# Fake Game but Real Play: Exploring Player Motivations and Coping Strategies with Fake Games

SAM MORADZADEH, The Pennsylvania State University, USA
JEFFREY SEIHOON OH, The Pennsylvania State University, USA
XINNING GUI, The Pennsylvania State University, USA
YUBO KOU, The Pennsylvania State University, USA

Fake games are an emerging form of games characterized by misleading advertising (external referent) and perceived inauthenticity in gameplay (internal referent). While previous research has examined game authenticity, deceptive advertising, and game design, there is a lack of understanding about why players engage with fake games despite their deceptive nature and how they cope with the fakeness of these games. To address these questions, we conducted an interview study with 30 mobile game players. Through reflexive thematic analysis, we identified four motivations for playing fake games, such as curiosity and easy entertainment, and four coping mechanisms, including adaptive and reconciled play. We discuss how players uniquely interact with the fakeness of fake games and how these games form a distinct ecosystem at the intersection of digital platforms, digital marketplaces, and game developers. We conclude with implications for research and design to mitigate their impact and improve the gaming environment.

CCS Concepts:• **Human-centered computing →Human computer interaction (HCI) →Empirical studies in HCI**

Additional Key Words and Phrases: Fake game, mobile game, free-to-play, casual game, play motivation, coping strategy, interview study

**ACM Reference Format:**

Sam Moradzadeh, Jeffrey Seihoon Oh, Xinning Gui and Yubo Kou. 2025. Fake Game but Real Play: Exploring Player Motivations and Coping Strategies with Fake Games. Proc. ACM Hum.-Comput. Interact., 9, 6, Article GAMES021 (October 2025), 31 pages. https://doi.org/10.1145/3748616

## 1 Introduction

Mobile games have grown in popularity, reaching a revenue of US $19.615 billion in 2024 in the United States alone [89]. By the first quarter of 2024, 68.7% of gamers played on smartphones, surpassing PC (34.9%) and console gaming (24.4%), meaning mobile players outnumber PC and console players combined [125]. This widespread appeal is largely due to the ubiquity of mobile devices, which allow people to carry game devices in their pockets [9]. The free-to-play (F2P)

Authors' Contact Information: Sam Moradzadeh (szm6500@psu.edu), Jeffrey Seihoon Oh (jso5122@psu.edu), Xinning Gui (xinninggui@psu.edu), Yubo Kou (yubokou@psu.edu), College of Information Sciences and Technology, The Pennsylvania State University, 16802, University Park, PA, USA.

Permission to make digital or hard copies of all or part of this work for personal or classroom use is granted without fee provided that copies are not made or distributed for profit or commercial advantage and that copies bear this notice and the full citation on the first page. Copyrights for components of this work owned by others than the author(s) must be honored. Abstracting with credit is permitted. To copy otherwise, or republish, to post on servers or to redistribute to lists, requires prior specific permission and/or a fee. Request permissions from Permissions@acm.org.

ACM 2573-0142/2025/10 - GAMES021
© 2025 Copyright is held by the owner/author(s). Publication rights licensed to ACM.
https://doi.org/10.1145/3748616

model, which allows players to enjoy games without upfront costs, has driven the popularity of mobile games [54]. To generate revenue, developers rely on in-game purchases and advertisements, often leading to practices like artificial scarcity and triggering fear of missing out [139]. In such a highly competitive market, these monetization strategies have given rise to predatory monetization [69] practices and, more recently, false advertising [42]. False advertising has been used to mislead users with exaggerated claims about the game's features, graphics, or rewards. These ads entice players with promises of thrilling adventures or exciting challenges, only to deliver a vastly different experience once the game is downloaded [93], leading to what we refer to as fake games.

Fake games refer to games with an external referent of misleading advertising, often showcasing polished and exciting gameplay, and an internal referent of perceived inauthenticity, where the actual gameplay differs significantly from the advertised experience [78]. Games that are marketed with misleading promotional content that does not accurately reflect their actual gameplay, or those that remain in an unfinished state despite being presented as complete products, are commonly referred to as fake games [92]. Players often download and engage with fake games not through informed decision-making, but due to false advertising and deceit [38]. Fake games are known for their low build quality, unfinished, and underdeveloped content [36]. They frequently fail to deliver on their advertised promises, whether in terms of gameplay, narrative, or even game genre [113]. To this day, most studies surrounding fake games have focused on the external referent, particularly the deceptive patterns (also known as dark patterns) of games, rather than the games themselves or the gaming experience. For example, some studies resonate with the concept of fake games by examining deceptive patterns in advertising, such as a study on 'Fake-Vertising' [81], which explored misleading patterns like the 'pull the pin' mechanic (a puzzle feature often missing in the actual game). Another study examined deceptive patterns within mobile game ads targeting women [4], revealing portrayals of women as weak and helpless, reinforcing harmful stereotypes that misalign with the gameplay, reflecting similar deceptive practices in fake games.

To date, no study has thoroughly investigated why players download and engage with fake games. This study fills that gap by exploring the motivations behind player interactions with fake games and how they navigate their inauthentic elements, offering deeper insights into the psychological and behavioral factors sustaining their engagement. While prior research has explored motivations for playing F2P mobile games broadly [51, 77, 134], little is known about whether these motivations differ when players engage with games that turn out to be fake, those that misrepresent gameplay or functionality in advertising [92]. This study explores that distinction by examining how and why players engage with such games, and how they respond once the mismatch becomes apparent. Thus, we ask these research questions:

**RQ1:** Why do players play fake games?

**RQ2:** How do players cope with fakeness in fake games?

To explore these questions, we conducted semi-structured interviews with 30 mobile game players who had interacted with fake games. Participants discussed their motivations, perceptions of fake games, and coping strategies. In our approach to these two RQs, epistemologically speaking, we acknowledge that the term 'fake game' refers to a multifaceted phenomenon rather than a specific type, genre, or style of game. It encapsulates various industry practices, player experiences, and perceptions of deception in gaming. As an emergent concept, it requires interpretation to situate our work and engage critically with the notions of 'fake' and 'fakeness.' Thus, we employed reflexive thematic analysis that stresses how researchers' own self-awareness

and reflection impacts their interpretation of the data [12]. Our findings highlight how players engage with fake games for various reasons, often navigating their deceptive elements through adaptive strategies. Rather than simply accepting or rejecting these games, players respond along a spectrum, balancing enjoyment, skepticism, and selective participation. This ambivalence blurs the line between real and fake gameplay, revealing new dimensions of player experience. We also consider how fake games are embedded within a broader ecosystem of platforms and advertising technologies, which facilitates their circulation and visibility.

Our study contributes to the field of HCI and game studies in several ways. First, it provides empirical insights into the underlying reasons behind player interaction with fake games, further expanding our understanding of realness and fakeness in games. Second, upon realizing the fakeness of fake games, our participants employed nuanced methods and mindsets as coping mechanisms, which enhances our understanding of how players develop novel and contextualized gaming habits that have not been discussed before, contributing to psychological studies on games. Third, we offer a broader ecological view of the game industry through a multi-entity approach by examining the inter-organism interactions of each entity, contributing to the human infrastructure of HCI with a detailed case example. Finally, we present design and research implications with respect to the entities we discuss, offering a multi-scale solution to the existence of the fake game phenomenon. These contributions collectively enhance our understanding of the video game landscape and its implications for players, developers, and digital platforms.

## 2 Contextualizing Fake Games

In recent years, the mobile gaming industry has witnessed a noticeable rise in the prevalence of fake games [74]. These games are often promoted through advertisements that showcase features minimally present or entirely absent in the actual product, a practice known as fake advertising [56, 78]. Fake games have not only sparked widespread frustration among players for perceived authenticity (i.e., fakeness) upon game engagement, another defining characteristic of fake games [61], but it has also garnered the attention of regulatory bodies such as the Federal Trade Commission (FTC) [46] in the US and the Advertising Standards Authority (ASA) [87] in the UK. Both government agencies have scrutinized these practices for their potential to mislead consumers, raising important questions about advertising ethics and the integrity of mobile gaming as a whole. However, because fake games are offered for free with no upfront cost, agencies like the FTC and ASA often fall short in effectively regulating them [138]. As a result, despite growing awareness and criticism, fake advertising remains a common strategy among mobile game developers and advertisers [92].

For instance, Homescapes, a game that is primarily based on match-3 puzzle mechanics, is frequently advertised with 'pull-the-pin' puzzles that play a minor role in the game itself. This discrepancy led to a ruling by the ASA in April 2020 [124], where they determined that the ads were misleading. Another example is Hero Wars (Figure 1), which has gained criticism from players [115] for being marketed using battle puzzle mechanics, even though the core gameplay revolves around automated battles typical of idle RPGs. These examples are not isolated; they represent a broader trend within the industry where the advertised features are often exaggerated or misrepresented to attract downloads. The gap between what is advertised (external referent) and the actual product (internal referent) not only deceives potential players and impacts their gaming experience, but also contributes to a broader sense of distrust within the gaming community.

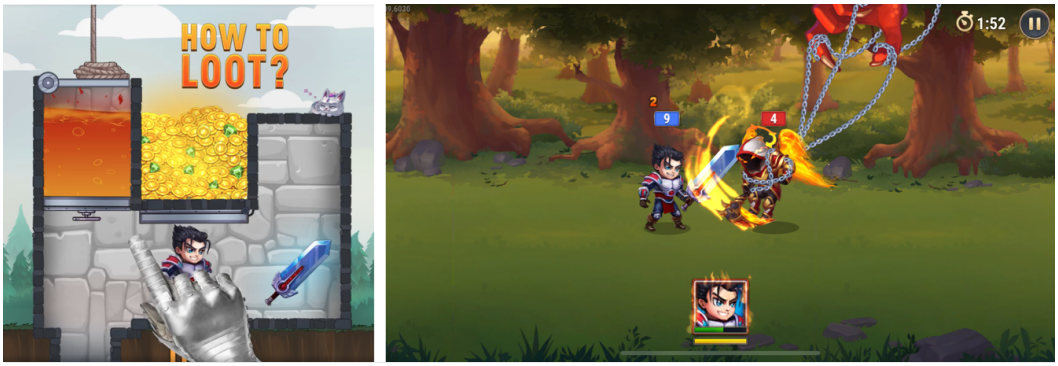



Figure 1. A comparison between the advertised game for Hero Wars, marketing it as a 'pull-the-pin' game (left), and the actual gameplay, which demonstrates an idle RPG with autoplay mechanics (right). Source: The left image is from the official company advertising, accessed through Facebook Ads Library[2] by the authors; the right image is a screenshot of the gameplay taken by the authors.

The surge in negative reviews, player backlash, and media scrutiny [82] has significantly damaged the long-term reputation of many games [26]. In response, developers have started incorporating elements from their advertisements, often under the name of 'minigames' [74] into early gameplay, attempting to create a more cohesive and balanced experience for players. This approach attempts to bridge the gap between advertisement and gameplay, but the fundamental issue of misleading advertising and the rough player experience remains unresolved. The persistence of these tactics underscores a significant challenge within the mobile gaming industry, as developers balance the desire for rapid growth with the ethical implications of their marketing strategies.

In both player discourse and popular media coverage, fake games are often dismissed as low-quality or unplayable, evoking frustration and ridicule rather than engagement [37, 63]. This aligns with broader tendencies in game studies to frame legitimacy in terms of mechanical depth, polish, and coherence, qualities that fake games seemingly lack [6, 92]. As a result, fake games are often assumed to be inferior or not worth playing, with little consideration for the nuanced and sometimes enjoyable ways players interact with them [81]. Our study challenges this assumption by examining how players actively make meaning from these experiences and engage with fake games beyond mere dissatisfaction.

## 3 Related Work

Although deceptive advertising in games has been discussed in existing literature, there is still no dedicated body of work that directly examines the fake game phenomenon as a distinct category. For this reason, we examined fake games through three strands that resemble the fake game phenomenon: game legitimacy and fakeness, game marketing and advertising, and motivations to play and coping strategies in games.

[2] The Facebook Ads Library is a publicly accessible database that provides information on all active and inactive ads running across Facebook's platforms, allowing users to view and search for advertisements by keywords, advertiser, or topics.

### 3.1 Legitimacy and Fakeness of Games

The discussion on what constitutes a legitimate (also termed as real) game versus what is considered fake has a long-standing history in game studies—not directly, but through the process of drawing a line and defining what is a game through the lens of scholars [67, 68, 121]. For instance, Consalvo and Paul [24] proposed a framework for understanding what constitutes 'not real' games. This concept can be discerned by noting when a game's legitimacy is questioned, disputed, mocked, or even dismissed. According to Consalvo and Paul [24, 25], 'not real' games can be identified by four key factors: (1) the advent of new gaming formats, such as Facebook games; (2) an obscure or unclear developer or company behind the game; (3) specific game elements, or doubts regarding its design, perceived difficulty, or length, that indicate underdevelopment; and (4) certain patterns in the game's business model, such as being free-to-play.

Perceptions of fakeness are often tied to a game's genre and how players engage with it. Hjorth and Richardson [58] observed that casual mobile games are frequently dismissed as "not real" games, reflecting a gaming hierarchy that privileges skill-intensive console or PC games. Similarly, Paavilainen et al. [100] found that players with traditional gaming backgrounds viewed social games as simplistic, likening them to toys due to perceived lower development quality and depth. However, fake games differ in that they involve a deliberate mismatch between promotional materials and gameplay, often creating a felt sense of betrayal or deception for the player. However, fake games differ in that they involve a deliberate mismatch between promotional materials and gameplay, often creating a felt sense of betrayal or deception for the player [92].

Elements associated with fakeness and questioned legitimacy in games can also be considered synonymous with scams [132]. This area connects fakeness to games that are designed not for gaming purposes, but rather as mediums for fraudulent activities, such as Ponzi schemes [133], which are more prevalent in play-to-earn (P2E) games [120] and crypto or Non-Fungible Token (NFT) [3] games. In P2E games, often structured on blockchain systems, players can earn tokens or rewards for their gameplay, which can be converted into real money [30]. For example, Mittal and Agrawal [88] explored the rise of NFTs and their associated cybercrime risks, using the Logan Paul CryptoZoo game [28] scam as a case study. They highlighted how cybercriminals exploit vulnerabilities in the NFT market using games. These examples reflect deceptive game ecosystems that parallel fake games in their exploitation of player expectations, though their primary focus is financial rather than experiential.

Lastly, fakeness has also been linked to games designed with malicious intent, such as collecting user data, exploiting device permissions, or distributing malware [119]. These games often employ deceptive tactics like "squatting," in which attackers release apps with names or package identifiers closely resembling those of popular titles to trick users [60, 103]. Researchers have categorized these threats under harms such as "backdoor" access, where malicious apps bypass standard security measures to gain control over a device [116]. For instance, more than half a million users downloaded car simulation games from Google Play that were later identified as viruses [14]. While our focus is not on cybersecurity threats per se, these examples illustrate how visual and nominal legitimacy can be weaponized to deceive players, paralleling how fake games mislead through appearance despite being functionally benign.

In summary, while prior research has examined 'not real' games, linking them to certain genres, player interactions, or scam-like behaviors, the concept of fake games is more nuanced, primarily due to the role of deceptive advertising. Although some studies point to malicious

intents like data harvesting or hacking, these alone do not define fake games. A comprehensive understanding of what makes a game fake is still lacking. Despite growing interest in game legitimacy within HCI and game studies, the player perspective remains underexplored. Our study addresses this gap by examining how players experience and interpret fake games.

### 3.2 Advertising, Marketing, and Deception

By the end of 2022, the Google Play Store featured roughly half a million mobile games [47]. Given this vast number, it is evident that effective marketing is essential for drawing in new players within the crowded mobile game market [81]. The mobile game market, with its low entry barriers for developers [40], massive user base [18], and reliance on free-to-play models [54], creates the ideal conditions for fake games to thrive [6]. These factors make mobile devices the most widely targeted medium for deceptive gaming practices [92]. The fierce competition and the need to remain relevant have led to the adoption of unethical and, in some cases, non-compliant strategies to deceptively promote games.

Mobile marketing encompasses all promotional efforts directed at consumers through mobile channels [108]. The Interactive Advertising Bureau (IAB) [34, 64] identified three types of advertisements related to games: (1) in-game advertising, (2) external game advertising, and (3) cross-promotions. The first category, in-game advertising (IGA), involves embedding products or brands directly within a digital game [83, 122]. Unlike IGA, advergames are specifically designed to promote a brand, product, service, or idea, with the goal of boosting brand awareness and driving website traffic [122]. These advergames, often casual and easy to access, are created to be engaging and offer quick rewards, making them ideal for short, frequent play sessions on devices like tablets and smartphones, perfectly suited for filling brief moments of downtime during the day.

The second common mobile game marketing practice is advertising on social media like Instagram, Facebook, and TikTok [90]. Research has demonstrated how three major mobile game companies—Rovio, Zynga, and King—expanded their games by concentrating their advertising efforts on social media [73]. This approach involves embedding brands or products within games accessible on popular social networks, such as Facebook. Players are attracted to social network gaming for a variety of reasons, including social interaction, building relationships, teamwork or competition, role-playing, and escaping from reality [122, 137].

The third mobile game marketing strategy is cross-promotion, which focuses on keeping users engaged within a company's suite of games. This tactic leverages popular, established games to promote newer titles, especially when a recent release is facing high churn rates. By displaying ads for the new game within their successful titles, developers can entice players to explore their latest offerings [111].

While HCI research has explored in-game advertising and advergames, less attention has been paid to misleading or provocative mobile game ads. Alha [4] found that ads targeting women often reinforce harmful stereotypes, portraying them as weak or helpless. In another study, Alha [6] examined unethical advertising practices, including deceptive gameplay representations and gender bias, highlighting a lack of regulation. Teymur [123] analyzed manipulative UX patterns in mobile ads, calling for more ethical, user-centered advertising. Similarly, Mago [81] escribed these tactics as 'Fake-vertising,' where fake gameplay is used to mislead players, potentially damaging trust and retention.

HCI researchers have also been interested in combating the mismatch between promotion and the actual product [117, 140]. The quest for transparency in advertising algorithms revealed a

preference for straightforward disclosures, noting that while clarity is desired, it can also lead to a critical view of algorithmic accuracy [35]. The development of tools like AdIntuition aims to unmask undisclosed advertisements on social media platforms, offering strategies for more honest content presentation [118].

In summary, although marketing and advertising, particularly in the context of social media, have been studied within HCI, the effects of deceptive advertising and its impact on players in the gaming environment have not yet been examined. Our study addresses this gap by fostering and encouraging further discussion at the intersection of HCI, gaming, and advertising.

### 3.3 Motivations to Play and Coping Strategies in Games

The construct of motivations to play [137] is critical in explaining underlying reasons on why players play fake games, and their coping strategies to the fakeness. Motivations for playing mobile games are diverse, encompassing pleasure, cognitive stimulation, and social interaction [136]. In the following, we review research on motivation to play video games and game designs that implement psychological factors influencing motivation. We will then conclude with coping strategies that players develop in games when facing various difficulties stemming from psychological drivers and game design.

From a psychological perspective, motivations to play can be categorized as either extrinsic or intrinsic [29]. Extrinsic motivation is driven by external rewards, while intrinsic motivation stems from internal desires and interests [109]. Frey and Osterloh [45] define extrinsic motivation in mobile games as driven by incentives like rewards, whereas intrinsic motivation involves personal enjoyment or fulfillment [27]. Spiel et al. [114] highlighted that games for neurodivergent players often focus on extrinsic goals, while Tyack and Mekler [127] show that self-determination theory (SDT) is frequently used in HCI research to explore intrinsic motivation in game design. These motivations compel players to engage with challenges [27], even in difficult levels [106], competitive environments [71], or the pressures of in-game social dynamics [98].

The F2P model capitalizes on external motivations by offering free access and sustaining engagement through rewards, challenges, and social interaction [5, 41, 52, 53]. These mechanisms align with both intrinsic and extrinsic motivations. Genres like casual games [91] (e.g., Candy Crush) have also been linked to addictive play, especially due to gratification, boredom, or loneliness [22]. Prior research has explored player motivations for engaging with F2P mobile games, highlighting how game design, cost structure, and platform accessibility shape user behavior. Hamari and Lehdonvirta [55] examined how reward mechanics and social influence drive players to purchase virtual goods in F2P games. Similarly, Lehdonvirta [77] identified key attributes, such as functional utility and symbolic value, that influence in-game purchase decisions. Paavilainen et al. [100] emphasized casual play, social interaction, and novelty as common reasons players are drawn to mobile games, while Wohn [134] found that convenience, relaxation, and opportunistic spending characterize many mobile gaming sessions. More recently, Hadan et al. [51] investigated deceptive design patterns in a game's transition to F2P, showing how shifts in monetization models influence player perception and motivation. These studies demonstrate that F2P games are attractive not only for their lack of upfront cost but also for how they cater to player motivations through lightweight, habitual, and often socially embedded gameplay. Our study builds on this literature by asking whether similar motivations, such as curiosity or ease of access, also drive engagement with fake games, which often adopt the F2P model while employing deceptive advertising or design patterns.

As engagement deepens, player behaviors are commodified for targeted marketing and monetization [55, 95]. This commodification is deeply rooted in psychological strategies that capitalize on external motivations, nudging players toward making in-game purchases [54, 94] or engaging with gamblified [80] mechanics like loot boxes [17], creating a loop of engagement that is difficult to break. These strategies, often intertwined with deceptive design patterns, subtly manipulate player behavior to maximize profit, frequently at the player's expense [15, 48]. Such practices can include misleading time commitments, enticing players to spend more money than intended, and leveraging social pressures, all of which significantly influence how players engage with and adapt to these games [139].

As players encounter obstacles in games, they also develop strategies to manage the associated stress and demands. This is where coping comes into play. Coping [75] involves the cognitive and behavioral efforts players use to manage internal pressures (like frustration) and external demands (such as challenging game mechanics or social expectations) during gameplay. HCI scholars and game studies have explored players' coping strategies in various situations. For example, research has shown that players cope with toxicity in esports by normalizing negative behavior or ostracizing toxic players [2]. Games also offer players a way to manage stress and emotional challenges, providing respite and support [65]. Additionally, players deal with the impact of moderation by valuing transparency, which influences their acceptance of punishments [79]. Community involvement, particularly through peer support, has been identified as a crucial coping mechanism in moderated environments [70].

Prior work on coping has drawn from psychological frameworks that examine how individuals regulate emotions and manage stress in uncertain or adverse environments. Notably, Gross's theory of emotion regulation [49] outlines strategies such as cognitive reappraisal and expressive suppression, while Lazarus and Folkman's transactional model of stress and coping [75] distinguishes between problem-focused and emotion-focused coping strategies. In game studies, there is a growing interest in applying these psychological constructs to understand player experiences. For instance, a systematic review by Beres et al. [10] examined the role of emotions and emotion regulation in esports performance, highlighting coping strategies employed by players to manage competitive stress. Similarly, Mirhadi et al. [86] explored how different game aspects support various coping strategies, including emotion-focused, avoidance, and meaning-focused coping, demonstrating the multifaceted ways players engage with games to manage stress.

In summary, while existing literature offers substantial insights into player motivations and coping mechanisms, the unique challenges of fake games—particularly their deceptive design—remain underexplored. The concept of fakeness may challenge established theories, making it essential to study these phenomena within the context of fake games. This approach can deepen our understanding of how players navigate the blurred lines between genuine gameplay and deception, enhancing theories of player experience in HCI and game studies.

## 4 Methods

We conducted semi-structured interviews with 30 mobile game players to understand their underlying reasons for playing fake games, and how they cope with fakeness in fake games. For data analysis, we applied a reflexive thematic analysis [12] approach to identify and interpret key themes emerging from the participants' responses. The interview protocol for the study received approval from the university's IRB office prior to the start of data collection.

### 4.1 Data Collection

We focused on recruiting mobile game players (both iOS or Android) because fake games are particularly prevalent in the mobile game industry due to the accessibility and reach of mobile platforms. We recruited our participants through three main channels[3] to ensure a diverse sample and maximize reach. These included: 1) recruitment messages posted on our university and college email lists and on Microsoft's employee communication platform, Viva Engage (n=22), the first and second authors' personal contacts (n=6), and snowball sampling (n=2).

All the recruitment channels followed the same protocol: each message included the requirements of 1) being 18 years old or older, 2) being fluent in English, 3) currently residing in the US, 4) having seen a mobile game advertisement on social media, and 5) having downloaded and played a game based on that advertisement. Each message contained a link to a survey, which participants were required to fill out to provide more information on their experiences. This screening survey served both as eligibility confirmation and as a means to gather more details about their experiences, such as their point of interaction with the games (e.g., On which social media platform did you see the mobile game advertisement?), including a text entry to specify a particular platform or environment, their primary device (e.g., What is your primary device for playing mobile games?), and the game they played (e.g., What is the name of the game you downloaded and played based on the advertisement?). Importantly, the screening survey did not mention fake games, deception, or quality of experience. Instead, it asked descriptive, open-ended questions to avoid priming participants toward negative responses. This allowed us to capture a range of gameplay experiences, including positive, neutral, and negative ones.

We then used this information to screen and recruit participants who had the most varied experiences and encountered nuanced platforms and games. For example, a participant stated in the screening survey, 'There are a lot of fake games, but I usually delete them after a few days.' This response indicated a broader experience with fake games, and thus, we moved forward to the interview stage with them. To add another layer of screening and rigor in ensuring that invited participants had experience with and engagement in fake games, all interviews began with questions about the games they mentioned in the screening survey. We then drew parallels between the characteristics of fake games [92] (e.g. Gameplay Disguise) and their experiences, and only after confirming that they were pinpointing fake games did we continue with the interview. None of the participants were screened out during this stage.

We interviewed 30 participants, and their detailed experiences and demographic information can be found in Table 1. Ages ranged from 18 to 37 years (median = 25). Of the participants, 11 identified as male, 15 identified as female, 2 identified as non-binary or gender diverse, and 2 did not disclose. It is important to note that the games listed in Table 1 are self-reported by players and reflect their unique experiences—from engaging with advertisements on social media to downloading and playing the game. As authors, we do not claim that all of these games are necessarily fake, nor did we use these titles solely to recruit players. Rather, we are presenting the players' perspectives and making sense of their experiences as they were shared with us.

[3] We explored other recruitment channels, such as posting on mainstream social media subreddits like r/TikTok, r/Instagram, r/YouTube, r/Twitter, and r/Facebook. Although we sought permission from moderators to comply with subreddit policies [102] we were ultimately not granted approval to post recruitment messages.

Table 1. Participants' Primary Device Usage, Advertisement Interaction Placement, and Downloaded Mobile Games.

| P# | Age | Gender | Race | OS | Point of interaction | Mobile Games |
|---|---|---|---|---|---|---|
| 1 | 18-22 | Male | Asian | iOS | TikTok | Cat's Kitchen |
| 2 | 23-27 | Female | Asian | iOS | Instagram, TikTok | Love Nikki |
| 3 | 23-27 | Male | Asian, | Android | YouTube | Azure Lane |
| 4 | 23-27 | Male | Asian | Android | YouTube, Facebook | Fire Emblem Heroes |
| 5 | 23-27 | Female | Hispanic or Latino/a/x | iOS | TikTok | Mobile Legends |
| 6 | NA | NA | NA | Android | YouTube | Genshin Impact |
| 7 | 23-27 | Male | Asian | Android | Instagram | Evony |
| 8 | 18-22 | Male | White | iOS | Instagram | Invincible: Guarding the Globe |
| 9 | 28-32 | Female | Asian | iOS | Facebook | Choices, Merge Dragon |
| 10 | 23-27 | Female | Indigenous/ Hispanic or Latino/a/x | iOS | YouTube | Soap Cutting, I Peel Good, Ink Inc - Tattoo Drawing, Icing on The Cake |
| 11 | NA | NA | NA | iOS | Instagram | Flappy Dunk, Paper.io2, State.io |
| 12 | 18-22 | Non-binary or gender diverse | White | Android | Instagram, TikTok, YouTube, Reddit | Albion, Tap Clickers, Survivor.io |
| 13 | 18-22 | Female | Asian | iOS | Instagram | Project Makeover |
| 14 | 18-22 | Female | Asian | Android | Instagram, TikTok | Brain Puzzle Queen, My Cafe, BitLife, Chapters |
| 15 | 33-37 | Female | White | iOS | Instagram | Water Sort, Tap Away |
| 16 | 23-27 | Female | Middle Eastern or North African | iOS | Twitter (X), TikTok | Project Makeover |
| 17 | 33-37 | Male | Hispanic or Latino/a/x, White | Android | Snapchat | Township |
| 18 | 23-27 | Non-binary or gender diverse | White | Android | Facebook, Instagram | Homescapes |
| 19 | 28-32 | Female | White | iOS | Facebook, Twitter (X) | Township |
| 20 | 28-32 | Male | Middle Eastern or North African | Android | Twitter (X), Instagram | Block Blast, Wood Screw Puzzle |
| 21 | 23-27 | Female | White | iOS | Instagram | Dragonvale, Fishdom, Nonogram, Get Color |
| 22 | 33-37 | Female | White | iOS | Twitter (X), YouTube | Township |
| 23 | 18-22 | Male | Asian | iOS | Instagram, YouTube, in-game | Cup Heroes, Skyline Bowling, Rapid Reload, Bullet Army Run, Twisty Rails, Stilts Run |

| | | | | | | |
|---|---|---|---|---|---|---|
| 24 | 33-37 | Female | Hispanic or Latino/a/x | Android | Instagram, in-game | Hole.io |
| 25 | 23-27 | Male | Asian | iOS | Facebook, Instagram, YouTube | Epic War: Merge Dragon, Dragon Ball Legends |
| 26 | 33-37 | Female | White | iOS | Facebook | MonopolyGo |
| 27 | 18-22 | Female | Hispanic or Latino/a/x | iOS | Instagram, YouTube | Project Makeover, Slither.io, Wordscapes, Township |
| 28 | 18-22 | Female | White | iOS | Instagram, YouTube | MonopolyGo |
| 29 | 28-32 | Male | Asian | Android | Facebook, Instagram, YouTube | Zenless Zero Zone, Hero Wars, Octopath Traveler, Epic Seven |
| 30 | 23-27 | Male | Asian | Android | Facebook | Hero Wars |

To minimize bias in sample selection and maintain an open-ended approach in observing the phenomenon of fake games, we avoided using the term ‘fake’ in the interview protocol design. This means that all discussions, experiences, and even definitions of fake games during the interview emerged naturally through probing, without any questions explicitly including the term ‘fake.’ This approach prevents us from structuring everything, including the recruitment methods and questions, around directly asking players about their experience with 'fake games.' Instead, by treating 'fake games' as a fluid, emergent category rather than an objective classification, we allow definitions and perceptions to arise organically through discussion.

The first (n=15) and second (n=15) authors conducted interviews in English, all recorded via Zoom and done remotely. The interviews were video and audio recorded, transcribed verbatim, and stored in a password-protected database. Using semi-structured interviews [1] allowed us to ask open-ended questions and probe into unique experiences. For example, when a participant mentioned, ‘I hate this garbage game,’ we followed up with the question, ‘What do you mean by garbage game?’ to naturally explore their experiences with fake games without following a rigid sequence. We conducted all interviews between June and July 2024, with each session lasting between 30-65 minutes (median = 36 minutes, average = 37.56 minutes). Upon completion, participants received a $20 Amazon gift card as compensation.

### 4.2 Data Analysis

We conducted a reflexive thematic analysis, applying an iterative approach to coding the data and developing themes from a bottom-up perspective. Following Braun and Clarke’s six-phase framework [11–13], the first two authors who conducted the interviews engaged with the data, reviewing both recordings and transcripts to gain an initial understanding of our participants' motivations for playing fake games and their coping mechanisms with perceived fakeness. Each of the first two authors independently analyzed 30 transcripts, identifying and annotating excerpts and quotes that were relevant and meaningful to our study.

Upon completing the initial coding process, the first two authors met to discuss their findings, resolve any coding disagreements, and refine ambiguous or overlapping codes. The research team then met collectively to further review and adjust the codes as necessary, ultimately arriving at a final set of 954 distinct initial codes. Following the initial coding, the first two authors individually

transferred all codes into Miro[4] using sticky notes, where they organized and grouped similar codes to generate preliminary themes. This was an iterative process in which the authors continuously refined the themes to ensure they were both cohesive and distinct.

To ensure that participants' experiences specifically related to fake games rather than general mobile or casual games, we applied a rigorous approach during the data analysis and initial coding phase. We verified that participants' responses aligned with the characteristics of fake games as defined by Moradzadeh and Kou [92]. For example, in the quote, "I downloaded that game because in the ads they showed a dramatic girl looking for help, almost like a soap opera, but then I deleted it because I don't like shooting [gameplay] games," the player describes elements of gameplay disguise and narrative pretense [92], which are key characteristics of fake games. By identifying such markers, we ensured that the initial codes accurately represented responses related to fake games, thereby addressing our RQs appropriately.

While we primarily followed Braun and Clarke's reflexive thematic analysis approach [12], we were conceptually inspired by psychological coping frameworks, such as emotion regulation and stress coping strategies, as articulated by Gross [49] and Lazarus and Folkman [75]. These frameworks were not used deductively in our analysis but helped sensitize the authors to interpret certain coping behaviors, such as withdrawal, multitasking, or rationalization, as responses to stressors or dissonance in gameplay. This inspiration remained at the level of interpretive awareness rather than a prescriptive coding framework.

Subsequently, the research team, comprising four members, including the first and second authors who also conducted the interviews, engaged in an iterative, collaborative process to refine and consolidate the initial coding structure. All four team members served as observers and coders during the analysis, contributing to the identification and organization of emerging patterns into thematic formations aligned with the two research questions. Through multiple rounds of discussion and refinement, the team reviewed candidate themes to ensure they accurately reflected the dataset and provided a comprehensive interpretation. This process resulted in a thematic map with four overarching themes identified for each RQ. As an example of how initial codes were categorized into one of the overarching themes, the quote, "I play crappy games to relax after [working in the] lab, when I come home, before sleeping, or if I get bored and am waiting for someone," was initially coded under the theme "Gaming on downtime." After discussion, we agreed that, although the participant appears to play mobile games during downtimes, their reasoning for playing, through the lens of the player, is rooted in their enjoyment of games that deliver fast, enjoyable experiences, providing instant fun without requiring long-term commitment. Thus, we placed it under the sub-theme "Quick Fun" and the overarching theme "Easy Entertainment." Once the themes were set, the team proceeded with defining and naming them to specify and differentiate them. Lastly, the team initiated the writing process, integrating the analysis with selected data excerpts to construct a clear and cohesive narrative. To protect participants' privacy [110], all identifying information was removed or anonymized when reporting the findings.

[4] (www.miro.com) Miro is an online collaborative whiteboard platform that allows teams to work together in real-time, visualizing ideas, planning projects, and organizing information on a shared digital canvas.

## 5 Findings

In this section, we first explain four main drivers through which our participants engage with and play fake games (RQ1). Second, we present four coping strategies our participants pick up when encountering fakeness in fake games (RQ2).

Table 2. Summary of Findings and Coding Schema for RQ1 and RQ2

| Category | Theme | Description | Example Subcodes |
|---|---|---|---|
| **Motivations** | *Curiosity* | Motivation driven by spontaneous discovery and the allure of novel game concepts. | Spontaneous finds; Indie appeal; Unique gameplay mechanics |
| | *Easy Entertainment* | Desire for quick, low-effort entertainment with minimal cognitive demand. | Idle game mechanics; Hyper-casual design; Brain-rot play |
| | *Familiar Appeal* | Attraction to games that evoke nostalgia or mimic popular franchises. | Nostalgic aesthetics; IP mimicry; Franchise resemblance |
| | *Investment Calculus* | Engagement based on a low-risk mindset, including trial-and-error downloads and minimal cost evaluation. | Playable ads; Free-to-try logic; Low-investment exploration |
| **Coping Strategies** | *Adaptive Play* | Players adjust their gameplay to deal with intrusive ads and misleading content. | Airplane mode, Ad evasion, Multitasking, Background play |
| | *Reconciled Play* | Players rationalize or accept flaws in fake games to continue engaging. | Rationalizing flaws, Second chances, Enjoying partial value |
| | *Withdrawal* | Players gradually or immediately disengage from fake games due to unmet expectations. | Soft drop, Uninstalling, Player churn |
| | *Proactive Avoidance* | Players take proactive steps to avoid fake games before engaging with them. | Checking reviews, Download size scrutiny, Privacy caution |

### 5.1 RQ1: Why Do Players Play Fake Games?

Our participants highlighted four main drivers for engaging with and playing fake games on their mobile devices: curiosity, easy entertainment, familiar appeal, and investment calculus.

*5.1.1 Curiosity.* Curiosity explains the players' innate motivation [19, 127] to explore and discover new games. We found two underlying motivations that drive the curiosity of our players to download and play fake games: unexpected discoveries, referred to as spontaneous finds, and the appeal of novel concepts, innovative game concepts.

Players enjoy discovering new games in unexpected places, like social media (e.g., Snapchat and TikTok), streaming services (e.g., Netflix and Amazon Prime), or even within other games and apps (in-game ads). These unanticipated discoveries pique players' curiosity, prompting them to explore games they might not have initially sought out. With fake games, this curiosity is frequently sparked by ads that are designed to be misleading, strategically placed on platforms where players might not expect to find games, making them appear more legitimate and worthwhile. For example, one participant described:

> "I saw a game ad in one of the Duolingo ads and I thought it's a fun game [...] I wanted to try [the game] because it looked fun and I played it for quite a while actually." (P20)

P20's experience of discovering games through unconventional channels—in this case, a language learning app— illustrates how players are drawn to the novelty of encountering game ads within familiar, non-gaming environments. These ads often present a polished, exciting version of the game, but the actual gameplay can differ significantly, as P20 continued: "But [the game] got repetitive and [levels] got too similar," a common trait of fake games. Spontaneous finds go beyond just one medium: "I'm watching a football game with my family and I'll see, like a [game like] Candy Crush advertised" (P8). These unexpected contexts initially engage players, who are drawn to the ad placement and the potential for a novel experience, often without fully recognizing early indicators that the game may not align with the advertised expectations.

In addition to these spontaneous finds, players are motivated by the desire to explore innovative game concepts. The appeal of originality and new gameplay mechanics encourages them to try games that offer distinct experiences compared to their usual gaming habits. One participant highlighted how the variety in gameplay styles across different fake games sustained their interest:

> "Oh I have several fake games because none of [the ones I kept] are similar. They're all different. They have their own unique points. [For example,] Skyline Bowling is bowling. Rapid Reload is a shooting game. Bullet Army is just going left and right." (P23)

Players' attraction to innovative concepts is evident through various game elements such as game mechanics, as noted by P23. Beyond these aspects, players are also drawn to novel game concepts, often perceiving them as products of indie developers (i.e., small, independent game creators [43, 44]). This curiosity leads them to explore fake games, believing they may offer a fresh, independent perspective: "Sometimes I sort by new releases [on Google Play] and look for games with fresh graphics, especially from indie developers." (P30). For P30, the appeal is in both the innovative graphics and the perceived mindset of the developers. This pursuit of novelty often leads to engagement with games that promise innovation but deliver a subpar or deceptive experience, revealing the gap between expectation and reality.

*5.1.2 Easy entertainment.* Players seek quick and effortless entertainment, often turning to games that promise immediate satisfaction with minimal effort or commitment. The appeal of instant rewards makes these games attractive, even if they later discover the games might not be entirely authentic. This easy entertainment, driven by quick fun and simplicity, explains why players engage with fake games, as they offer the quick gratification players seek.

For many players, mobile games are a convenient way to fill small pockets of free time with quick bursts of entertainment. These games, particularly fake games, are appealing during moments of downtime, such as commuting or waiting, because they offer instant gratification without deep engagement. One participant shared how they turn to mobile games during idle moments:

> "It's not a priority. It's more like when you're watching TV or waiting for the bus, or even when you're on the bus. It's just a game to pull up on your phone doesn't matter if fake." (P7)

These bursts, known as dopamine rushes [126], are mostly shown to be entangled with mobile phones [99], which, as P7 noted, can be played in different scenarios. We found that these quick bursts of fun, resemble certain mobile genres, like idle games (i.e., games that progress with minimal player interaction [7]): "I'll go look for those idle games that you just leave [the game] on, and it continues even though they're fake" (P1). The ease with which players can dip in and

out of these games makes them ideal for sporadic play sessions, where the goal is not deep engagement but rather a quick, fun distraction.

In addition to games quick appeal, the simplicity of fake games is another major draw. Players are often attracted to games with easy-to-understand mechanics that allow them to jump in and start playing right away. The minimal learning curve is particularly important when players are looking for something straightforward and low-effort to pass the time. One participant described their preference for simple puzzle games as a way to engage their mind without requiring too much focus:

> "I like them because it's kind of like a brain rot game, but not completely. I'm exercising some part of my brain while I'm bored or waiting for something, just to kill some time. The puzzle aspect [of the game] is fun." (P2)

Players like P2 find that the simplicity of fake game design caters to their desire for low-effort entertainment. We found this simplicity is often associated with certain game genres such as casual games (i.e., games that are easy to learn and play with minimal commitment [33]) or the more recent emergence of hyper-casual games (i.e., games focusing on intuitive gameplay and basic actions like tapping or swiping [62]). Participants also linked simplicity to stress relief: "I'm totally obsessed with Homescapes; it's just such an easy and simple game to play [...] there's no stress to it" (P18). Whether seeking mental stimulation through fake games or engaging in idle or casual games that require minimal interaction, players prioritize easy, accessible fun that fits seamlessly into their routines. despite the games' often deceptive simplicity.

While the initial fakeness may fade once players understand the game's true nature, its impact still shapes how they frame and engage with the experience. This highlights fake games as an evolving perception rather than a fixed genre label. This preference for quick, simple entertainment may also explain why players are inclined to engage with fake games. These games often fulfill the desire for immediate gratification and low-stakes enjoyment, even if they lack depth or long-term value. Players may overlook these shortcomings in favor of the accessible and easy fun these games offer, particularly when their primary goal is to pass the time in a light and enjoyable manner.

*5.1.3 Familiar Appeal.* Familiar Appeal encompasses the players' attraction to games that evoke a sense of familiarity through two factors: nostalgia and popular titles: nostalgia refers to the players' connection to past gaming experiences, where they seek out games that remind them of well-loved titles from their earlier gaming days. Popular Titles, on the other hand, pertain to games that resemble well-known, widely recognized titles. This theme explains why players are drawn to fake games that either bring back memories of their favorite games or mimic the characteristics of popular, established franchises they already enjoy.

Players are drawn to fake games because they evoke cherished memories of past gaming experiences, offering a sense of comfort and nostalgia. This familiarity often outweighs concerns about the game's fakeness.

> "I thought [the actual game] was a little bit different [from the ad]. It wasn't like the ad was showing, but I was like, OK. Let's give this a shot. [...] Honestly, it reminded me Sim City, so there was that nostalgia factor too. That's why I said this is kind of cool, and I just kept playing." (P17)

Nostalgia can transform a player's initial uncertainty into sustained interest, even in the context of fake games. For P17, the reminder of a past favorite like Sim City was enough to keep them engaged, even when the game differed from what the advertisement promised. This

demonstrates how nostalgia can motivate players to continue exploring a fake game, despite initial disappointments.

Players are attracted to fake games that remind them of popular, well-known titles because they enjoy the familiarity these titles offer. Unlike nostalgia, which is rooted in personal memories of past gaming experiences, this familiarity stems from the recognition of well-established characters or franchises. They seek out these games expecting to experience elements they have enjoyed in those franchises. P23's perspective illustrates this:

> "If the ad shows a well-made Captain America with his shield, I'm downloading it. I'd give it a try if [the game] lets you become Captain America or Iron Man." (P23)

The appeal of popular franchises in fake games lies in their ability to project players a familiar and high-quality experience. For P23, the chance to play as Captain America or Iron Man, especially when the characters are advertised as well-made, is a strong incentive to try the game. This demonstrates how fake games leverage the recognition of familiar elements from well-known titles to capture players' interest, even if the overall quality may not match their expectations.

*5.1.4 Investment Calculus.* Investment calculus captures how players describe their low-commitment approach to trying fake games, often justifying their engagement by highlighting the minimal time or financial effort required. This calculus serves as a motivation when players perceive that the benefits—such as quick, minimal enjoyment—outweigh the costs, whether financial or in terms of time. This process includes both experimentation, where players are motivated by the opportunity to explore new games with minimal effort to install and uninstall, and cost-conscious play, where the free or low-cost nature of the game drives engagement. Even when aware of a game's fakeness, players may still choose to play if the perceived benefits justify the minimal effort required.

Players approach fake games with an experimental mindset, often prompted by interactive or playable ads (i.e., ads that allow users to try a portion of the game before downloading [59]). This experimentation reflects a pragmatic approach, allowing players to evaluate whether a fake game meets their expectations without requiring a significant investment of time or money. Players engage in this process knowing they can readily abandon the game if it fails to satisfy their criteria. Beyond merely testing the fake game, players see the experimentation itself as part of the gaming experience, valuing the trial-and-error process as a unique and engaging way to explore new games.

> "I don't [check reviews]. No, the game seemed fun [so I downloaded it]. I just wanted to play it. I didn't need to [check reviews] because it wasn't an important decision. I wasn't going to pay anything. [...] I have done this before. I downloaded so many fake games that didn't turn out as they seemed in the ads, so I deleted them right away. It's OK; I just try it. It's a trial and error [process]. [It's] experiments, more or less." (P20)

Playable ads play a significant role in this experimental approach, offering players a brief preview of the game's gameplay. Players like P20 do not feel the need to check reviews because the ads themselves serve as an initial test, allowing them to gauge whether the game is worth their time. As P19 explains, "There is a [free trial game in the ad] for around 20-30 seconds before skipping it. [But] mostly, it is not the same as the game" (P19). These ads often showcase the easiest or most entertaining parts of the game, enticing players to download it even if the full game requires months of playing to reach the advertised content. This approach highlights the

low-risk nature of experimenting with fake games, where the quick, trial-and-error process becomes an integral part of the fake gaming experience.

Players prioritize free or low-cost games, which is particularly relevant in the context of fake games, as these are often marketed as free-to-play. Some, like P24, are shocked by others' spending: “I see people spend like $700, and I say, are you crazy?” The appeal of these games lies in their minimal financial investment, even if it means sacrificing aspects like quality or in-game purchases. This strategy allows players to explore new games without significant risk, making them more inclined to engage with fake games that promise affordable or free entertainment.

> “I was making fun of my friends who like playing these kinds of fake games, and now I'm kind of addicted to this game. [...] I think the most important part for me is if it's free or not, so that's why I just see those fake ads and think that it's OK; there's nothing [I need to pay for], no subscription, so I downloaded it.” (P22)

Prioritizing free or low-cost games allows players to justify engaging with fake games despite their known shortcomings. As P22 notes, the absence of financial commitment, such as subscriptions or in-game purchases, makes it easier to disregard the game's fakeness. This cost-conscious mindset encourages players to download and play these games, placing higher value on the accessibility of free entertainment over potential compromises in quality or authenticity.

### 5.2 RQ2: How Do Players Cope with Fakeness in Fake Games?

We explored why players play fake games in RQ1. We now turn to the challenges that arise once the game's fakeness becomes apparent. As players navigate these challenges, they adopt various strategies to cope with the fakeness. Our participants highlighted four main coping strategies they use when encountering fakeness in fake games: adaptive play, reconciled play, withdrawal, and proactive avoidance.

*5.2.1 Adaptive play.* Adaptive play describes how players actively cope with the inherent fakeness in fake games by adjusting their gaming habits. Rather than allowing intrusive ads or misleading content to disrupt their experience, players take control by employing strategies specifically tailored to navigate the fakeness of fake games. These behaviors align with problem-focused coping strategies [75], where individuals attempt to change the situation causing distress. This theme highlights the resourcefulness and flexibility players demonstrate to maintain an enjoyable gaming experience, even when dealing with the fakeness nature of fake games.

Players manage the intrusiveness of fake games by finding ways to maintain an enjoyable experience despite the frequent interruptions. One common strategy is ad evasion, where players turn on airplane mode or go offline to bypass the excessive ads that can significantly detract from gameplay. This allows them to enjoy the game without the constant disruptions that fake games typically impose. As P15 explains, "Fake games are so annoying [to play]. So I usually play them on airplane mode so that the ads won't load. [...] It tries to load [the ads], but it just won't work. So then the game will keep going." This form of technical adjustment echoes Gross’s concept of situation modification [49], where users proactively alter the external environment to reduce emotional strain. By strategically evading ads, players mitigate one of the most frustrating aspects of fake games—intrusive ad runs—ensuring uninterrupted gameplay.

In addition to ad evasion, players also cope with the frustrations of fake games by multitasking. When faced with interruptions like ads or long wait times, players engage in multiple activities simultaneously, such as switching between different games, using mobile games as background activities, or balancing gameplay with social media browsing. This multitasking approach helps

players manage the shortcomings of fake games, allowing them to stay engaged with the game while fitting it seamlessly into their daily routines. As P23 describes, "It was so annoying to play fake games to a point where [the game] is just sitting on my phone now. So whenever I'm bored with the other games, I go back to that fake game. But then again, I get ads and I go back to other games." Through multitasking, players adapt their playstyle to minimize frustration and maintain a level of enjoyment, even when the game itself is flawed.

*5.2.2 Reconciled Play.* Reconciled play describes how players cope with the fakeness of fake games by rationalizing or coming to terms with the game's flaws. This approach aligns with cognitive coping strategies commonly found in psychology, where individuals alter their perception of a situation to reduce discomfort [21]. Building on this psychological factor, we found that after recognizing misleading elements or inauthenticity, players consciously decide to overlook the fakeness, focusing instead on the aspects of the game they find enjoyable. This theme explores how players actively reconcile their initial disappointment with the game's shortcomings, allowing them to continue engaging with the game while managing their expectations.

Players cope with the disappointment of fake games by rationalizing that the game may still hold value, often giving it a second chance in hopes of improvement. Players may remove the game from their devices initially but continue to check for updates, ready to give it another try if enhancements are made. As P20 describes, "For a long time, that was the only game I checked for updates on, even after I had removed it from my phone. If the game had new updates, I would have downloaded it again." This behavior reflects how players manage their disappointment by maintaining a sense of potential in the game's future updates.

In other cases, players choose to focus on the enjoyable aspects of the game, consciously overlooking its inauthentic elements if the core gameplay is satisfying enough. This approach involves cognitive coping mechanisms, where players selectively attend to the positive elements to minimize the impact of the game's flaws. P29 captures this mindset: "It's a fake game, [ads] mislead many players to download it and play, but this game itself is not bad, the story is good. […] it's not that horrible." By concentrating on what they find enjoyable, players can continue to engage with the game despite the discrepancies (i.e., fakeness) nature.

*5.2.3 Withdrawal.* Withdrawal explains how players cope with fakeness in fake games by gradually or abruptly disengaging when their expectations are not met. This theme focuses on the emotional journey from initial interest to eventual disinterest or frustration, leading to reduced engagement or complete abandonment of the game as a coping mechanism. This aligns with classic avoidance-oriented coping strategies [75], in which individuals reduce exposure to a stressor rather than directly confronting or reframing it.

One form of withdrawal is the gradual loss of interest, often referred to as a 'soft drop.' As players encounter repetitive gameplay, excessive ads, or a lack of new challenges, their engagement diminishes over time. This slow disengagement allows players to cope with their disappointment by gradually reducing their playtime until they eventually stop playing altogether. As P14 describes, "I just try and keep going even after finding it's another fake game, but if it bothers me too much or if it's too difficult where I have to, like, use a hint [by making an in-game purchase] every time, I just stop playing. […] I still have it installed, but I don't play it much anymore."

Another approach to withdrawal is the immediate removal of the game. When players quickly realize that a game does not meet their standards or has misled them, they often choose to uninstall it right away. This behavior, known as player churn (i.e., players leaving the game after

installation, never to return [105, 135]), represents a critical moment where players decide to disengage entirely from a game, reflecting their frustration and dissatisfaction. Our findings further indicate that this decisive action typically follows a sharp sense of disappointment, leading to a strong emotional response and a clear decision to disengage. P11 illustrates this reaction: "[I saw an ad which was a little guy with a gun, and then you go. It's either division or multiplication to multiply the number of guys you have shooting at the target and stuff like that. [...] I downloaded the game once, didn't see what I expected, so I deleted it and just ignored every other ad that came to me regarding the same topic because they're all fake. [I] just got off." This immediate withdrawal underscores how players cope with the fakeness of fake games by quickly cutting ties with those that fail to deliver.

*5.2.4 Proactive Avoidance.* Proactive avoidance describes how players take deliberate and informed actions to protect themselves from the fakeness of fake games. By developing and applying specific precautionary measures, players actively work to avoid being misled, ensuring a safer and more satisfying gaming experience. This strategy resembles anticipatory coping, where individuals take preventive action before a stressor is encountered [75].

As part of their coping strategy, players meticulously check metadata, such as user reviews and ratings, before downloading games. This proactive behavior is a direct response to the deceptive nature of fake games, allowing players to identify potential red flags in advance. By focusing on reviews that reveal issues like excessive ads, bugs, or misleading content, and by remaining skeptical of overly positive reviews that might be fake, players protect themselves from disappointment. As P24 explains, "I always check reviews. If it has like 3.0 stars, then maybe it's going to be a waste of time and being fake, or it has a lot of bugs." Through this careful examination, players avoid games that do not meet their standards, ensuring they do not waste time on games that are likely to disappoint.

Players' heightened caution around privacy and security emerges as a response to the deceptive and intrusive nature of fake games. To cope with these risks, players become more vigilant, carefully scrutinizing permissions and download sizes that could signal hidden data collection. For instance, P25 mentioned, "I faced a privacy issue in a copycat Dragon Ball game when I was downloading for a long time and it was 20-30 GB. [...] It felt weird because 20 GB was too much for a simple game." This vigilance leads players to limit their engagement with new games, reducing their exposure to potential privacy violations. As P24 noted, "My playing has changed over time. I realized companies use our information and sell it. So then I started to be a little bit more cautious and download less. [...] The user information is the product, not really the game." By adopting these protective behaviors, players effectively manage the risks associated with fake games, ensuring that their personal data remains secure.

## 6 Discussion

Our findings reveal four underlying reasons why players play fake games: curiosity, easy entertainment, familiar appeal, and investment calculus. We also identified four coping strategies that players use to navigate the fakeness of these games: adaptive play, reconciled play, withdrawal, and proactive avoidance. In the following, we reflect on the broader existence of fake games within the video game industry, considering the roles of multiple stakeholders, including players, game developers, and digital platforms like mobile marketplaces and social media. We offer insights and implications for both design and research.

### 6.1 Playing the Fakeness in Fake Games

Players' increasing engagement with low build quality, fake games, even when aware of their fakeness, challenges traditional views on the importance of authenticity in gaming. As noted in the background, fake games are often dismissed as unworthy of engagement. However, our findings reveal that players can still derive satisfaction from these games, even when fully aware of their fakeness. While previous research [24, 58, 100] has emphasized depth and complexity as defining features of 'real games,' our findings suggest a shift in player priorities. Players engage with fake games for immediate gratification, navigating the blurred boundaries between enjoyment and frustration. This behavior aligns with theoretical definition of video games such as Juul's [67, 68], who describes games as rule-based systems with variable outcomes and player engagement. While Juul's definition primarily emphasizes formal structures like rule-based systems and variable outcomes, our findings extend this by suggesting that legitimacy (or 'gameness,' as Consalvo and Paul [24] pointed out) in gaming is not strictly tied to the game mechanics or measurable results. Instead, the focus shifts to the player's personal experience, where ease of access, instant gratification, and casual engagement outweigh concerns about authenticity.

In this evolving landscape, the definition of a real game becomes more fluid, as long as players derive enjoyment, regardless of the game's origin or quality. This raises important questions about how we categorize gaming experiences moving forward. Should fakeness and legitimacy in gaming be redefined based on player satisfaction, even if that satisfaction comes from fake or low-quality games? By focusing more on player experience rather than the technical merits of a game, we may need to broaden our understanding of what constitutes 'real' versus 'fake' in game studies. This behavior mirrors a broader industry trend of releasing 'half-baked' games [129], such as *Cyberpunk 2077*, where companies rush products to market before they are fully developed, bypassing traditional development phases like alpha and beta. This practice has led players to lower their expectations over time [101]. Similarly, our findings suggest that players' perception of fakeness in fake games has become convoluted and often mixed, where enjoyment and dissatisfaction coexist. This coexistence of enjoyment and dissatisfaction is largely due to the diverse perceptions of gaming experience and value.

While fake games share structural characteristics with broader F2P models, such as free access and ad-driven discovery [52, 54, 59], our findings suggest that players' engagement with them cannot be fully explained by general F2P motivations like casual play, social interaction, and novelty [100] alone. Rather, fake games invite players to interact with fakeness in ways that are uniquely affective and ambivalent. For instance, the theme of familiar appeal illustrates how players willingly engage with fake games that evoke nostalgia or mimic popular franchises, even when they recognize the underlying deception. As P17 noted, the game reminded them of Sim City, prompting continued play despite its misalignment with the advertised content. Similarly, P23 described being drawn to a fake game because the ad featured Captain America, highlighting how recognizable IPs can function as emotional anchors. These examples suggest that fakeness is not merely tolerated but becomes part of the appeal when wrapped in familiarity. In this sense, players are not only navigating deception, they are actively playing with it, finding moments of enjoyment within the tension between expectation and reality. This complicates conventional distinctions between authentic and deceptive gameplay, extending our understanding of how player motivation [51, 77, 134] operates in contexts of misrepresentation.

Players perceive fake games in diverse ways, leading to a variety of coping strategies that allow them to engage with these games. Our participants employed varied terminologies to describe

fake games (e.g., brain rot games), reflecting the wide range of expectations and perceptions these games evoke. While previous studies on coping strategies in video games [2, 65] have often focused on negative impacts and avoidance behaviors, particularly in stressful or high-pressure environments, our findings reveal a more nuanced picture: participants not only cope with the deceptive elements but also derive genuine enjoyment from certain aspects of these games, enriching traditional models of coping by highlighting the complexity of player perception and experience.

While previous studies [34, 64] around marketing and advertising have often considered users as relatively passive consumers, our research reveals a different picture. In the face of fake game practices, players are not simply passive victims; instead, they develop and refine strategies to protect themselves and enhance their gaming experience. This growing sophistication reflects an increasing awareness of the complexities of the digital marketplace, where inauthentic content is not uncommon. Our findings highlight how players employ adaptive strategies, such as ad evasion (e.g., P15 mentioned "I usually play them on airplane mode") and selective engagement, to navigate these challenges, demonstrating a proactive approach to managing their gaming environment. This behavior indicates a broader trend of digital literacy and self-protection among gamers, who are becoming more skilled at identifying and mitigating potential risks. For example, this can be seen in how users have become more selective with cookie consent pop-ups [97], which often employ deceptive design practices [15, 48]. Instead of blindly accepting all cookies, users are increasingly managing their privacy settings [96], showcasing how digital consumers are taking control over their online interactions. Likewise, gamers are making calculated decisions to selectively engage with or avoid fake game elements based on their in-game experiences.

Examining the delicate balance between player motivation and skepticism provides a deeper understanding of how digital platforms like social media and streaming services influence gaming behavior and the acceptance of fake content. Both intrinsic and extrinsic motivations have long been recognized [27, 29, 45, 109] as key drivers of player engagement, encouraging individuals to explore new games and experiences. However, we found as digital platforms refine their marketing and game distribution strategies, these motivations are increasingly met with a heightened sense of skepticism upon facing fakeness. Our findings show that mobile game motivation extends beyond gratification and passing time to risk management, including withdrawal and avoidance. This balance between engagement and skepticism is evident in the loot box controversy in games like *Call of Duty* and *Genshin Impact*. While these purchases offer rewards [20], they also fuel skepticism due to their gambling-like nature [57]. In response, countries like the Netherlands and Belgium have banned loot boxes [31] to protect vulnerable players, particularly minors [84]. These regulatory actions highlight how governments could similarly address fake games, offering a model for mitigating deceptive game design risks.

### 6.2 The Fake Mobile Gaming Ecosystem and Cross-Platform Governance

Fake mobile games thrive on an ecosystem as infrastructure (i.e., an underlying network of platforms, technologies, and user interactions that enable their widespread distribution and visibility [76]), where various interconnected digital platforms, marketplaces, social media networks, and game developers collectively support their existence and proliferation. Our participants frequently mentioned how fake games often appear across multiple platforms (e.g., learning apps and streaming services), making them hard to avoid, and emphasized that the ease of access through app stores and social media ads contributes to their wide reach. For instance,

P20 described encountering a fake game ad inside Duolingo: "I saw a game ad in one of the Duolingo ads... I wanted to try [the game] because it looked fun." This cross-platform discovery was echoed by P8, who noticed game ads during televised sports, reflecting the ubiquity of fake game promotion.

This ecosystem enables the continuous circulation and visibility of fake games, leveraging the infrastructure of app marketplaces, advertising algorithms, and user-generated content to reach and engage players. In this way, platforms act as "organs" within the fake game infrastructure, each playing a role in the visibility and legitimacy of deceptive games.

Fake games operate as a cross-platform phenomenon, where players encounter them across various digital spaces such as mobile marketplaces, social media, and even streaming services. Studies have investigated the marketing practices and success of game titles on social media [73, 90, 111], but our findings revealed that participants' discovery trajectories are more complex and involve a cross-platform pattern. This means they discover and engage with fake games through multiple platforms, including within-app cross-promotion and in-app ads, which further drives fake games visibility. As P23 noted, "I go back to that fake game... but then again, I get ads and I go back to other games." The design of fake games leverages this loop, embedding themselves within the broader mobile experience.

As cross-platforming brings novel approaches in discovery and marketing [130], it also involves negative aspects, such as privacy violations and misuse of personal data, which our participants echoed. For instance, P25 described downloading a 20–30 GB game and questioning the size: "It felt weird because 20 GB was too much for a simple game." Similarly, P24 voiced concerns: "I realized companies use our information and sell it." These concerns reflect an infrastructural opacity that frustrates players and compels them to take defensive measures, such as reading reviews or reducing their downloads. Research [50] has found that inconsistent privacy practices across platforms lead to user confusion and increased vulnerability to tracking, often violating users' privacy. As a coping strategy against the fakeness of fake games, our participants employed proactive avoidance strategies, which underline their privacy concerns within the cross-platform phenomenon. As clearly echoed by P24, "I realized companies use our information and sell it." In order to confront the fakeness and its underlying existence, cross-platforming, there is a need for uniform policy regulation. The General Data Protection Regulation (GDPR) closely governs cross-border personal data transfers [131], requiring strict compliance to ensure data protection, with specific rules based on the destination country's level of data protection or need for additional safeguards [85]. A similar regulation governing data flow within cross-platform environments could be established with rigorous compliance oversight from regulatory bodies like the FTC.

Digital marketplaces like the App Store and Google Play serve as critical organisms within the ecosystem of fake mobile games. These platforms play a key role in the proliferation of fake games by providing the space for game developers to promote their products. Advertising acts as the gateway for players into downloading mobile games [34, 64, 108], and it sometimes includes unethical and non-compliant industry practices [4, 6]. Our participants further highlighted that many of their games perceived as fake due to misleading advertisements. Fake games, along with other practices, can be understood as attempts to remain competitive in the saturated mobile gaming market. However, platforms often fall short in regulating misleading content, as revealed by participant mistrust in store reviews and ratings. P24 noted, "If it has like 3.0 stars, then maybe it's going to be a waste of time and being fake, or it has a lot of bugs." Our study found that players rely on experimentation to cope with mistrust in marketplace reviews and ratings. While

they note low ratings (e.g., below 3.5 stars), they largely disregard reviews as ineffective in detecting fakeness. This mistrust highlights the need for platforms like Google Play and the App Store to ensure game authenticity. Despite policies against metric manipulation [128] research [39] shows Google Play's detection systems can fail to enforce them. Our findings further reveal these shortcomings, emphasizing the need for stricter regulation of advertising and review practices to enhance transparency and protect players from deceptive content.

This raises the question of how legal bodies or mobile marketplaces can define deceptive practices, like fake games, when player reactions range from enjoyment to frustration. The subjective nature of player experiences complicates standardizing definitions. For example, pay-to-win models are seen by some as fair monetization and by others as exploitative [32]. Similarly, grinding mechanics (i.e., repetitive tasks or actions required to progress or gain rewards) in MMORPGs[5], like *Old School RuneScape*, are appreciated by players for adding depth and longevity, while others find them frustrating and time-consuming [112]. Developers often respond to such tensions through updates based on player feedback. Mobile marketplaces could take a similar adaptive approach, creating evolving guidelines that reflect diverse player perceptions of fakeness and legitimacy, thereby supporting a more responsive and nuanced regulatory framework.

Game developers play a key role in the fake game ecosystem, yet participants in our study rarely identified them as central actors. This was largely due to the unclear or hidden identities of developers. For example, only one participant (P30) referenced seeking out "games with fresh graphics [...] especially from indie developers," only to later discover the game was fake. As Consalvo and Paul [24, 25] suggest, developer obscurity often signals a 'not real' game. Our findings expand on this, showing that fake games not only come from obscure developers but also imitate popular franchises (e.g., Marvel Universe), exploit nostalgia (e.g., SimCity), or pose as indie titles with seemingly novel concepts. Practices such as offshore mobile app development [107] and regulatory evasion[72] further obscure developer legitimacy. Given these challenges, participants' difficulty in identifying developers underscores the need for stronger oversight, credential verification, and regulation, particularly when in-game purchases are involved.

The financial success of fake mobile games hinges on the F2P model, which generates value through microtransactions. While some participants recognized this strategy, most did not see enough value to spend, often expressing shock at others' purchases. For instance, P24 questioned the rationale behind a player spending $700. This raises a key question: if most players engage for free, how are these games profitable? The answer lies in "whales" [16], —a small subset of high spenders who subsidize revenue [141]. In fake games, free players serve as competition for paying users, reinforcing perceived value. Free players serve as necessary competition to justify spending, reinforcing perceived value. As P22 noted, "I think the most important part for me is if it's free or not... so I downloaded it." These dynamics complicate governance, as marketplace policies enable deceptive monetization strategies targeting high-value players. These dynamics complicate governance, as marketplace policies enable deceptive monetization strategies targeting high-value players. The reliance on whales underscores the need for stronger regulatory oversight.

By utilizing this ecosystem, fake games capitalize on player behaviors and platform affordances, creating a self-sustaining environment that fuels their growth despite their inauthentic nature. This raises important questions about the responsibilities of digital platforms

[5] MMORPG stands for massively multiplayer online role-playing game

and developers in maintaining the integrity of the gaming environment. In the following section, we provide some implications for design and research.

### 6.3 Implications for Design and Research

Our findings show that players engage with fake games through strategies that reflect individual agency, platform navigation, and ecosystem awareness. These behaviors, such as adaptive play, proactive avoidance, and investment calculus, directly informed our design and policy implications by highlighting gaps in platform accountability, transparency, and support for informed player decision-making. Building on these insights, we propose the following implications for each entity involved in the fake game ecosystem:

From the individual and player perspective, a community-driven fact-checking feature could be added to digital platforms to help inform players about the likelihood of a game being fake. A prime example is the website 'darkpatterns[dot]com,' which helps users identify games that do not use manipulative psychological tricks. A more advanced fact-checking tool, possibly powered by AI, in the form of third-party application or extension could enhance these efforts. Developing systems and tools to automate the fact-checking process has been an area of interest within HCI communities [66]. In the context of fake games, design efforts could focus on developing similar tools tailored specifically to identify and mitigate fake content. Future research could investigate how players use and benefit from such tools, as well as the social dynamics that arise when players engage in self-regulation. Improving players' digital literacy through educational tools is another potential research direction—understanding which design strategies best equip players to identify fake games could inform educational and design frameworks.

From the developer perspective, our findings suggest that short-term development cycles and deceptive advertising strategies can still yield meaningful engagement, as players often continue to play fake games despite recognizing their inauthenticity. For example, P20 referred to this as a “trial and error” process, showing a willingness to experiment with low-stakes downloads even when disappointed. While we do not directly examine developer-side decision-making, these behaviors align with literature suggesting that the F2P model prioritizes user acquisition over long-term trust [6, 54]. Rather than advocating for a universal shift toward longer development cycles, we suggest that future research explore how developers weigh short-term engagement against sustained player retention, especially as new tools such as AI-based user testing [8] offer potential to optimize quality without delaying time-to-market.

From the digital marketplace perspective, our findings suggest that players would benefit from additional tools to help identify misleading or deceptive games, such as stricter developer certification or improved content verification. For example, participants frequently questioned the trustworthiness of app reviews and star ratings, leading some to rely on personal experimentation or avoid certain games altogether. Mandating real game demos could serve as a form of built-in fact-checking that supports more informed player decision-making. While our findings do not assess the business impact of fake games on platform providers, future research could explore how deceptive or low-quality games influence player trust, app store reputation, and monetization outcomes across different game categories.

Finally, government bodies could play a role in addressing the fake game phenomenon by exploring regulatory frameworks similar to the GDPR, particularly around data privacy and advertising transparency. While our study does not evaluate the direct impact of regulation, our participants’ concerns about privacy violations and misleading ads suggest a need for broader accountability mechanisms. For example, the European Union’s Digital Services Act (DSA) has

recently introduced measures to increase transparency and oversight of algorithmic content delivery, including advertising disclosures [104]. Similarly, the Children's Online Privacy Protection Act (COPPA) in the United States imposes restrictions on data collection from children, which may be relevant as many fake games target younger audiences [23]. Future research could explore how regulations like these might influence player trust, developer behavior, and platform practices in mobile game ecosystems.

## 7 Limitations and Future Work

We acknowledge that our study has some limitations. First, we recruited the majority of our participants through a large public university in the US, which may have favored players with heightened awareness of mobile game practices and greater digital literacy regarding mobile gaming. Second, we conducted the study with mobile players, as fake games are prevalent on mobile platforms for several reasons. The ubiquity of mobile devices introduces new practices for players. Future work can explore fake games on other platforms, such as PlayStation or Steam, to further examine the prevalence of fake games on those devices and how players are motivated to engage with and cope with them. Third, due to the novelty of the fake game phenomenon and the qualitative nature of our study, we encourage further investigation using alternative and mixed research methods. Fourth, as mentioned earlier in the paper, 'fake game' refers to a multifaceted phenomenon rather than a specific type, genre, or style of game. It encapsulates various industry practices, player experiences, and perceptions of deception in gaming, making the design of the study protocol, recruitment, data collection, and analysis complex. Players are often not familiar with the definition of fake games or its various facets, and we acknowledge this limitation. However, we strongly believe that as the phenomenon receives more attention, players will develop greater literacy, thereby making future studies more streamlined. We also acknowledge that, as with all qualitative research, our findings are shaped by interpretive decisions during thematic analysis, which may reflect researcher subjectivity despite reflexive efforts to ensure rigor. Fifth, our recruitment strategy focused on individuals who had seen a mobile game advertisement and subsequently downloaded and played the game. As a result, our sample may not capture insights from individuals who were exposed to misleading or deceptive ads but chose not to engage with the games. This group, non-players or rejecters, may hold different perspectives on fake game advertising, skepticism, and avoidance strategies that could enrich our understanding of player decision-making. Future research could explicitly target this population to complement our current findings and shed light on why certain users resist or reject fake game engagement altogether.

## 8 Conclusion

In this study, we explored the phenomenon of fake games, an emerging form of gaming, by focusing on player experiences and the underlying motivations that drive engagement with these games. Our study revealed a nuanced interplay between players' motivations for engaging with fake games and the strategies they adopt when confronted with their inauthentic elements. While players are initially drawn to fake games for reasons like entertainment and curiosity, the discovery of misleading content, i.e., fakeness, prompts various coping mechanisms. By exploring both the motivations and responses to fake games, this research offers valuable insights into the broader fake game ecosystem and highlights key considerations for design, player behavior, and industry regulation. Our study contributes to a better understanding of how fake games fit within

the broader mobile gaming landscape, offering valuable insights for developers, digital platforms, and regulatory bodies. This research opens avenues for further investigation into player behavior and the evolving role of fake games in the industry.

## Acknowledgments

We extend our gratitude to our ACs and external reviewers for their invaluable detailed feedback and thoughtful comments. This material is based upon work partially supported by the U.S. National Science Foundation under award No. 2326505. Any opinions, findings and conclusions or recommendations expressed in this material are those of the author(s) and do not necessarily reflect the views of the U.S. National Science Foundation.

## References

[1] Adams, W.C. 2015. Conducting Semi-Structured Interviews. *Handbook of Practical Program Evaluation*. John Wiley & Sons, Ltd. 492–505.

[2] Adinolf, S. and Turkay, S. 2018. Toxic Behaviors in Esports Games: Player Perceptions and Coping Strategies. *Proceedings of the 2018 Annual Symposium on Computer-Human Interaction in Play Companion Extended Abstracts* (New York, NY, USA, Oct. 2018), 365–372.

[3] Al Shamsi, M. et al. 2023. Space transition and the vulnerabilities of the NFT market to financial crime. *Journal of Financial Crime*. 30, 6 (Jan. 2023), 1664–1673. https://doi.org/10.1108/JFC-09-2022-0218.

[4] Alha, K. 2024. Endure, Join Them, or Leave? Suffering Women in Mobile Game Advertising. *Transactions of the Digital Games Research Association*. 6, 3 (Aug. 2024), 115–146. https://doi.org/10.26503/todigra.v6i3.2178.

[5] Alha, K. et al. 2018. Free-to-Play Games: Paying Players' Perspective. *Proceedings of the 22nd International Academic Mindtrek Conference* (New York, NY, USA, Oct. 2018), 49–58.

[6] Alha, K. 2023. The Wild West of Mobile Game Advertising. *Abstract Proceedings of DiGRA 2023 Conference: Limits and Margins of Games* (Jun. 2023).

[7] Alharthi, S.A. et al. 2018. Playing to Wait: A Taxonomy of Idle Games. *Proceedings of the 2018 CHI Conference on Human Factors in Computing Systems* (New York, NY, USA, Apr. 2018), 1–15.

[8] Ariyurek, S. et al. 2021. Automated Video Game Testing Using Synthetic and Humanlike Agents. *IEEE Transactions on Games*. 13, 1 (Mar. 2021), 50–67. https://doi.org/10.1109/TG.2019.2947597.

[9] Bell, M. et al. 2006. Interweaving mobile games with everyday life. *Proceedings of the SIGCHI Conference on Human Factors in Computing Systems* (New York, NY, USA, Apr. 2006), 417–426.

[10] Beres, N.A. et al. 2023. Playing with Emotions: A Systematic Review Examining Emotions and Emotion Regulation in Esports Performance. *Proc. ACM Hum.-Comput. Interact.* 7, CHI PLAY (Oct. 2023), 395:558-395:587. https://doi.org/10.1145/3611041.

[11] Braun, V. et al. 2022. Doing Reflexive Thematic Analysis. *Supporting Research in Counselling and Psychotherapy: Qualitative, Quantitative, and Mixed Methods Research*. S. Bager-Charleson and A. McBeath, eds. Springer International Publishing. 19–38.

[12] Braun, V. and Clarke, V. 2019. Reflecting on reflexive thematic analysis. *Qualitative Research in Sport, Exercise and Health*. 11, 4 (Aug. 2019), 589–597. https://doi.org/10.1080/2159676X.2019.1628806.

[13] Braun, V. and Clarke, V. 2021. Thematic Analysis: A Practical Guide. (2021), 1–100.

[14] Brewster, T. 2018. 500,000 Duped Into Downloading Android Malware Posing As Driving Games On Google Play. *Forbes*.

[15] Brignull, H. et al. 2015. Dark patterns-user interfaces designed to trick people. *Proceedings of the Poster Presentation, Australian Psychological Society Congress, Sydney, NSW, Australia* (2015), 21–23.

[16] Britt, B.C. and Britt, R.K. 2021. From waifus to whales: The evolution of discourse in a mobile game-based competitive community of practice. *Mobile Media & Communication*. 9, 1 (Jan. 2021), 3–29. https://doi.org/10.1177/2050157920934509.

[17] Brooks, G.A. and Clark, L. 2023. The gamblers of the future? Migration from loot boxes to gambling in a longitudinal study of young adults. *Computers in Human Behavior*. 141, (Apr. 2023), 107605. https://doi.org/10.1016/j.chb.2022.107605.

[18] Brown, L. 2024. "The Mythical Mass Market": Design, Habit and the Invention of the American Mobile Gamer. *Game Studies*. 24, 2 (Jul. 2024).

[19] Brühlmann, F. et al. 2018. Measuring the "Why" of Interaction: Development and Validation of the User Motivation Inventory (UMI). *Proceedings of the 2018 CHI Conference on Human Factors in Computing Systems* (New York, NY, USA, Apr. 2018), 1–13.

[20] Cerulli-Harms, A. et al. 2020. Loot boxes in online games and their effect on consumers, in particular young consumers. *Publication for the Committee on the Internal Market and Consumer Protection (IMCO)*. 202, (2020).

[21] Chefitz, M. et al. 2018. Designing Conversational Interfaces to Reduce Dissonance. *Proceedings of the 2018 ACM Conference Companion Publication on Designing Interactive Systems* (New York, NY, USA, May 2018), 219–223.

[22] Chen, C. and Leung, L. 2016. Are you addicted to Candy Crush Saga? An exploratory study linking psychological factors to mobile social game addiction. *Telematics and Informatics*. 33, 4 (Nov. 2016), 1155–1166. https://doi.org/10.1016/j.tele.2015.11.005.

[23] Children's Online Privacy Protection Rule ("COPPA"): 2013. *https://www.ftc.gov/legal-library/browse/rules/childrens-online-privacy-protection-rule-coppa*. Accessed: 2025-05-14.

[24] Consalvo, M. and Paul, C.A. 2019. *Real games: What's legitimate and what's not in contemporary videogames*. MIT Press.

[25] Consalvo, M. and Paul, C.A. 2013. Welcome to the discourse of the real: Constituting the boundaries of games and players. *FDG* (2013), 55–62.

[26] Cost per Install (CPI) Rates of Mobile Games: 2023. *https://www.devtodev.com/education/articles/en/487/cost-per-install-cpi-in-mobile-games*. Accessed: 2024-08-25.

[27] Cota, T.T. et al. 2015. Mobile game design for the elderly: A study with focus on the motivation to play. *Computers in Human Behavior*. 51, (2015), 96–105.

[28] CryptoZoo World | Made By CryptoZoo Community: 2024. *https://cryptozooworld.com/*. Accessed: 2024-08-17.

[29] Deci, E.L. and Ryan, R.M. 2013. *Intrinsic motivation and self-determination in human behavior*. Springer Science & Business Media.

[30] Delfabbro, P. et al. 2022. Understanding the mechanics and consumer risks associated with play-to-earn (P2E) gaming. *Journal of Behavioral Addictions*. 11, 3 (Sep. 2022), 716–726. https://doi.org/10.1556/2006.2022.00066.

[31] Denoo, M. et al. 2023. Counterplay: Circumventing the Belgian Ban on Loot Boxes by Adolescents. *Proc. ACM Hum.-Comput. Interact.* 7, CHI PLAY (Oct. 2023), 378:104-378:130. https://doi.org/10.1145/3611024.

[32] Diablo Immortal Review: 2022. *https://www.ign.com/articles/diablo-immortal-review*. Accessed: 2024-09-06.

[33] Duh, H.B.-L. et al. 2010. A narrative-driven design approach for casual games with children. *Proceedings of the 5th ACM SIGGRAPH Symposium on Video Games* (New York, NY, USA, Jul. 2010), 19–24.

[34] Dunham, J. et al. 2023. Building Positively Affective Location-Based Advertising: A Study of Pokémon GO Players. *Proceedings of the 2023 CHI Conference on Human Factors in Computing Systems* (New York, NY, USA, Apr. 2023), 1–19.

[35] Eslami, M. et al. 2018. Communicating Algorithmic Process in Online Behavioral Advertising. *Proceedings of the 2018 CHI Conference on Human Factors in Computing Systems* (New York, NY, USA, Apr. 2018), 1–13.

[36] Fake Game Ads: Everything You Need to Know: 2023. *https://www.makeuseof.com/what-are-fake-game-ads/*. Accessed: 2023-10-06.

[37] Fake Mobile Game Ads: Why Do Mobile Game Ads Lie? 2025. *https://www.blog.udonis.co/mobile-marketing/mobile-games/fake-mobile-game-ads*. Accessed: 2025-05-08.

[38] Fake Streamers Promoting Fake Games Are A Real Problem: 2024. *https://www.thegamer.com/fake-streamers-mobile-games-promotion-adverts/*. Accessed: 2024-09-08.

[39] Farooqi, S. et al. 2020. Understanding Incentivized Mobile App Installs on Google Play Store. *Proceedings of the ACM Internet Measurement Conference* (New York, NY, USA, Oct. 2020), 696–709.

[40] Feijoo, C. et al. 2012. Mobile gaming: Industry challenges and policy implications. *Telecommunications Policy*. 36, 3 (Apr. 2012), 212–221. https://doi.org/10.1016/j.telpol.2011.12.004.

[41] Flunger, R. et al. 2017. The free-to-play business model. *Proceedings of the 19th International Conference on Information Integration and Web-based Applications & Services* (New York, NY, USA, Dec. 2017), 373–379.

[42] Freeman, G. et al. 2022. Pay to Win or Pay to Cheat: How Players of Competitive Online Games Perceive Fairness of In-Game Purchases. *Proceedings of the ACM on Human-Computer Interaction*. 6, CHI PLAY (Oct. 2022), 247:1-247:24. https://doi.org/10.1145/3549510.

[43] Freeman, G. et al. 2020. "Pro-Amateur"-Driven Technological Innovation: Participation and Challenges in Indie Game Development. *Proc. ACM Hum.-Comput. Interact.* 4, GROUP (Jan. 2020). https://doi.org/10.1145/3375184.

[44] Freeman, G. and McNeese, N.J. 2019. Exploring Indie Game Development: Team Practices and Social Experiences in A Creativity-Centric Technology Community. *Computer Supported Cooperative Work (CSCW)*. 28, 3–4 (Jun. 2019), 723–748. https://doi.org/10.1007/s10606-019-09348-x.

[45] Frey, B.S. and Osterloh, M. 2001. *Successful management by motivation: Balancing intrinsic and extrinsic incentives*. Springer Science & Business Media.

[46] FTC Requires Mobile Advertising Company to Stop Misleading Users About In-Game Rewards: 2021. *https://www.ftc.gov/news-events/news/press-releases/2021/01/ftc-requires-mobile-advertising-company-stop-misleading-users-about-game-rewards*. Accessed: 2023-10-19.

[47] Google Play: number of available games by quarter 2022: 2022. *https://www.statista.com/statistics/780229/number-of-available-gaming-apps-in-the-google-play-store-quarter/*. Accessed: 2023-10-06.

[48] Gray, C.M. et al. 2018. The Dark (Patterns) Side of UX Design. *Proceedings of the 2018 CHI Conference on Human Factors in Computing Systems* (New York, NY, USA, Apr. 2018), 1–14.

[49] Gross, J.J. 1998. The Emerging Field of Emotion Regulation: An Integrative Review. *Review of General Psychology*. 2, 3 (Sep. 1998), 271–299. https://doi.org/10.1037/1089-2680.2.3.271.

[50] Guamán, D.S. et al. 2021. GDPR Compliance Assessment for Cross-Border Personal Data Transfers in Android Apps. *IEEE Access*. 9, (2021), 15961–15982. https://doi.org/10.1109/ACCESS.2021.3053130.

[51] Hadan, H. et al. 2024. From Motivating to Manipulative: The Use of Deceptive Design in a Game's Free-to-Play Transition. *Proc. ACM Hum.-Comput. Interact.* 8, CHI PLAY (Oct. 2024), 309:1-309:31. https://doi.org/10.1145/3677074.

[52] Hamari, J. et al. 2017. Service quality explains why people use freemium services but not if they go premium: An empirical study in free-to-play games. *International Journal of Information Management.* 37, 1, Part A (Feb. 2017), 1449–1459. https://doi.org/10.1016/j.ijinfomgt.2016.09.004.

[53] Hamari, J. et al. 2017. Why do players buy in-game content? An empirical study on concrete purchase motivations. *Computers in Human Behavior.* 68, (Mar. 2017), 538–546. https://doi.org/10.1016/j.chb.2016.11.045.

[54] Hamari, J. et al. 2020. "Why pay premium in freemium services?" A study on perceived value, continued use and purchase intentions in free-to-play games. *International Journal of Information Management.* 51, (Apr. 2020), 102040. https://doi.org/10.1016/j.ijinfomgt.2019.102040.

[55] Hamari, J. and Lehdonvirta, V. 2010. Game design as marketing: How game mechanics create demand for virtual goods. *International Journal of Business Science & Applied Management.* 5, 1 (2010), 14–29.

[56] Hii, A. et al. 2020. Deceptive advertising practices in the mobile game industry. *Lexology.*

[57] Hing, N. et al. 2022. Loot box purchasing is linked to problem gambling in adolescents when controlling for monetary gambling participation. *Journal of Behavioral Addictions.* 11, 2 (Apr. 2022), 396–405. https://doi.org/10.1556/2006.2022.00015.

[58] Hjorth, L. and Richardson, I. 2009. Playing the waiting game: Complicating notions of (tele) presence and gendered distraction in casual mobile gaming. *COST 298 Conference: The Good, The Bad and the Challenging* (2009).

[59] Hu, X. and Wise, K. 2021. How playable ads influence consumer attitude: exploring the mediation effects of perceived control and freedom threat. *Journal of Research in Interactive Marketing.* 15, 2 (Jan. 2021), 295–315. https://doi.org/10.1108/JRIM-12-2020-0269.

[60] Hu, Y. et al. 2020. Mobile App Squatting. *Proceedings of The Web Conference 2020* (New York, NY, USA, Apr. 2020), 1727–1738.

[61] Hurley, N. 2024. I Hate All These Deceiving Mobile Games Ads. *The Creative Collective.*

[62] Hyper Casual Games: Design, Monetization, and Market Insights: 2024. *https://www.blog.udonis.co/mobile-marketing/mobile-games/hyper-casual-game.* Accessed: 2024-08-30.

[63] I Played the Worst Mobile Games From Those Fake Ads So You Don't Have To: 2024. *https://www.howtogeek.com/i-played-the-worst-mobile-games-from-those-fake-ads-so-you-dont-have-to/.* Accessed: 2025-05-08.

[64] IAB Games Advertising Ecosystem Guide: 2014. *https://www.iab.com/insights/iab-games-advertising-ecosystem-guide/.* Accessed: 2024-08-21.

[65] Iacovides, I. and Mekler, E.D. 2019. The Role of Gaming During Difficult Life Experiences. *Proceedings of the 2019 CHI Conference on Human Factors in Computing Systems* (New York, NY, USA, May 2019), 1–12.

[66] Juneja, P. and Mitra, T. 2022. Human and Technological Infrastructures of Fact-checking. *Proc. ACM Hum.-Comput. Interact.* 6, CSCW2 (Nov. 2022), 418:1-418:36. https://doi.org/10.1145/3555143.

[67] Juul, J. 2011. *Half-real: Video games between real rules and fictional worlds.* MIT press.

[68] Juul, J. 2010. The Game, the Player, the World: Looking for a Heart of Gameness. *Plurais - Revista Multidisciplinar.* 1, 2 (2010). https://doi.org/10.29378/plurais.2447-9373.2010.v1.n2.%p.

[69] King, D.L. and Delfabbro, P.H. 2018. Predatory monetization schemes in video games (e.g. 'loot boxes') and internet gaming disorder. *Addiction.* 113, 11 (2018), 1967–1969. https://doi.org/10.1111/add.14286.

[70] Kou, Y. et al. 2024. Community Begins Where Moderation Ends: Peer Support and Its Implications for Community-Based Rehabilitation. *Proceedings of the CHI Conference on Human Factors in Computing Systems* (New York, NY, USA, May 2024), 1–18.

[71] Kou, Y. and Gui, X. 2018. Entangled with Numbers: Quantified Self and Others in a Team-Based Online Game. *Proceedings of the ACM on Human-Computer Interaction.* 2, CSCW (Nov. 2018), 93:1-93:25. https://doi.org/10.1145/3274362.

[72] Kukushkina, N. 2024. Mobile App Compliance in 2024. *DigitalMara.*

[73] Landoni, P. et al. 2020. Business model innovation in cultural and creative industries: Insights from three leading mobile gaming firms. *Technovation.* 92, (2020), 102084.

[74] Lazanin, S. 2023. Fake Mobile Game Ads: Why Do Advertisers Use Them? *MAF.*

[75] Lazarus, R.S. 1984. Stress, appraisal, and coping. *SprongerPub, CO.* (1984).

[76] Lee, C.P. et al. 2006. The human infrastructure of cyberinfrastructure. *Proceedings of the 2006 20th anniversary conference on Computer supported cooperative work* (New York, NY, USA, Nov. 2006), 483–492.

[77] Lehdonvirta, V. 2009. Virtual item sales as a revenue model: identifying attributes that drive purchase decisions. *Electronic Commerce Research.* 9, 1 (Jun. 2009), 97–113. https://doi.org/10.1007/s10660-009-9028-2.

[78] Long, N. 2023. What's going on with the "fake" mobile game ads on TikTok?

[79] Ma, R. et al. 2023. Transparency, Fairness, and Coping: How Players Experience Moderation in Multiplayer Online Games. *Proceedings of the 2023 CHI Conference on Human Factors in Computing Systems* (New York, NY, USA, Apr. 2023), 1–21.

[80] Macey, J. and Hamari, J. 2022. Gamblification: A definition. *New Media & Society.* (Mar. 2022), 14614448221083903. https://doi.org/10.1177/14614448221083903.

[81] Mago, Z. 2020. FAKE-VERTISING AND MOBILE GAMES: CASE STUDY OF 'PULL THE PIN' ADS. *Communication Today*. 11, 2 (2020), 132–147.

[82] Martens, D. and Maalej, W. 2019. Towards understanding and detecting fake reviews in app stores. *Empirical Software Engineering*. 24, 6 (Dec. 2019), 3316–3355. https://doi.org/10.1007/s10664-019-09706-9.

[83] Martí-Parreño, J. et al. 2017. Product Placement in Video Games: The Effect of Brand Familiarity and Repetition on Consumers' Memory. *Journal of Interactive Marketing*. 38, 1 (May 2017), 55–63. https://doi.org/10.1016/j.intmar.2016.12.001.

[84] Mattinen, T. et al. 2023. A Ruse by Any Other Name: Comparing Loot Boxes and Collectible Card Games Using Magic Arena. *Proceedings of the ACM on Human-Computer Interaction*. 7, CHI PLAY (Oct. 2023), 401:721-401:747. https://doi.org/10.1145/3611047.

[85] Mehrnezhad, M. 2020. A Cross-Platform Evaluation of Privacy Notices and Tracking Practices. *2020 IEEE European Symposium on Security and Privacy Workshops (EuroS&PW)* (Sep. 2020), 97–106.

[86] Mirhadi, S. et al. 2024. Playing Through Tough Times: Exploring the Relationship between Game Aspects and Coping Strategies during Difficult Life Challenges. *Proc. ACM Hum.-Comput. Interact.* 8, CHI PLAY (Oct. 2024), 332:1-332:25. https://doi.org/10.1145/3677097.

[87] Misleading advertising: 2022. *https://www.asa.org.uk/advice-online/misleading-advertising.html*. Accessed: 2024-08-25.

[88] Mittal, A. and Agrawal, S. 2023. Unveiling the Cyber Crime Shadows: Exploring the Dark Side of NFTs and the Logan Paul Cryptozoo Scam. *International Journal of Law Management & Humanities*.

[89] Mobile Games - United States: 2024. *https://www.statista.com/outlook/dmo/digital-media/video-games/mobile-games/united-states*. Accessed: 2024-09-08.

[90] Mobile Marketing and Social Media: Scale Ad Campaigns | Udonis: 2023. *https://www.blog.udonis.co/mobile-marketing/mobile-marketing-and-social-media*. Accessed: 2024-02-13.

[91] Molinillo, S. et al. 2020. Impact of perceived value on casual mobile game loyalty: The moderating effect of intensity of playing. *Journal of Consumer Behaviour*. 19, 5 (2020), 493–504. https://doi.org/10.1002/cb.1831.

[92] Moradzadeh, S. and Kou, Y. 2024. "Wow another fake game from YouTube ad": Unpacking Fake Games Through a Mixed-Methods Investigation. *Proc. ACM Hum.-Comput. Interact.* 8, CHI PLAY (Oct. 2024), 350:1-350:36. https://doi.org/10.1145/3677115.

[93] Myers, M. 2023. Every fake mobile game ad is now real. *Polygon*.

[94] Nieborg, D.B. 2015. Crushing Candy: The Free-to-Play Game in Its Connective Commodity Form. *Social Media + Society*. 1, 2 (Jul. 2015), 2056305115621932. https://doi.org/10.1177/2056305115621932.

[95] NIEBORG, D.B. 2016. Free-to-play Games and App Advertising: The Rise of the Player Commodity. *Explorations in Critical Studies of Advertising*. Routledge.

[96] Nouwens, M. et al. 2022. Consent-O-Matic: Automatically Answering Consent Pop-ups Using Adversarial Interoperability. *Extended Abstracts of the 2022 CHI Conference on Human Factors in Computing Systems* (New York, NY, USA, Apr. 2022), 1–7.

[97] Nouwens, M. et al. 2020. Dark Patterns after the GDPR: Scraping Consent Pop-ups and Demonstrating their Influence. *Proceedings of the 2020 CHI Conference on Human Factors in Computing Systems* (New York, NY, USA, Apr. 2020), 1–13.

[98] Omori, M.T. and Felinto, A.S. 2012. Analysis of Motivational Elements of Social Games: A Puzzle Match 3-Games Study Case. *International Journal of Computer Games Technology*. 2012, 1 (2012), 640725. https://doi.org/10.1155/2012/640725.

[99] Paasonen, S. 2021. *Dependent, distracted, bored: Affective formations in networked media*. MIT Press.

[100] Paavilainen, J. et al. 2013. Social network games: Players' perspectives. *Simulation & Gaming*. 44, 6 (2013), 794–820.

[101] Payday 3 review – Half-baked heist shooter that needs more time in the oven: 2023. *https://www.dexerto.com/gaming/payday-3-review-2303206/*. Accessed: 2024-09-06.

[102] Proferes, N. et al. 2021. Studying Reddit: A Systematic Overview of Disciplines, Approaches, Methods, and Ethics. *Social Media + Society*. 7, 2 (Apr. 2021), 20563051211019004. https://doi.org/10.1177/20563051211019004.

[103] Qi, W. et al. 2015. Privacy Leaks When You Play Games: A Novel User-Behavior-Based Covert Channel on Smartphones. *2015 IEEE 23rd International Conference on Network Protocols (ICNP)* (Nov. 2015), 201–211.

[104] Regulation (EU) 2022/2065 of the European Parliament and of the Council of 19 October 2022 on a Single Market For Digital Services and amending Directive: 2020. *https://eur-lex.europa.eu/eli/reg/2022/2065/oj/eng*. Accessed: 2025-05-14.

[105] Roohi, S. et al. 2020. Predicting Game Difficulty and Churn Without Players. *Proceedings of the Annual Symposium on Computer-Human Interaction in Play* (New York, NY, USA, Nov. 2020), 585–593.

[106] Roohi, S. et al. 2021. Predicting Game Difficulty and Engagement Using AI Players. *Proc. ACM Hum.-Comput. Interact.* 5, CHI PLAY (Oct. 2021), 231:1-231:17. https://doi.org/10.1145/3474658.

[107] Saachi Marketing Developer 2024. The Ultimate Guide to Cost-Effective Offshore Mobile App Development. *Medium*.

[108] Salo, J. and Karjaluoto, H. 2007. Mobile games as an advertising medium: Towards a new research agenda. *Innovative Marketing*. 3, 1 (2007).

[109] Sansone, C. and Harackiewicz, J.M. 2000. *Intrinsic and extrinsic motivation: The search for optimal motivation and performance*. Academic Press.

[110] Saunders, B. et al. 2015. Anonymising interview data: challenges and compromise in practice. *Qualitative Research*. 15, 5 (Oct. 2015), 616–632. https://doi.org/10.1177/1468794114550439.
[111] Serxner, D. 2023. Cross Promotion for App Growth. *YouAppi*.
[112] Sgandurra, S.A. 2022. Fight. Heal. Repeat: A Look at Rhetorical Devices in Grinding Game Mechanics. *Simulation & Gaming*. 53, 4 (Aug. 2022), 388–399. https://doi.org/10.1177/10468781221106487.
[113] Someone Made The Mobile Game From Those Fake Ads: 2020. *https://www.thegamer.com/someone-made-the-mobile-game-from-those-fake-ads/*. Accessed: 2023-10-19.
[114] Spiel, K. and Gerling, K. 2021. The Purpose of Play: How HCI Games Research Fails Neurodivergent Populations. *ACM Trans. Comput.-Hum. Interact.* 28, 2 (Apr. 2021), 11:1-11:40. https://doi.org/10.1145/3432245.
[115] Stop false mobile game advertising: 2019. *https://www.change.org/p/false-advertising-on-mobile-games-must-stop*. Accessed: 2024-02-17.
[116] Suleman, M. et al. 2021. Combating Against Potentially Harmful Mobile Apps. *Proceedings of the International Conference on Artificial Intelligence and Computer Vision (AICV2021)* (Cham, 2021), 154–173.
[117] Sun, S. et al. 2021. Understanding and Detecting Mobile Ad Fraud Through the Lens of Invalid Traffic. *Proceedings of the 2021 ACM SIGSAC Conference on Computer and Communications Security* (New York, NY, USA, Nov. 2021), 287–303.
[118] Swart, M. et al. 2020. Is This An Ad?: Automatically Disclosing Online Endorsements On YouTube With AdIntuition. *Proceedings of the 2020 CHI Conference on Human Factors in Computing Systems* (New York, NY, USA, Apr. 2020), 1–12.
[119] Tang, C. et al. 2019. A Large-Scale Empirical Study on Industrial Fake Apps. *2019 IEEE/ACM 41st International Conference on Software Engineering: Software Engineering in Practice (ICSE-SEIP)* (May 2019), 183–192.
[120] Tavares, R. et al. 2023. Gamers' Reaction to the Use of NFT in AAA Video Games. *Procedia Computer Science*. 219, (Jan. 2023), 606–613. https://doi.org/10.1016/j.procs.2023.01.329.
[121] Tekinbas, K.S. and Zimmerman, E. 2003. *Rules of play: Game design fundamentals*. MIT press.
[122] Terlutter, R. and Capella, M.L. 2013. The Gamification of Advertising: Analysis and Research Directions of In-Game Advertising, Advergames, and Advertising in Social Network Games. *Journal of Advertising*. 42, 2–3 (Apr. 2013), 95–112. https://doi.org/10.1080/00913367.2013.774610.
[123] Teymur, E. 2024. *Motivation or Manipulation? Dark UX and Persuasive Elements in Mobile Game Advertisements*. Universität Siegen.
[124] The Advertising Standards Authority (ASA) 2020. ASA Ruling on PLR Worldwide Sales Ltd t/a Playrix.
[125] Top devices for gaming 2024: 2024. *https://www.statista.com/statistics/533047/leading-devices-play-games/*. Accessed: 2024-09-10.
[126] Tyack, A. and Mekler, E.D. 2021. Off-Peak: An Examination of Ordinary Player Experience. *Proceedings of the 2021 CHI Conference on Human Factors in Computing Systems* (New York, NY, USA, May 2021), 1–12.
[127] Tyack, A. and Mekler, E.D. 2020. Self-Determination Theory in HCI Games Research: Current Uses and Open Questions. *Proceedings of the 2020 CHI Conference on Human Factors in Computing Systems* (New York, NY, USA, Apr. 2020), 1–22.
[128] User Ratings, Reviews, and Installs - Policy Center: 2024. *https://support.google.com/googleplay/android-developer/answer/9898684?hl=en*. Accessed: 2024-09-04.
[129] We Have Entered An Era Of Half Baked Games, And It's Only Going To Get Worse: 2020. *https://www.thegamer.com/game-development-avengers-baldurs-gate-pandemic/*. Accessed: 2024-09-06.
[130] What is Cross-Platform Marketing? 2021. *https://medium.com/trapica/what-is-cross-platform-marketing-9539e231878f*. Accessed: 2024-09-04.
[131] What rules apply if my organisation transfers data outside the EU? 2024. *https://commission.europa.eu/law/law-topic/data-protection/reform/rules-business-and-organisations/obligations/what-rules-apply-if-my-organisation-transfers-data-outside-eu_en*. Accessed: 2024-09-06.
[132] What You Need To Know About Gaming Scams Targeting Children: 2024. *https://www.forbes.com/councils/forbestechcouncil/2024/01/29/what-you-need-to-know-about-gaming-scams-targeting-children/*. Accessed: 2024-08-18.
[133] White, E.E. 2007. Massively Multiplayer Online Fraud: Why the Introduction of Real World Law in a Virtual Context Is Good for Everyone Comments. *Northwestern Journal of Technology and Intellectual Property*. 6, 2 (2008 2007), 228–243.
[134] Wohn, D.Y. 2014. Spending real money: purchasing patterns of virtual goods in an online social game. *Proceedings of the SIGCHI Conference on Human Factors in Computing Systems* (New York, NY, USA, Apr. 2014), 3359–3368.
[135] Xiong, Y. et al. 2023. A Data-Driven Decision Support Framework for Player Churn Analysis in Online Games. *Proceedings of the 29th ACM SIGKDD Conference on Knowledge Discovery and Data Mining* (New York, NY, USA, Aug. 2023), 5303–5314.
[136] Yang, H.-L. and Lin, R.-X. 2019. Why do people continue to play mobile game apps? A perspective of individual motivation, social factor and gaming factor. *Journal of Internet Technology*. 20, 6 (2019), 1925–1936.
[137] Yee, N. 2006. Motivations for Play in Online Games. *CyberPsychology & Behavior*. 9, 6 (Dec. 2006), 772–775. https://doi.org/10.1089/cpb.2006.9.772.
[138] YouTube Channel Calls Out Mobile Game Devs for Illegal Ads: 2021. *https://gamerant.com/game-theory-mobile-game-ads-illegal/*. Accessed: 2024-09-08.
[139] Zagal, J.P. et al. 2013. Dark patterns in the design of games. *Foundations of Digital Games 2013* (2013).

[140] Zeng, E. et al. 2021. What Makes a "Bad" Ad? User Perceptions of Problematic Online Advertising. *Proceedings of the 2021 CHI Conference on Human Factors in Computing Systems* (New York, NY, USA, May 2021), 1–24.
[141] Zhang, S. et al. 2023. Out of the Box Thinking: Improving Customer Lifetime Value Modelling via Expert Routing and Game Whale Detection. *Proceedings of the 32nd ACM International Conference on Information and Knowledge Management* (New York, NY, USA, Oct. 2023), 3206–3215.

## A. INTERVIEW SCREENING SURVEY

Table 3. Interview Screening Survey

| Item | Question Prompt | Response Type |
|---|---|---|
| Q1 | Are you 18 years old or older? | Yes/No |
| Q2 | Are you fluent in English? | Yes/No |
| Q3 | Do you currently reside in the United States? | Yes/No |
| Q4 | Have you seen a mobile game advertisement on social media? | Yes/No |
| Q5 | Have you downloaded and played a game based on a mobile game advertisement you saw on social media? | Yes/No |
| Q6 | What is your primary device for playing mobile games? | Open-ended |
| Q7 | On which social media platform did you see the mobile game advertisement? | Multiple choice (Select all that apply) |
| Q8 | What is the name of the game you downloaded and played based on the advertisement? (If there are several, please list all.) | Open-ended |