engagement with IGA and its role in shaping their gaming experience.

The findings reveal that IGA exerts a dual, dynamic influence on emotional engagement, ranging from mild irritation or acceptance to intense harassment or enthusiasm. This emotional engagement escalates across both the instance- and system-level interpretations (Poels, Janssens, and Herrewijn 2013), rather than remaining confined to a single evaluative layer. Surprisingly, positive and negative emotional engagement unfold differently across evaluative levels, revealing a crossover dynamic between momentary ad encounters and broader judgments of the gaming ecosystem. Negative emotional engagement arises through two subtypes (irritation and perceived harassment) and becomes particularly salient in paid-for games, where players expect a protected environment and interpret IGA as a violation of the implicitly negotiated moral contract between themselves and the commercial ecosystem. The former (irritation) emerges at the instance level (Poels, Janssens, and Herrewijn 2013), when players perceive IGA as an intrusive hindrance that undermines the concentration and control underpinning flow (Csikszentmihalyi 1990).

Rather than leaving, gamers cope by engaging in passive responses, including complaints and negative electronic word-of-mouth, sustaining (vs. weakening) community interactions. Theoretically, this suggests that not all negative engagement yields disengagement, but rather alternative coping mechanisms that maintain community participation.

When emotions intensify (perceived *harassment*), the interpretive frame changes and shifts to the system-level and includes anger, rooted in the belief of

being cheated and deceived (Germelmann et al. 2020). Whereas hindrance is momentary, disruption constitutes a more invasive intrusion that irreversibly fractures the flow state. This distinction highlights how hindrance generates passive resistance strategies such as venting, whereas disruption amplifies psychological reactance (Hollebeek et al. 2021), prompting more active forms of resistance, such as boycotting the game or the advertised brands.

Interestingly, the impact of IGA extends beyond individual perceived harassment, influencing the very fabric of the gaming community. The sense of belonging to a close-knit, sacred community exacerbates these negative emotions, intensifying players' anger due to their aversion to the intrusion that is IGA. This aversion often extends to fellow community members who are seen as complicit in nurturing IGA, reconfiguring community dynamics, and potentially transforming the community into toxic gaming environments (Bernritter et al. 2025), casting these members as inadvertent "traitors." What emerges then is cultural discourse formation, a process by which collective emotional responses generate and stabilize shared meanings, moral boundaries, and inclusion criteria in the community. In the gaming context, emotional engagement becomes a vehicle for renegotiating these boundaries, determining who belongs, who has betrayed communal norms, and what forms of commercial presence are considered legitimate.

These processes produce consequences that extend well beyond the immediate gaming context. Once a gaming environment has turned toxic, players' willingness to engage with the brand is reshaped, reducing purchase intentions and willingness to pay for branded virtual items (e.g., avatar skins), as well as lowering real-world spending on the brand outside the game, due to an affective spillover process (Bernritter et al. 2025). Moreover, toxic dynamics underscore the importance of maintaining moral boundaries, with commercial actors being held accountable for their ad content and their impact on community cohesion.

Although IGA predominantly yields negative emotional engagement, it can also evoke positive engagement, which manifests through two subtypes. *Acceptance* emerges at the system-level, when gamers perceive functional IGA benefits (e.g., enhanced features/lower cost) as a necessary tradeoff that preserves the game experience. *Enthusiasm* emerges at the instance-level (Poels, Janssens, and Herrewijn 2013), when IGA bolsters immersion and facilitates flow (Csikszentmihalyi 1990), in turn fostering more

enduring game play and raising positive electronic word-of-mouth and purchase intentions.

Although product placement research has mainly examined executional cues (e.g., prominence/plot connection) in passive viewing contexts (Cowley and Barron 2008; Homer 2009; Russell 2002), we focus on the dynamics of an interactive context. In video-gaming, players' emotional engagement with IGA emerges from combinations of ad attributes (e.g., content, format, frequency; Chang et al. 2010; Verberckmoes et al. 2016) that can either disrupt or reinforce the gameplay experience. These attributes operate as concrete design levers through which advertisers and publishers shape advertising value (Ye et al. 2025). Building on prior conceptualizations of narrative realism, our findings suggest that, although realism is necessary, IGA content enhances flow and positive engagement through two complementary mechanisms: narrative plausibility (coherence with the game's fictional world and storyline) and narrative interaction (story-doing that deepens immersion; De Regt, Plangger, and Barnes 2021). Format and style foster immersion when they reinforce narrative plausibility, blending seamlessly with the visual game environment and narrative interaction by supporting the game's interactive dynamics. Moreover, ad frequency and length reveal a complex relationship: unless essential for building the game environment to provide narrative plausibility or interaction (e.g., in sports/lifelike games; Terlutter and Capella 2013), they risk disrupting the gameplay experience, instigating potential psychological reactance and negative engagement (Edwards, Li, and Lee 2002; Schmidt and Eisend 2015).

Rather than judging IGA attributes in isolation, players read them configurationally, evaluating how content, format and style, frequency and length together preserve or disrupt flow, extending the Ye et al. (2025) evidence that advertising value differs across media types. Whereas Rutz, Aravindakshan, and Rubel (2019) suggest that engagement (i.e., repeated play) creates advertising opportunities, our results show that the enhancement or disruption of the game experience depends on how IGA is emotionally experienced. For instance, while a player who perceives IGA as harassing generates an impression (of the ad), their resulting negative emotional engagement manifests as perceived interruption, game abandonment, boycott, and negative electronic word-of-mouth, eroding the player base that stable advertising revenue is contingent on. Finally, the impact of IGA on emotional engagement and the game experience is not

reducible to a stimulus-response dynamic, but represents a configurational process through which advertising enters and is absorbed into the culture of the gaming community.

Theoretical Implications

This study makes two key contributions to the gaming and consumer engagement literatures (Hussain et al. 2025; Ingendahl, Brückner, and Vogel 2025; Welden et al. 2025a), addressing calls for more engagement-centric perspectives on gamified advertising (Araujo et al. 2020; Van Berlo, Van Reijmersdal, and Waiguny 2023). First, it highlights the pivotal role of emotional engagement in shaping consumers' overall engagement with the game (Urbonavicius, Hollebeek, and Simanavičiūtė 2025), broadening scholarly understanding of engagement in this context. We thus extend prior research that conceptualizes engagement as observable gameplay that can be leveraged for advertising (Rutz, Aravindakshan, and Rubel 2019) by showing that engagement is not only a stable behavioral outcome, but is continuously shaped by players' emotional responses to IGA. In doing so, we demonstrate that IGA can actively sustain or disrupt engagement through the opposing mechanisms of flow and psychological reactance.

Whereas prior studies have acknowledged emotional responses as a mediator of the impact of congruent ad placements on brand evaluations (Gillespie, Muehling, and Kareklas 2018), we show that emotions constitute the interpretive mechanism through which players make sense of IGA, shaping their engagement (Hollebeek and Macky 2019). We complement and extend the dominant view of the advertising–gameplay relationship by showing that IGA benefits from enjoyable game experiences (Ingendahl, Brückner, and Vogel 2025), and IGA shapes how players experience the game, revealing a bidirectional dynamic.

We also extend the work of Poels, Janssens, and Herrewijn (2013) by mapping emotional engagement trajectories across instance- and system-level interpretations, showing a crossover pattern whereby mild and intense emotions distribute in opposite ways for positively (vs. negatively) perceived IGA. Within negative engagement, mild irritation unfolds at the instance-level and intense anger arises at the system-level, whereas for positive engagement, acceptance and enthusiasm reverse this mapping: a specific ad may generate enthusiasm, and the advertising system as a whole is more likely to be viewed with general acceptance. Our findings thus also extend the work of Van

Berlo, Van Reijmersdal, and Waiguny (2023) by uncovering how these negative emotions serve as powerful negative engagement drivers (e.g., by discontinuing their gameplay/boycotting the game; Hollebeek and Macky 2019).

Moreover, our work extends the notion of Welden et al. (2025a) of structural information asymmetry in gaming ecosystems, which limits the ability of advertisers to design compelling, immersive, and nondisruptive IGA strategies. We address this asymmetry by focusing on one of these authors' key ecosystem pillars, online communities, providing micro-level, emotion-centric insight into players' lived IGA experiences (Abbasi et al. 2021). This finding suggests that future IGA models should incorporate consumer perceptions of manipulation, fairness, and entitlement as key antecedents of emotional engagement, expanding extant frameworks on perceived advertising intrusiveness.

Recognizing this escalation helps explain why the boundary between acceptable advertising and disruptive commercial intrusion is central to understanding gamers' emotional engagement trajectories. We clarify how IGA attributes—content, format and style, frequency and length—shape players' emotional engagement, on the one hand enhancing the gaming experience while at the same time eliciting aversion.

Theoretically, this research advances IGA congruity research by revealing how players interpret these attributes as context-dependent triggers of positive (vs. negative) engagement. We introduce the attribute of *content*, disentangling the notion of narrative realism (De Pelsmacker, Dens, and Verberckmoes 2019; Verberckmoes et al. 2016) through narrative plausibility, alignment with the game world and the storyline, and narrative interaction, whereby branded elements enable story-doing (De Regt, Plangger, and Barnes 2021). Beyond content, we conceptualize *format and style* as visual and interactive modalities of congruity that determine whether IGA reinforces or disrupts flow.

Moreover, while prior studies suggest that increased exposure to visual brand elements enhances advertising effectiveness (Martí-Parreño, Bermejo-Berros, and Aldás-Manzano 2017; Schmidt and Eisend 2015), we show how players evaluate frequency and length through conditional reasoning anchored in specific configurations of content, as well as format and style. Although these elements sustain engagement when they contribute to perceived realism (Poels, Janssens, and Herrewijn 2013; Terlutter and Capella 2013), they also trigger reactance when they are perceived as excessive (Edwards, Li, and Lee 2002). Together, these

insights challenge dominant cognitive perspectives, showing that these attributes are experienced as ways in which IGA either enhances or disrupts flow.

Managerial Implications

In video-gaming, perceived value arises from the connections between games, streaming, communities, and brands (Welden et al. 2025b). This research thus suggests that IGA should move beyond simple thematic matching toward a more holistic approach, developing qualitative indicators of emotional escalation and systematically tracking recurrent phrases and narratives in player communities. IGA should shift from “fitting the brand into the game world” to “what distinctive, memorable player actions the brand can unlock” (e.g., by enabling a unique strategy like Burger King with FC25, a ritualized event, or a socially meaningful object that would not exist in the game without that sponsor).

Building on the conceptual shift from buying exposure to planning meaningful consumer-brand interactions, we provide actionable guidance on translating interaction planning in immersive gaming environments (Araujo et al. 2020). Advertisers are advised to work on two connected design layers: how each ad instance is integrated, and how the overall monetization model shapes user expectations. To mitigate adverse reactions, companies should design and execute IGA with the explicit aim of fostering emotional engagement. Whereas achieving enthusiasm requires assessment of individual perspectives, preventing harassment requires systemic design choices. When players feel harassed, this experience is usually not due to a single banner; rather, they feel the gaming environment is unfair. To this end, developers and publishers are encouraged to engage in ongoing dialogue with gamers (e.g., in gaming communities) to understand their drivers, needs, and concerns (Hung et al. 2025). Ongoing dialogue includes the possibility of engaging gamers in the content customization or co-production options of IGA, aligning communication on what ads pay for.

In terms of IGA content, format and style, frequency and length, brands should enact narrative plausibility and narrative interaction. For instance, branded billboards in sports games or quest items in adventure games can effectively integrate brands in the gameplay (De Regt, Plangger, and Barnes 2021; Newzoo 2024). Instead of passive storytelling, narrative interaction requires players to interact with branded elements as part of their journey. This active

engagement strengthens player-brand connections (Hollebeek, Glynn, and Brodie 2014).

Brands should also align ads with the game format and style: in a cyberpunk world, for instance, neon-lit billboards or holographic ads fit the futuristic setting. Finally, frequency and length matter; excessive or prolonged ads risk disrupting the experience unless they contribute to the realism of the game, as in sports simulations where IGA mirrors real-world sponsorships.

Limitations and Future Research

This research also has limitations that offer additional research opportunities. First, although our analyses offer exploratory insight, further testing and validation is required. For instance, experimental studies could combine attention and arousal measures (e.g., eye tracking, galvanic skin response), or biometric methods (e.g., eye tracking, facial coding, galvanic skin response) could be used to test whether the identified emotional pathways are reliably preceded by distinct attention and arousal signatures when players encounter different IGA attributes (Han et al. 2025; Ingendahl, Brückner, and Vogel 2025; Read et al. 2024). Such multimethod designs would help disentangle conscious evaluations from preconscious affective responses that remain opaque in netnographic data. Moreover, future studies should more explicitly consider the dual-pathway model of IGA, in which functional utility and narrative congruence influence consumers' willingness to tolerate advertising in entertainment contexts.

Second, although we addressed the behavioral consequences of gamers' engagement with IGA in terms of their coping responses and community responses, we did not investigate the effects on purchase behavior and longer-term economic outcomes. Future research could examine how IGA attributes translate the identified emotional pathways (acceptance/enthusiasm versus irritation/harassment) into observable commercial outcomes, linking gamers' engagement with brand-level indicators (e.g., search, consideration/sentiment) and hard performance metrics such as in-game spending, average revenue per paying user, and upgrade decisions across game versions (Paschmann et al. 2025; Riedel et al. 2025; Ungureanu, van Oest, and Schauerte 2025).

Third, although we examine players' perspectives across multiple platforms and communities, we do not explicitly consider the broader data ecosystem in which IGA operates, nor the interactions across its

stakeholders. Future research could integrate biometric measures of IGA exposure and in-game behavior with platform, streaming, and social media data to examine how specific IGA configurations influence trajectories of collective brand engagement, community toxicity, and monetization at the ecosystem level over time (Van Crombrugge and Stremersch 2025; Welden et al. 2025a).

AI Disclosure

Artificial intelligence tools (Grammarly, ChatGPT-5) were used only for language editing under the authors' supervision. No AI system contributed to data collection or analysis.

Disclosure Statement

No potential conflict of interest was reported by the author(s).

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References

- Abbasi, A. Z., U. Rehman, A. Hussain, D. Ting, and J. Islam. 2021. "The Impact of Advertising Value of In-Game Pop-Up Ads in Online Gaming on Gamers' Inspiration: An Empirical Investigation." *Telematics and Informatics* 62: 101630. <https://doi.org/10.1016/j.tele.2021.101630>.
- Albatati, B., F. Liu, S. Wang, and M. Yu. 2023. "Emotions and Online Gaming Experiences: An Examination of MMORPG Gamers from India and the United States." *Computers in Human Behavior* 148: 107900. <https://doi.org/10.1016/j.chb.2023.107900>.
- Araujo, T., J. Copulsky, J. Hayes, S. Kim, and J. Srivastava. 2020. "From Purchasing Exposure to Fostering Engagement: Brand-Consumer Experiences in the Emerging Computational Advertising Landscape." *Journal of Advertising* 49 (4): 428–445. <https://doi.org/10.1080/00913367.2020.1795756>.
- Becker, M., T. Scholdra, M. Berkmann, and W. Reinartz. 2023. "The Effect of Content on Zapping in TV Advertising." *Journal of Marketing* 87 (2): 275–297. <https://doi.org/10.1177/00222429221105818>.
- Behnke, M., J. Gross, and L. Kaczmarek. 2022. "The Role of Emotions in Esports Performance." *Emotion (Washington, D.C.)* 22 (5): 1059–1070. <https://doi.org/10.1037/emo0000903>.
- Belk, R. 2017. "Qualitative Research in Advertising." *Journal of Advertising* 46 (1): 36–47. <https://doi.org/10.1080/00913367.2016.1201025>.

- Bernritter, S., I. Danatzis, J. Möller-Herm, and F. Sotgiu. 2025. "Navigating Toxic Playgrounds: Managing Reputational and Financial Brand Safety in Multiplayer Video Games." *International Journal of Research in Marketing* 42 (4): 936–956. <https://doi.org/10.1016/j.ijresmar.2025.01.002>.
- Brehm, J. W. 1966. *A Theory of Psychological Reactance*. New York: Academic Press.
- Brehm, S., and J. Brehm. 2013. *Psychological Reactance: A Theory of Freedom and Control*. New York: Academic Press.
- Chaney, I., S. Hosany, M. Wu, C. Chen, and B. Nguyen. 2018. "Size Does Matter: Effects of In-Game Advertising Stimuli on Brand Recall and Brand Recognition." *Computers in Human Behavior* 86: 311–318. <https://doi.org/10.1016/j.chb.2018.05.007>.
- Chang, Y., J. Yan, J. Zhang, and J. Luo. 2010. "Online in-Game Advertising Effect: Examining the Influence of a Match between Games and Advertising." *Journal of Interactive Advertising* 11 (1): 63–73. <https://doi.org/10.1080/15252019.2010.10722178>.
- Cheah, I., A. Shimul, and I. Phau. 2022. "Motivations of Playing Digital Games: A Review and Research Agenda." *Psychology & Marketing* 39 (5): 937–950. <https://doi.org/10.1002/mar.21631>.
- Claffey, E., and M. Brady. 2019. "An Empirical Study of the Impact of Consumer Emotional Engagement and Affective Commitment in Firm-Hosted Virtual Communities." *Journal of Marketing Management* 35 (11-12): 1047–1079. <https://doi.org/10.1080/0267257X.2019.1601125>.
- Cowley, E., and C. Barron. 2008. "When Product Placement Goes Wrong: The Effects of Program Liking and Placement Prominence." *Journal of Advertising* 37 (1): 89–98. <https://doi.org/10.2753/JOA0091-3367370107>.
- Creswell, J., and C. Poth. 2016. *Qualitative Inquiry and Research Design: Choosing among Five Approaches*. Thousand Oaks: Sage.
- Csikszentmihalyi, M. 1990. *Flow: The Psychology of Optimal Experience*. New York: Harper Perennial.
- Dahlén, M. 2005. "The Medium as a Contextual Cue: Effects of Creative Media Choice." *Journal of Advertising* 34 (3): 89–98. <https://doi.org/10.1080/00913367.2005.10639197>.
- De Pelsmacker, P., N. Dens, and S. Verberckmoes. 2019. "How Ad Congruity and Interactivity Affect Fantasy Game Players' Attitude toward IGA." *Journal of Electronic Commerce Research* 20 (1): 43–61.
- De Regt, A., K. Plangger, and S. Barnes. 2021. "Virtual Reality Marketing and Customer Advocacy: Transforming Experiences from Story-Telling to Story-Doing." *Journal of Business Research* 136: 513–522. <https://doi.org/10.1016/j.jbusres.2021.08.004>.
- Edwards, S., H. Li, and J. Lee. 2002. "Forced Exposure and Psychological Reactance: Antecedents and Consequences of the Perceived Intrusiveness of Pop-Up Ads." *Journal of Advertising* 31 (3): 83–95. <https://doi.org/10.1080/00913367.2002.10673678>.
- Germelmann, C., J. Herrmann, M. Kacha, and P. Darke. 2020. "Congruence and Incongruence in Thematic Advertisement-Medium Combinations: Role of Awareness, Fluency, and Persuasion Knowledge." *Journal of Advertising* 49 (2): 141–164. <https://doi.org/10.1080/00913367.2020.1745110>.
- Ghosh, T. 2016. "Winning versus Not Losing: Exploring the Effects of in-Game Advertising Outcome on Its Effectiveness." *Journal of Interactive Marketing* 36 (1): 134–147. <https://doi.org/10.1016/j.intmar.2016.05.003>.
- Ghosh, T., S. Sreejesh, and Y. Dwivedi. 2021. "Examining the Deferred Effects of Gaming Platform and Game Speed of Advergimes on Memory, Attitude, and Purchase Intention." *Journal of Interactive Marketing* 55 (1): 52–66. <https://doi.org/10.1016/j.intmar.2021.01.002>.
- Ghosh, T., S. Sreejesh, and Y. Dwivedi. 2022. "Brands in a Game or a Game for Brands? Comparing the Persuasive Effectiveness of IGA and Advergimes." *Psychology & Marketing* 39 (12): 2328–2348. <https://doi.org/10.1002/mar.21752>.
- Gillespie, B., D. Muehling, and I. Kareklas. 2018. "Fitting Product Placements: Affective Fit and Cognitive Fit as Determinants of Consumer Evaluations of Placed Brands." *Journal of Business Research* 82: 90–102. <https://doi.org/10.1016/j.jbusres.2017.09.002>.
- Gioia, D., K. Corley, and A. Hamilton. 2013. "Seeking Qualitative Rigor in Inductive Research: Notes on the Gioia Methodology." *Organizational Research Methods* 16 (1): 15–31. <https://doi.org/10.1177/1094428112452151>.
- Glaser, T., and A. Strauss. 1967. *The Discovery of Grounded Theory: Strategies for Qualitative Research*. Chicago: Aldine.
- Guba, E., and Y. Lincoln. 1994. "Competing Paradigms in Qualitative Research." In *Handbook of Qualitative Research*, Vol. 2, 105. Thousand Oaks: Sage.
- Gwinner, Kevin P., and John Eaton. 1999. "Building Brand Image Through Event Sponsorship: The Role of Image Transfer." *Journal of Advertising* 28 (4): 47–57. <https://doi.org/10.1080/00913367.1999.10673595>.
- Han, J., Y. Ni, M. Amon, A. Nécaise, M. Han, and M. Lee. 2025. "Multimodal Physiological Responses Predict Advertisement Effectiveness." *Journal of Advertising* 54 (5): 693–712. <https://doi.org/10.1080/00913367.2025.2524185>.
- Herrewijn, L., and K. Poels. 2013. "Putting Brands into Play: How Game Difficulty and Player Experiences Influence the Effectiveness of in-Game Advertising." *International Journal of Advertising* 32 (1): 17–44. <https://doi.org/10.2501/IJA-32-1-017-044>.
- Holbrook, M., and J. O'Shaughnessy. 1984. "The Role of Emotion in Advertising." *Psychology & Marketing* 1 (2): 45–64. <https://doi.org/10.1002/mar.4220010206>.
- Hollebeek, L. D., and R. Belk. 2021. "Consumers' Technology-Facilitated Brand Engagement and Wellbeing: Positivist TAM/PERMA-vs. Consumer Culture Theory Perspectives." *International Journal of Research in Marketing* 38 (2): 387–401. <https://doi.org/10.1016/j.ijresmar.2021.03.001>.
- Hollebeek, L. D., and K. Macky. 2019. "Digital Content Marketing's Role in Fostering Consumer Engagement, Trust, and Value: Framework, Fundamental Propositions, and Implications." *Journal of Interactive Marketing* 45 (1): 27–41. <https://doi.org/10.1016/j.intmar.2018.07.003>.
- Hollebeek, L. D., M. Glynn, and R. Brodie. 2014. "Consumer Brand Engagement in Social Media:

- Conceptualization, Scale Development and Validation.” *Journal of Interactive Marketing* 28 (2): 149–165. <https://doi.org/10.1016/j.intmar.2013.12.002>.
- Hollebeek, L. D., W. Hammedi, and D. Sprott. 2023. “Consumer Engagement, Stress, and Conservation of Resources Theory: A Review, Conceptual Development, and Future Research Agenda.” *Psychology & Marketing* 40 (5): 926–937. <https://doi.org/10.1002/mar.21807>.
- Hollebeek, L. D., D. E. Sprott, V. Sigurdsson, and M. Clark. 2021. “Social Influence and Stakeholder Engagement Behavior: Conformity, Compliance, and Reactance.” *Psychology & Marketing* 39 (1): 90–100. <https://doi.org/10.1002/mar.21577>.
- Hollebeek, L., R. K. Srivastava, and T. Chen. 2019. “S-D Logic-Informed Customer Engagement: Integrative Framework, Revised Fundamental Propositions, and Application to CRM.” *Journal of the Academy of Marketing Science* 47 (1): 161–185. <https://doi.org/10.1007/s11747-016-0494-5>.
- Homer, P. 2009. “Product Placements: The Impact of Placement Type and Repetition on Attitude.” *Journal of Advertising* 38 (3): 21–32. <https://doi.org/10.2753/JOA0091-3367380302>.
- Hung, H., A. Kumar, V. Kumar, C. Lin, and K. H. Tan. 2025. “Exploring Player Cocreation Dynamics on the Gaming Platform: Interplay of Goal Fulfillments, Orchestration Actions, and Platform Affordances.” *International Journal of Research in Marketing* 42 (4): 1125–1142. <https://doi.org/10.1016/j.ijresmar.2024.12.003>.
- Hussain, A., L. Hollebeek, B. Marder, and D. Ting. 2025. “In-Game Content Purchase Motivations (IGCPMs): Conceptualization, Scale Development, and Validation.” *Information & Management* 62 (7): 104207. <https://doi.org/10.1016/j.im.2025.104207>.
- Hussain, M., T. Islam, and S. Rehman. 2023. “What You See Is What You Get: Assessing in-Game Advertising Effectiveness.” *Journal of Research in Interactive Marketing* 17 (4): 527–543. <https://doi.org/10.1108/JRIM-03-2022-0087>.
- Ingendahl, M., L. Brückner, and T. Vogel. 2025. “Beyond Affect Transfer: Attribute Associations in Video-Game Brand Placements and Their Impact on Brand Attitudes.” *Journal of Advertising* 54 (4): 586–596. <https://doi.org/10.1080/00913367.2024.2337428>.
- Ingendahl, M., T. Vogel, A. Maedche, and M. Wänke. 2023. “Brand Placements in Video Games: How Local in-Game Experiences Influence Brand Attitudes.” *Psychology & Marketing* 40 (2): 274–287. <https://doi.org/10.1002/mar.21770>.
- Kozinets, R. 2019a. “Consuming Technocultures: An Extended JCR Curation.” *Journal of Consumer Research* 46 (3): 620–627. <https://doi.org/10.1093/jcr/ucz034>.
- Kozinets, R. 2019b. *Netnography: The Essential Guide to Qualitative Social Media Research*. London: Sage Publications.
- Kozinets, R. 2020. “Netnography Today: A Call to Evolve, Embrace, Energize, and Electrify.” In *Netnography Unlimited*, 3–23. New York: Routledge.
- Kozinets, R., and U. Gretzel. 2024. “Netnography Evolved: New Contexts, Scope, Procedures and Sensibilities.” *Annals of Tourism Research* 104: 103693. <https://doi.org/10.1016/j.annals.2023.103693>.
- Lee, M., and R. Faber. 2007. “Effects of Product Placement in Online Games on Brand Memory: A Perspective of the Limited-Capacity Model of Attention.” *Journal of Advertising* 36 (4): 75–90. <https://doi.org/10.2753/JOA0091-3367360406>.
- Lee, M., J. Choi, and S. Kim. 2025. “Acceptance Propensity of Pre-Roll Skippable Ads: An Analysis of Large-Scale Clickstream Data Using Dynamic Linear Models.” *Journal of Advertising Research* 65 (3): 375–391. <https://doi.org/10.1080/00218499.2025.2464294>.
- Lewis, B., and L. Porter. 2010. “In-Game Advertising Effects: Examining Player Perceptions of Advertising Schema Congruity and Game-Reality Congruity.” *Journal of Interactive Advertising* 10 (2): 46–60. <https://doi.org/10.1080/15252019.2010.10722169>.
- Malhotra, G., S. Mishra, and G. Saxena. 2021. “Consumers’ Psychological Reactance and Ownership in IGA.” *Marketing Intelligence & Planning* 39 (6): 842–855.
- Marti-Parreño, J., J. Bermejo-Berros, and J. Aldás-Manzano. 2017. “Product Placement in Video Games: The Effect of Brand Familiarity and Repetition on Consumers’ Memory.” *Journal of Interactive Marketing* 38 (1): 55–63. <https://doi.org/10.1016/j.intmar.2016.12.001>.
- Mau, G., G. Silberer, and C. Constien. 2008. “Communicating Brands Playfully: Effects of in-Game Advertising for Familiar and Unfamiliar Brands.” *International Journal of Advertising* 27 (5): 827–851. <https://doi.org/10.2501/S0265048708080293>.
- Mimoun, L., L. Trujillo-Torres, and F. Sobande. 2022. “Social Emotions and the Legitimation of the Fertility Technology Market.” *Journal of Consumer Research* 48 (6): 1073–1095. <https://doi.org/10.1093/jcr/ucab043>.
- Naumann, K., J. Bowden, and M. Gabbott. 2020. “Expanding Customer Engagement: The Role of Negative Engagement, Dual Valences and Contexts.” *European Journal of Marketing* 54 (7): 1469–1499. <https://doi.org/10.1108/EJM-07-2017-0464>.
- Newzoo. 2024. “How Consumers Engaged with Games in 2024: Global Gamer Study.” Newzoo.
- Panic, K., V. Cauberghe, and P. De Pelsmacker. 2013. “Comparing TV Ads and Advergaming Targeting Children: The Impact of Persuasion Knowledge on Behavioral Responses.” *Journal of Advertising* 42 (2-3): 264–273. <https://doi.org/10.1080/00913367.2013.774605>.
- Paschmann, J., H. Bruno, H. van Heerde, F. Völckner, and K. Klein. 2025. “Driving Mobile App User Engagement through Gamification.” *Journal of Marketing Research* 62 (2): 249–273. <https://doi.org/10.1177/00222437241275927>.
- Poels, K., W. Janssens, and L. Herrewijn. 2013. “Play Buddies or Space Invaders? Players’ Attitudes toward in-Game Advertising.” *Journal of Advertising* 42 (2-3): 204–218. <https://doi.org/10.1080/00913367.2013.774600>.
- Read, G., S. Holiday, J. Hayes, and B. Britt. 2024. “Biometric Tools in a Computational Advertising Context: An Overview of Use and Application.” *Journal of Advertising* 53 (5): 754–770. <https://doi.org/10.1080/00913367.2024.2399657>.
- Riedel, A., R. Mulcahy, A. Beatson, and C. Weeks. 2025. “Advertising in Freemium Services: Lack of Control and Intrusion as the Price Consumers Pay.” *Journal of Advertising* 54 (3): 322–341. <https://doi.org/10.1080/00913367.2024.2393078>.

- Russell, C. 2002. "Investigating the Effectiveness of Product Placements in Television Shows: The Role of Modality and Plot Connection Congruence on Brand Memory and Attitude." *Journal of Consumer Research* 29 (3): 306–318. <https://doi.org/10.1086/344432>.
- Rutz, O., A. Aravindakshan, and O. Rubel. 2019. "Measuring and Forecasting Mobile Game App Engagement." *International Journal of Research in Marketing* 36 (2): 185–199. <https://doi.org/10.1016/j.ijresmar.2019.01.002>.
- Schmidt, S., and M. Eisend. 2015. "Advertising Repetition: A Meta-Analysis on Effective Frequency in Advertising." *Journal of Advertising* 44 (4): 415–428. <https://doi.org/10.1080/00913367.2015.1018460>.
- Song, L., T. Wang, S. Yao, Q. Zhang, and G. Tso. 2026. "Binge-Watching and Advertising Reactance: The Moderating Roles of Ad Position and Ad Congruence." *Journal of Advertising* 55 (2): 245–263. <https://doi.org/10.1080/00913367.2025.2511188>.
- Statista. 2024. "Video Game Market Revenue—Worldwide." <https://www.statista.com/forecasts/1344668/revenue-video-game-worldwide>.
- Statista. 2025. "In-Game Advertising – Worldwide." <https://www.statista.com/outlook/amo/media/games/in-game-advertising/worldwide>.
- Stewart, D., and P. Pavlou. 2002. "From Consumer Response to Active Consumer: Measuring the Effectiveness of Interactive Media." *Journal of the Academy of Marketing Science* 30 (4): 376–396. <https://doi.org/10.1177/009207002236912>.
- Terlutter, R., and M. Capella. 2013. "The Gamification of Advertising: Analysis and Research Directions of IGA, Advergaming, and Advertising in Social Network Game." *Journal of Advertising* 42 (2-3): 95–112. <https://doi.org/10.1080/00913367.2013.774610>.
- Tran, G., and D. Strutton. 2013. "What Factors Affect Consumer Acceptance of In-Game Advertisements? Click "Like" to Manage Digital Content for Players." *Journal of Advertising Research* 53 (4): 455–469. <https://doi.org/10.2501/JAR-53-4-455-469>.
- Ungureanu, O., R. van Oest, and N. Schauerte. 2025. "Add on or Move on: Do In-Game Purchases Help or Hurt Upgrading to Newer Game Versions?" *International Journal of Research in Marketing* 42 (4): 1105–1124. <https://doi.org/10.1016/j.ijresmar.2025.02.007>.
- Urbanavicius, S., L. D. Hollebeek, and A. Simanavičiūtė. 2025. "The Effect of Consumers' Affective Engagement on Their Personal Data Disclosure on Social Media." *Journal of Consumer Behaviour* 24 (4): 1613–1629. <https://doi.org/10.1002/cb.2481>.
- Van Berlo, Z., E. Van Reijmersdal, and M. Waiguny. 2023. "Twenty Years of Research on Gamified Advertising: A Systematic Overview of Theories and Variables." *International Journal of Advertising* 42 (1): 171–180. <https://doi.org/10.1080/02650487.2022.2143098>.
- Van Crombrugge, M., and S. Stremersch. 2025. "The Rise of the Subscription Model in the Video Game Console Industry." *International Journal of Research in Marketing* 42 (4): 1058–1083. <https://doi.org/10.1016/j.ijresmar.2025.02.006>.
- Verberckmoes, S., K. Poels, N. Dens, L. Herrewijn, and P. De Pelsmacker. 2016. "When and Why Is Perceived Congruity Important for IGA in Fantasy Games?" *Computers in Human Behavior* 64: 871–880. <https://doi.org/10.1016/j.chb.2016.07.062>.
- Vermeir, I., S. Kazakova, T. Tessitore, V. Cauberghe, and H. Slabbinck. 2014. "Impact of Flow on Recognition of and Attitudes towards in-Game Brand Placements: Brand Congruence and Placement Prominence as Moderators." *International Journal of Advertising* 33 (4): 785–810. <https://doi.org/10.2501/IJA-33-4-785-810>.
- Wang, S., and H.-Y. Chou. 2019. "Effects of Game-Product Congruity on In-App Interstitial Advertising and the Moderation of Media-Context Factors." *Psychology & Marketing* 36 (3): 229–246.
- Wang, Y.-S., W.-L. Lee, and T.-H. Hsu. 2017. "Using Netnography for the Study of Role-Playing in Female Online Games: Interpretation of Situational Context Model." *Internet Research* 27 (4): 905–923. <https://doi.org/10.1108/IntR-04-2016-0111>.
- Weiger, W., J. Giertz, M. Hammerschmidt, and L. D. Hollebeek. 2025. "Blurred Lines? Disentangling the Roles of Consumers' Influencer-and Brand Engagement in Shaping Brand Performance." *Journal of Business Research* 194: 115280. <https://doi.org/10.1016/j.jbusres.2025.115280>.
- Welden, R., M. Haenlein, K. Hewett, K. Smith, and J. Hulland. 2025a. "Quest for Insights: Leveraging Data from the Video Game Ecosystem in Marketing." *Journal of the Academy of Marketing Science* 53 (4): 1135–1156. <https://doi.org/10.1007/s11747-024-01074-1>.
- Welden, R., K. Hewett, K. Yoo, M. Haenlein, K. M. Smith, K. Pauwels, P. K. Kannan, and J. Hulland. 2025b. "Leveling up Retail: How Retailers and Brands Thrive in the Video Game Ecosystem." *Journal of Retailing* 101 (4): 583–600. <https://doi.org/10.1016/j.jretai.2025.06.002>.
- Yang, M., D. R. Roskos-Ewoldsen, L. Dinu, and L. M. Arpan. 2006. "The Effectiveness of in-Game Advertising: Comparing College Students' Explicit and Implicit Memory for Brand Names." *Journal of Advertising* 35 (4): 143–152. <https://doi.org/10.2753/JOA0091-3367350410>.
- Ye, G., X. Guan, L. Hudders, Y. Xiao, and J. Li. 2025. "A Meta-Analysis of the Antecedents and Consequences of Advertising Value." *Journal of Advertising* 54 (1): 117–138. <https://doi.org/10.1080/00913367.2024.2309923>.
- Zagni, L. M., C. Rizzo, and R. Filieri. 2026. "From Intrusion to Advantage: Uncovering the Mediating Role of Perceived Benefit in Consumers' Responses to in-Game Advertising." *International Journal of Advertising*: 1–24. <https://doi.org/10.1080/02650487.2026.2689797>.