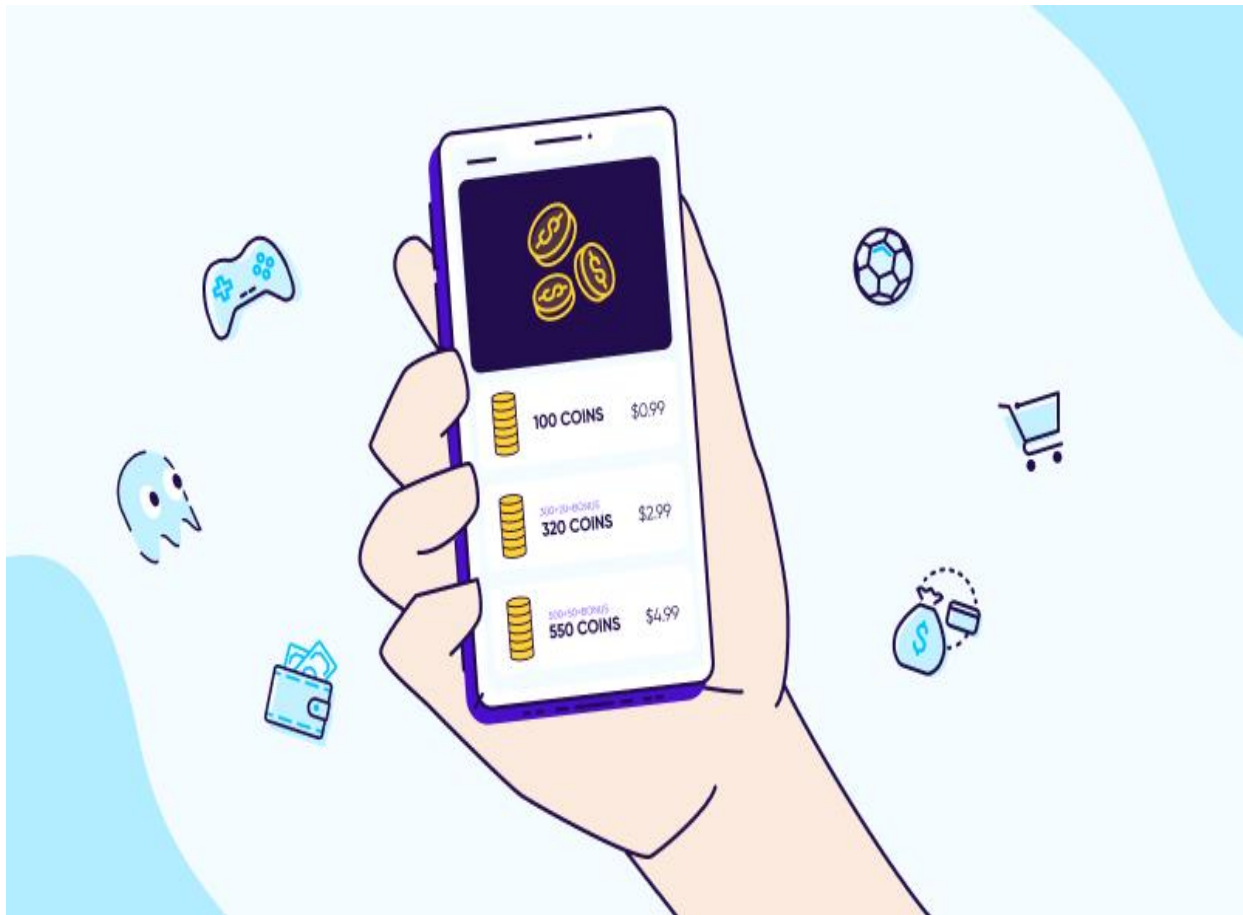

UNDERSTANDING THE PURCHASING BEHAVIOUR OF GAMING AUDIENCES

Written by: Lorenzo Ramon



ABSTRACT

This dissertation delves into gamers' spending behaviours, specifically in-game transactions such as downloadable content (DLC), cosmetic products, and microtransactions. The study uses a multi-theoretical framework that includes the Theory of Planned Behavior, Self-Determination Theory, Flow Theory, and the Digital Consumer Decision Journey to explicate the psychological, social, and experiential variables impacting gamers' digital buying decisions. Data were collected using a standardized questionnaire designed to capture constructs from each theoretical model, allowing for a thorough quantitative analysis.

The findings show that gamer purchase behaviour is influenced by a complex interaction of rational attitudes, social influences, intrinsic motives, and immersive experiences. Attitudes, subjective standards, and perceived behavioural control all have a substantial impact on purchase intentions, whereas intrinsic demands for competence, autonomy, and relatedness drive engagement with game content. Immersive flow states increase the possibility of spending, and the purchasing process is fluid and non-linear, influenced by a variety of touchpoints such as social media and peer recommendations.

The study contributes to the digital consumer behaviour literature by revealing that in-game purchases are significant, psychologically motivated decisions rather than just impulsive actions. The findings have practical significance for game developers and marketers looking to create ethical and effective monetization tactics that match player goals and improve user experience. Limitations include reliance on self-reported data and sample representativeness, indicating potential paths for further study using qualitative and longitudinal approaches. Overall, this study increases understanding of the dynamic incentives and behaviours that drive digital consumption in gaming environments.

TABLE OF CONTENTS

Introduction

Context and Importance.....	3
Problem Statement.....	3
Research Aim and Objectives.....	3
Research Questions.....	4

Literature Review

Introduction to the Literature Review.....	5
Justification for Selecting the Four Core Theories.....	5
Overview of the Gaming and Esports Industry's Growth and Monetization Strategies.....	6
Consumer Behaviour in the Digital Age.....	6
Microtransactions and In-Game Purchases.....	6
The Role of Physical Merchandise in the Gaming Industry.....	7
Psychological and Emotional Drivers	8

Theoretical Frameworks

Theory of Planned Behaviour.....	9
Self Determination Theory.....	9
Flow Theory.....	10
Digital Consumer Decision Journey.....	10

Gamers and Digital Economy

Diverse Segments Within the Gaming Community.....	11
Demographics, Psychographics and Purchasing Habits.....	11
Social Influence, Online Communities and Peer Pressure.....	12
Impact of Game Design on Consumer Spending.....	12

The Interplay Between Digital and Physical Purchases

Relationship between In-Game Purchases and Physical Purchases.....	13
--	----

Perception and Valuation of Physical vs Digital Products.....	13
Gaps in Literature	
Absence of an Integrative Model for Digital and Physical Gaming Purchases.....	14
Underutilisation of Behavioural Theories in Gaming Contexts.....	14
Conclusion of the Literature Review.....	15
Data Analysis: Questionnaire	
Findings.....	16
Conclusion of the Data Gathered.....	21
Discussion	
Theoretical Implications.....	23
Academic Debate and Gaps.....	23
Critical Social Considerations.....	24
Practical Implications.....	25
Conclusion	27
References	29

INTRODUCTION

CONTEXT AND IMPORTANCE

Over the last decade, the gaming business has grown at an unparalleled rate, from a small subculture to one of the largest global entertainment sensations (Grand View Research, 2020). Gaming has become a major pillar of the digital entertainment field, with millions of viewers and professional events giving prize pools similar to those of traditional sports. The revenue structures of the digital gaming industry have changed in tandem with this expansion, moving away from one-time purchases and toward more flexible and consistent revenue streams (Goh, Al-Tabbaa and Khan, 2023).

In-game transactions, such as downloadable contents (DLC), cosmetic items, battle passes, and loot boxes, have become a significant source of money for games. These microtransactions affect not only how games are monetized, but also game design, user engagement, and marketing techniques (Colagrossi, 2024). In parallel, physical merchandise such as branded apparel, signed equipment, and collector's items continue to be popular with consumers, boosting brand loyalty and sense of community (Roggeveen et al., 2021). Gamers are a diverse yet highly engaged audience whose purchasing decisions are influenced by a complex combination of psychological, social, and contextual factors. Despite their economic importance, there is still a lack of knowledge of the underlying motivations for both digital and traditional game purchases (Goh, Al-Tabbaa and Khan, 2023). This study seeks to close that gap by investigating what influences gamers' purchasing decisions in today's entertainment world.

PROBLEM STATEMENT

Although the gaming industry continues to expand because of a variety of revenue streams, including both in-game digital transactions and physical items, there is still a shortage of thorough understanding of gamers' buying behaviour.

Much of the existing research treats gaming as a single activity, ignoring the complex motivations and decision-making processes that determine how and why gamers choose to spend money on digital and physical goods. As a result, developers and marketers confront hurdles in developing monetization strategies that meet the diverse needs of this consumer group. There is an obvious need for more research on the psychological and behavioral factors that impact purchasing decisions in the modern gaming environment.

RESEARCH AIM AND OBJECTIVES

Aim

This study seeks to investigate and comprehend the fundamental elements that drive in-game purchasing behaviour among gaming audiences, using existing consumer behaviour theories adapted to the study's context.

Objectives

- Identify and analyse the psychological, social, and contextual elements that influence in-game purchases among gaming fans.
- Examine the applicability and relevance of known consumer behaviour theories, specifically, the Theory of Planned Behavior, Self-Determination Theory, Flow Theory, and the Digital Consumer Decision Journey, to game-related purchase behaviour.
- Provide information for developers, marketers, and stakeholders to create more successful engagement and monetization strategies for gaming audiences.

RESEARCH QUESTIONS

❖ Primary Research Question:

What are the key psychological and behavioural factors that influence purchasing behaviours among gaming audiences.

❖ Sub-Questions:

1. How do the components of the Theory of Planned Behavior (attitudes, subjective norms, perceived behavioural control) explain gamers' purchasing decisions?
2. How can Self-Determination Theory (autonomy, competence, and relatedness) explain intrinsic and extrinsic motives for game purchases?
3. To what extent does the notion of Flow influence gamers' immersion and subsequent expenditure on digital or physical products?
4. How does the Digital Consumer Decision Journey model influence gamers' purchasing decisions, from first awareness to post-purchase reflection?

LITERATURE REVIEW

INTRODUCTION TO THE LITERATURE REVIEW

This literature review seeks to investigate and analyse the existing body of research on gamers' spending habits, with an emphasis on both in-game transactions and tangible items. The review will delve into the psychological, sociological, and contextual variables that influence purchasing decisions among gamers. The review will also look at theoretical frameworks for understanding consumer behaviour in digital settings and how they apply to the gaming business.

The literature study will concentrate on the four fundamental theories that guide this research: Theory of Planned Behavior (TPB), Self-Determination Theory (SDT), Flow Theory, and the Digital Consumer Decision Journey (DCDJ). The goal is to critically evaluate how these frameworks help explain gamers' buying habits, both in digital and real environments, as well as how they may be used to improve game development and monetization techniques.

The review will also present an overview of the gaming and esports sectors' growth and evolution, with a focus on shifting monetization tactics. Understanding these tactics is critical for understanding the economic significance of in-game purchases and actual items, both of which have grown indispensable to the gaming industry.

JUSTIFICATION FOR SELECTING THE FOUR CORE THEORIES

The four theoretical frameworks selected for this study provide a comprehensive approach to understanding the psychological and behavioral factors of gamers' purchasing decisions.

1. The Theory of Planned Behavior (TPB) offers a solid framework for understanding how attitudes, subjective standards, and perceived behavioural control influence people's decisions to engage in specific behaviours. TPB can assist explaining why gamers make in-game purchases or buy tangible products depending on their sentiments toward the game, social factors, and the ease or difficulty of making such transactions (Ryan and Carr, 2023).
2. Self-Determination Theory (SDT) examines inner and extrinsic motivations and their impact on behaviour. This theory will provide light on why gamers may feel encouraged to make purchases in order to improve their sense of achievement, identity, and community within the game by looking at autonomy, competence, and relatedness (Ackerman, 2018).
3. Flow Theory is especially important in the gaming context since it explains the state of intense immersion and engagement that players feel while playing. The theory will assist people understand how being in a state of flow affects their purchase decisions, such as buying in-game content or tangible products to improve their gaming experience (Biasutti, 2011).
4. The Digital Consumer Decision Journey (DCDJ) model depicts the stages a consumer goes through while making a purchase in a digital environment, from awareness and contemplation to purchase and post-purchase review. Applying this model will provide a thorough insight of how gamers navigate their purchase journey, whether they are purchasing in-game stuff or tangible commodities such as merchandise (Scavilla, 2016).

OVERVIEW OF THE GAMING AND ESPORTS INDUSTRY'S GROWTH AND MONETIZATION STRATEGIES

The worldwide gaming industry has emerged as one of the most profitable sectors of the entertainment economy. The worldwide gaming market was valued at \$159.3 billion in 2020. This includes earnings from console and PC games, mobile games, and esports. To put it into context, the music industry was valued at \$19.1 billion in 2020, while the film sector was valued at \$41.7 billion. That means that the gaming market earns more than three times more than the music industry and nearly four times as much as the film industry (Divers, 2023).

Central to this growth has been a shift from traditional one-time game purchases to ongoing monetization models, such as microtransactions, season passes, and downloadable content (DLC). These tactics allow developers to make ongoing revenue long after a game's original release.

Along with digital purchases, tangible stuff, such as brand themed gear, figurines, and limited-edition souvenirs, remains an effective tool for extending the gaming experience into the real world. These things are frequently used as representations of identification and community affiliation, strengthening emotional bonds between players and game brands (Green, Champion and Eade, 2024).

The growing reliance on in-game monetization and branded items emphasizes the need of knowing how players make purchasing decisions. However, academic research has not kept up with these advancements, particularly in terms of combining digital and physical consumer behaviors into a single conceptual framework. This literature study fills that gap and prepares the groundwork for a thorough investigation into the underlying elements driving gamers' purchasing habits.

CONSUMER BEHAVIOUR IN THE DIGITAL AGE

Digital consumer behaviour deviates dramatically from traditional consumption models. In traditional situations, consumers often engage in ownership-based, product-focused transactions, which are primarily motivated by utility or necessity. In contrast, digital customers, particularly gamers, are driven by experience, access, interaction, and identity. The purchasing process is frequently nonlinear, emotionally motivated, and influenced by interactive platforms that provide constant, real-time feedback (Chamat, 2024).

Gamers represent digital transformation. They function in immersive environments in which consumer choices, like purchasing downloaded content or personalizing avatars, are integrated directly into the experience. Individual preferences influence decision-making, but so do game mechanics, social ecology, and community norms. As a result, understanding the behavioral intricacies of digital customers necessitates consideration of both the technological context and the psychosocial dynamics of online environments.

MICROTRANSACTIONS AND IN-GAME PURCHASES

Microtransactions have come to be a defining characteristic of the current gaming economy. These often small, repeated transactions allow players to obtain cosmetic improvements, additional content, power enhancements, or in-game currency, usually without leaving the game (Ansari, 2023).

Key categories include:

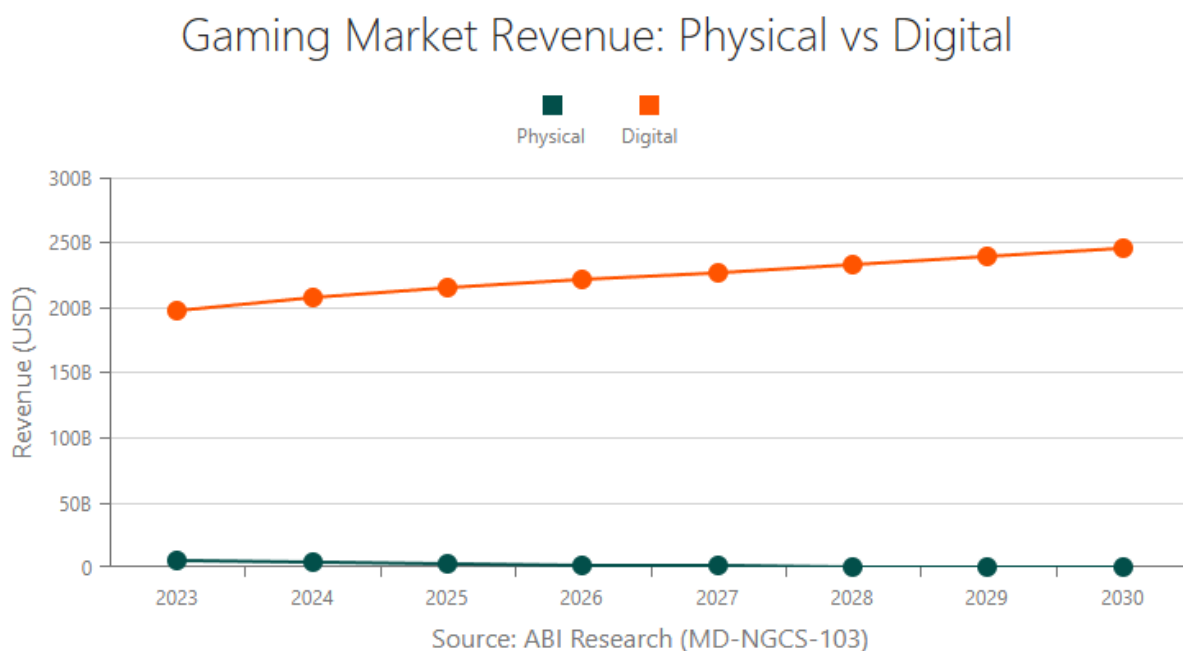
- Cosmetic items (skins, emotes, animations)
- Functional items (weapons, boosts, or tools)
- DLC and expansion packs

- Battle passes and seasonal content
- Loot boxes or randomized item bundles

These transactions are more than just income generators; they are intended to increase player involvement, provide status-enhancing opportunities, and personalize the experience, although it's also worth noting that a huge majority of microtransactions are designed to take as much money from players as much as possible which often leads to terrible game experience and in some cases, addiction (Raneri et al., 2022). In free-to-play models, in-game payments frequently cover development costs while keeping the main experience open to all players. As part of the larger digital economy, they reflect an increasing trend toward incremental, on-demand consumption, in which users pay for added value over time rather than making a single purchase.

THE ROLE OF PHYSICAL MERCHANDISE IN THE GAMING INDUSTRY

While digital transactions continue to dominate income, physical items remain an important part of gaming behaviour (ABI Research, 2023).



(A Graph showcasing the disparity of Physical purchases vs Digital in the Gaming Market)

Gamers can show their support for their favorite games by purchasing branded clothes, collectibles, figurines, art books, and signed products. These objects frequently have symbolic meaning, serving as concrete representations of virtual identities or emotional connections to specific people, franchises, or experiences (Genie, 2021).



(Jojos Bizzare Adventure x Gucci Collab)

Physical objects also act as marketing and engagement tools, increasing brand loyalty and strengthening fan relationships. Limited editions or exclusive drops create excitement and a sense of scarcity, resulting in quick purchasing decisions. In this approach, merchandising broadens the impact of a game beyond the screen, resulting in a hybrid consumption paradigm in which players participate in both digital and physical dimensions (Hussain et al., 2024).

PSYCHOLOGICAL AND EMOTIONAL DRIVERS

- **Identity:** Gamers frequently create and express their identities through in-game actions and purchases (Ai, Cross and Bignell, 2023). Customizing avatars, having rare items, and wearing game-themed apparel may all be used to express oneself and build a brand.
- **Community:** The social atmosphere of gaming, whether in multiplayer lobbies, online forums, or streaming platforms, has a huge impact on behaviour (Davis, 2023). Purchases are frequently made to match peers, participate in activities, or show dedication to a common group.
- **Status and Recognition:** Many games reward purchases with unique content, visual status indicators, or leaderboard benefits. These establish social hierarchies that incentivise expenditure among players who want to stand out or get respect in their respective communities (Hu, Wei and Chignell, 2023).
- **Together,** these emotional and social aspects contribute to a multifaceted decision-making process that goes far beyond rational utility. Gamers buy not only to improve their experience, but also to belong, express themselves, and advance in digital communities (Meriläinen, 2023).

THEORETICAL FRAMEWORKS

THEORY OF PLANNED BEHAVIOUR

Ajzen's (1991) Theory of Planned Behavior (TPB) states that attitudes, subjective norms, and perceived behavioral control all influence intentions, which in turn influence behaviour. It is a tried-and-true model for forecasting customer behaviour, particularly when behaviours are planned and intentional. TPB is especially useful in digital scenarios where users can choose between making in-game purchases and purchasing physical things. Internal preferences and external social influences commonly influence purchasing behaviour in such contexts (Ryan and Carr, 2023).

Attitudes regarding in-game purchases, such as the assumption that a cosmetic item improves enjoyment or prestige, can have a direct impact on purchasing decisions (admin, 2024). Subjective norms, or perceived social pressure from peers, influencers, or online communities, can promote conformity through purchasing decisions. Perceived behavioural control refers to a gamer's ease or ability to make a purchase, which includes financial resources and user-friendly interfaces.

Together, these factors make TPB a valuable paradigm for analysing the psychological and social drivers of game purchases, both digital and analog. Its systematic method helps explain how players' intentions turn into actual purchasing behaviour.

SELF DETERMINATION THEORY

Deci and Ryan (1985) developed Self-Determination Theory (SDT), a motivational theory that distinguishes between intrinsic motivation, which is driven by interest or enjoyment, and extrinsic motivation, which is influenced by external rewards or pressure. According to SDT, human conduct is motivated by the desire to meet three fundamental psychological needs: autonomy, competence, and relatedness (Ackerman, 2018).

In gaming environments, SDT provides useful information about why users engage with games and make relevant purchases. Autonomy refers to a player's ability to choose and control their own actions. In games, this could include deciding how to play or which content to connect with, and purchases like skins or downloadable content (DLC) can help to increase this sense of personal expression. Competence entails feeling competent and capable, which is frequently achieved by progressing through games or accumulating objects that boost performance or status. Relatedness displays a desire to connect with others, which can be facilitated by social aspects in games or shared cultural symbols, such as game-branded items (Uysal and Yildirim, 2016) (Ballou, 2020).

These needs affect both in-game purchases and physical item consumption. For example, purchasing a unique skin may fulfill autonomy by allowing self-expression. Similarly, acquiring real products such as clothing or souvenirs can strengthen identification and build a sense of belonging to a larger gaming community. SDT provides insight into how motivation extends beyond functional utility to emotional and psychological fulfillment, making it an effective paradigm for studying consumer behavior in digital gaming settings.

FLOW THEORY

Csikszentmihalyi (1990) introduced Flow Theory, which explains a psychological state of profound immersion and intense participation in an activity, sometimes known as being "in the zone." This situation happens when a person's skill level is balanced with the task's difficulty, resulting in intense focus, enjoyment, and a loss of self-consciousness (Biasutti, 2011).

Gaming contexts are especially conducive to producing flow experiences because they provide quick feedback, defined goals, and rising levels of difficulty. When players feel flow, they become more immersed in the game, which might increase emotional attachment while decreasing critical thinking about spending. This level of deep engagement can boost the possibility of in-game purchases, as players may be more likely to purchase products that improve or prolong the immersive experience, such as new content, customizations, or performance-enhancing upgrades (Huang, 2023).

Flow also applies to a broader gaming lifestyle. Players who frequently enter flow states may form stronger brand attachments, making them more likely to buy actual products such as attire, souvenirs, or gear that connects them to their gaming identity (Huang, 2023). Finally, Flow Theory explains how persistent involvement can influence player behavior, increasing emotional investment and the tendency to spend on both digital and physical gaming-related things (Dwivedi, 2022).

DIGITAL CONSUMER DECISION JOURNEY

The Digital Consumer Decision Journey (DCDJ) is a current concept that depicts how customers progress from awareness to deliberation, purchase, and post-purchase participation in digital ecosystems. Unlike typical linear models, the DCDJ focuses on a non-linear, often iterative process influenced by real-time input, peer influence, and platform algorithms (Scavilla, 2016).

For gamers, the journey begins with awareness, which is frequently triggered by exposure to in-game material, social media, influencers, or platform recommendations. This leads to consideration, in which gamers assess the worth of digital goods (skins, DLC, season passes) versus physical products (branded merchandise and accessories). During this phase, factors such as reviews, gameplay experience, and community discussion all contribute to molding perceptions (Hollebeek et al., 2022).

The purchase stage is typically facilitated by streamlined digital storefronts within games or external platforms. Convenience, cost, and perceived value are all factors that impact in-game purchases. Branding and emotional attachment to the game or creator are frequently driving factors in the purchasing of tangible products (Munteanu, 2024). During the post-purchase phase, gamers can discuss their purchases online, wear items at events, or continue to invest in content, re-entering the journey loop. Positive post-purchase experiences, such as collectible quality, might help to reinforce brand loyalty and encourage future buying.

By recording the complete decision journey, the DCDJ provides a full picture of how gamers interact with and eventually buy both digital and physical things, impacted by a combination of personal incentives and interactive digital touchpoints.

GAMERS AND DIGITAL ECONOMY

DIVERSE SEGMENTS WITHIN THE GAMING COMMUNITY

The gaming community is not a homogeneous group; it is divided into several segments based on engagement, motivation, and spending habits. Casual and hardcore gamers are frequently identified as the two most dominant categories.

- Casual - Casual gamers play occasionally, want easy gameplay, and are less inclined to invest considerably in in-game material.
- Hardcore - Hardcore gamers commit more time, are more competitive, and frequently participate in the metagame (theory-crafting, community conversation), which may correlate with more in-game spending, particularly on cosmetic or performance-enhancing products.

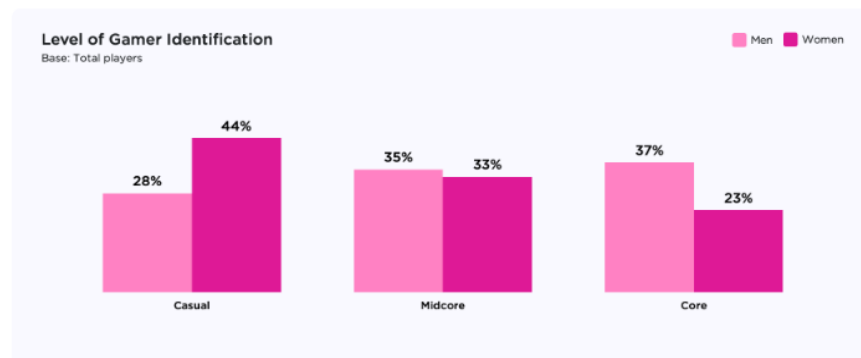
These distinctions matter because purchase behaviour, susceptibility to influence, and response to game design mechanics often vary between segments (Hamari and Keronen, 2017).

DEMOGRAPHICS, PSYCHOGRAPHICS AND PURCHASING HABITS

The demographics of gamers have shifted dramatically. Traditional stereotypes portray gamers as young guys, but data increasingly reveal broad participation across age groups, genders, and countries.

- Age – Age can influence the income and willingness to spend, along with platform preferences (Mobile, Desktop, Console).
- Gender – Genders play a role in preferred genres, while there are outliers, study shows that certain genders dominate in certain game genres. A vast majority of competitive gamers are Male, while Female audiences are more common in social/casual games.

Nearly half of women self-identify as casual gamers, with 23% identifying as core gamers



Source: Newzoo Global Gamer Study 2023 (Global weighted average across 36 markets) | Q: Level of identifying as a gamer | Base: Male players (n= 31,377) Female players (n=26,360)

(Tue Le Ngoc, 2024)

- Psychography – Psychographics such as the need for achievements, autonomy, and social connections affects what and why gamers purchase, this is directly supported by the Self-Determination Theory (Deci

and Ryan, 2000). For example, gamers seeking immersion may invest more in downloadable content (DLC) or skins, but competitive players may prioritize products that provide status or an advantage.

SOCIAL INFLUENCE, ONLINE COMMUNITIES AND PEER PRESSURE

Gamers are deeply involved in online groups such as forums, Discord servers, Reddit, and Twitch, which frequently influence consumption patterns.

Social influence is important in affecting gamers' purchasing decisions, especially in online groups (Barysevich, 2020). Gamers commonly interact in online forums, Discord servers, Twitch streams, and Reddit, where they share their games experiences and consuming habits. These groups serve as effective forms of social proof, frequently reinforcing spending habits through peer validation. For example, when influential content creators or peer groups recommend specific in-game purchases, such as cosmetic skins or downloadable content, players may feel compelled to conform.

This dynamic is best characterized by Ajzen's Theory of Planned Behavior, which holds that subjective norms, or perceived social expectations, have a major impact on behavioural intentions. In this setting, a gamer's buying decision is influenced by their desire for social alignment or acceptance within the community, rather than solely individualistic considerations. Furthermore, the Digital Consumer Decision Journey demonstrates how these factors might alter traditional linear purchasing patterns. Instead of moving from awareness to consideration to decision, gamers may be driven to spend impulsively based on a peer's advice or a popular trend in their community.

IMPACT OF GAME DESIGN ON CONSUMER SPENDING

Modern video games are not only intended to entertain, but also to monetise involvement via built-in economic systems. Loot boxes, progression systems, and incentive structures are examples of game mechanics that use behavioural psychology principles to directly affect consumer spending behaviours. Loot boxes, for example, use variable-ratio reinforcement schedules akin to gambling, enticing players to make many purchases in the hopes of receiving high rarity items (Psychology, 2021). Progression systems can further promote spending by introducing artificial constraints, also known as "pay-to-progress" mechanics, that allow players to skip time-consuming gaming through microtransactions. Daily log-in awards, battle passes, and cosmetic unlocks are all instances of how games encourage ongoing, often unconscious investment.

These design aspects are most successful when players enter flow states, a phrase coined by Csikszentmihalyi, in which they become completely absorbed and less self-conscious. During times of high engagement, gamers are more inclined to make spontaneous purchases in order to sustain their immersion or improve their in-game performance. As a result, game design not only entertains but also strategically encourages players to make financial commitments (Oppland, 2025) (Court et al., 2009).

THE INTERPLAY BETWEEN DIGITAL AND PHYSICAL PURCHASES

RELATIONSHIP BETWEEN IN-GAME PURCHASES AND PHYSICAL PURCHASES

While much study has focused on digital consumption in gaming, such as downloadable content (DLC), skins, and loot boxes, a growing body of literature investigates the link between in-game transactions and tangible goods. According to research, these two types of consumption are not mutually exclusive, but rather interrelated and frequently reinforce one another (Marchand and Hennig-Thurau, 2013). Players who are deeply invested in a game or property are more likely to purchase physical things such as branded clothes, collectibles, figurines, or esports team merchandise.

This is especially visible in gaming ecosystems that encourage strong fan devotion, such as League of Legends or Fortnite, where in-game purchases are usually accompanied by tangible brand engagement. According to some study, physical purchases function as identification markers or tangible displays of digital membership, helping to bridge the gap between virtual and real-world fans (Hamari and Sjöblom, 2017). As a result, expenditure patterns in one area frequently mimic or complement those in another, especially among more invested players.

PERCEPTION AND VALUATION OF PHYSICAL VS DIGITAL PRODUCTS

Gamers' impressions of actual and digital products differ depending on their personal values, goals, and psychological ownership. Physical objects are frequently connected with permanence, tangibility, and collectability, whereas digital products, despite their lack of physical form, are appreciated for their utility, aesthetic appeal, and status signaling inside the gaming world. Lehdonvirta claims that digital items can have symbolic meaning and social worth, especially when they are uncommon or customisable (Lehdonvirta, 2009). However, worries about lack of ownership rights and platform dependency can reduce the perceived value of digital purchases when compared to physical ones.

Physical merchandise, on the other hand, may not provide the same level of immediate pleasure or integration into gameplay, but it frequently meets social and identity-based needs by allowing players to display commitment to specific games or communities in offline settings, it also provides mental security, as physical objects are harder to part from an owner as digital ones. This dual valuing emphasizes the various and highly personal ways in which gamers give value to their purchases.

GAPS IN LITERATURE

ABSENCE OF AN INTEGRATIVE MODEL FOR DIGITAL AND PHYSICAL GAMING PURCHASES

While there has been substantial research into digital consumption in gaming, such as in-game purchases, virtual products, and downloadable content, there is a noticeable absence of comprehensive models that incorporate both digital and physical purchasing behaviors. Studies frequently examine both realms independently, concentrating just on digital transactions or physical items without considering their interplay. Lancaster's research, for example, emphasizes the co-evolution of offline and online video games but does not go into a unified consumer behaviour model that includes both sorts of purchases (Ozuem, Borrelli and Lancaster, 2015). This segmentation restricts our understanding of the overall consumer journey in gaming, as digital and physical purchases may impact one another.

UNDERUTILISATION OF BEHAVIOURAL THEORIES IN GAMING CONTEXTS

Behavioural theories such as Self-Determination Theory (SDT) and Theory of Planned Behavior (TPB) are useful frameworks for studying motivation and decision making. However, their use in game studies has mostly been superficial. Tyack and Mekler conducted a thorough assessment of SDT in human-computer interaction (HCI) game research, indicating a trend toward shallow implementations of the theory, with little involvement in hypothesis testing and theoretical depth (Tyack and Mekler, 2024). This suggests that more thorough and nuanced applications of behavioural theories are required to correctly reflect the intricacies of gamer behaviour.

To summarise, addressing these gaps through the development of integrative models that include both digital and physical purchasing behaviors, as well as the more rigorous application of behavioral theories, will improve our understanding of gamer consumption patterns and inform more effective marketing and design strategies in the gaming industry.

CONCLUSION OF THE LITERATURE REVIEW

The literature demonstrates a dynamic and varied landscape of gamer purchase behavior, influenced by both psychological and social variables. Key findings show that game design mechanics (loot boxes and progression systems), has varied influence within online communities, and internal motivating factors like autonomy,

competence, and immersion all have a significant impact on in-game purchases. Physical stuff, including collectibles and branded gear, also functions as an extension of gamers' identities and community affiliations. Although both domains have been extensively investigated, there is still a gap in studies that investigate their interplay.

Furthermore, while behavioral theories such as the Theory of Planned Behavior, Self-Determination Theory, Flow Theory, and the Digital Consumer Decision Journey have been discussed in previous research, their full potential has yet to be realised through consistent, theory-driven empirical application.

This research lays the groundwork for the current study by highlighting the need for a more comprehensive knowledge of gamers' purchase behavior, namely how psychological motives and social factors function in both digital and physical consuming contexts. The fragmented nature of past research, combined with weak theoretical applications, emphasizes the importance of a study that effectively applies behavioural theory to the broader consumer journey.

The chosen theories are especially relevant to the research's goals and aims. TPB contributes to our understanding of how attitudes, social norms, and perceived behavioral control influence purchasing intentions. SDT provides insight into the role of intrinsic and extrinsic motivations in determining voluntary involvement. Flow Theory explains how immersive gameplay experiences influence decision-making and expenditure, particularly in digital contexts. Finally, the Digital Consumer Decision Journey explains how current gamers travel a nonlinear path from awareness to purchase across both online and offline channels. Collectively, these frameworks provide a solid theoretical platform for studying the intricacies of gamer purchase behavior in today's hybrid digital economy.

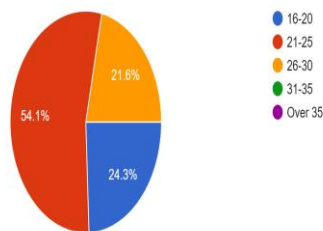
DATA ANALYSIS: QUESTIONNAIRE

The primary justification for employing a questionnaire in this study is its ability to collect quantitative data from a large and diverse sample of gamers in a timely and cost-effective manner. Questionnaires are especially useful for investigating behavioral patterns, attitudes, and motivations, making them excellent for evaluating theoretical constructs developed from the Theory of Planned Behavior, Self-Determination Theory, and other frameworks. They provide uniform data collecting, which facilitates statistical analysis and comparisons between gamer segments such as casual and hardcore players. This strategy also provides anonymity, which can lead to more honest and dependable responses.

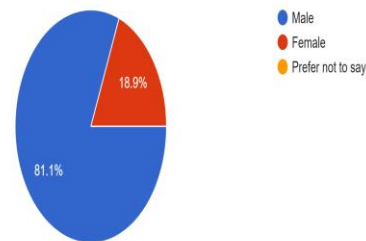
Findings

This section presents the key findings gathered through the questionnaire I issued in multiple social media sites such as Reddit and Facebook. While we may have only gathered 37 total responses, I believe we still have a solid framework to work with in terms of data. The aim of the questionnaire was to explore the purchasing behaviour of gamers. The questions were formulated in a way that aligns with the core theories used and discussed in this study; Theory of Planned Behaviour, Self-Determination Theory, Flow Theory, and The Digital Consumer Decision Journey.

What is your age?
37 responses



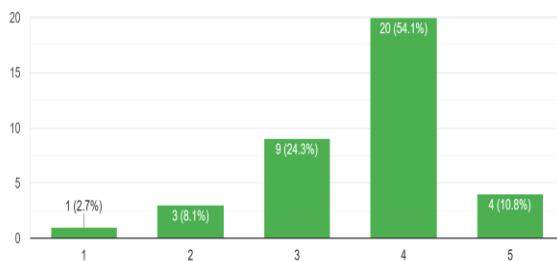
What is your gender?
37 responses



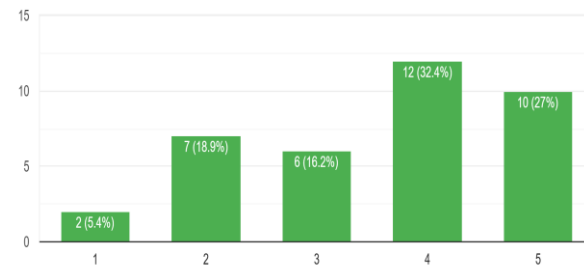
Starting with the average median age group, based on the data collected, we can assume that the average age group of those who took the questionnaire is around 20 to 29. A vast majority of our core group are males.

Understanding the average age and gender distribution of respondents is critical for contextualising the results of this study. Age and gender can have a considerable impact on gaming habits, preferences, and purchasing decisions. For example, younger gamers may be more likely to engage in microtransactions due to their greater knowledge with digital ecosystems, whereas gender may be associated with differing motives for in-game spending, such as cosmetic vs competitive content. By identifying participants' demographics, the study can more properly analyse behavioural patterns and assess the generalisability of the findings to the larger gaming community.

I generally have a positive attitude toward spending money on in-game content.
37 responses



It is entirely up to me whether I choose to buy in-game content.
37 responses

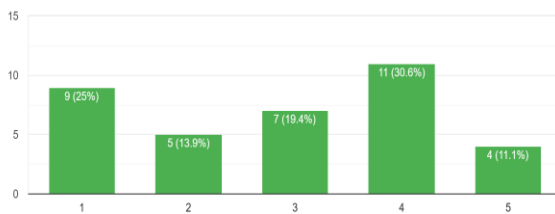


In terms of attitude, respondents gave spending on in-game content a positive rating, with an average score of 4 out of 5 on a Likert scale (1 being strongly disagree and 5 being strongly agree). This suggests that, overall, participants are positive about the idea of paying money on virtual things or content within games. Such a positive

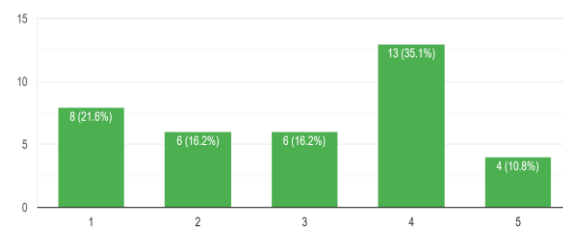
attitude implies that in-game purchases are not only acceptable but may also be regarded as a typical or fun aspect of the gaming experience. This is consistent with the "attitude toward the behaviour" component of the Theory of Planned Behavior (TPB), which states that positive attitudes improve the likelihood of engaging in a given behaviour, in this example, making in-game purchases.

Respondents also expressed a significant sense of autonomy when asked if they thought it was entirely up to them to decide whether to purchase in-game content. The majority of replies fell between 4 and 5 on the scale, indicating agreement or strong agreement. This shows that most participants believe their purchasing decisions are self-determined and free of external pressure, indicating a high level of perceived behavioural control.

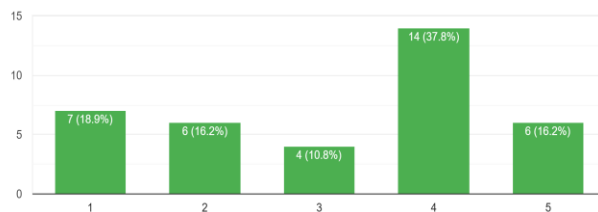
I buy in-game content to stand out or gain status in the community.
36 responses



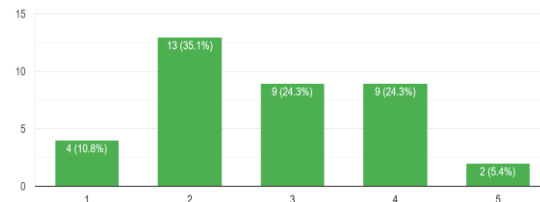
I feel social pressure to buy in-game items to keep up with others.
37 responses



I feel pressured to buy in-game content to stay competitive or relevant.
37 responses



People whose opinions I value think it is acceptable to spend money on in-game purchases.
37 responses



The findings on social influence show a varied picture. According to the Theory of Planned Behavior, subjective norms the perceived social pressure to perform or not perform a behavior are an important predictor of behavioural intention. In this study, the average Likert ratings for comments on social norms were close to the middle, reflecting mixed attitudes toward social influence. For example, the statement "I feel social pressure to buy in-game items to keep up with others" had a mean of 2.97, while "I buy in-game products to gain social prestige or stand out" had a little lower average of 2.89. These mid-range numbers indicate that gamers are divided, while some recognise external forces, many do not see them as strong motivators.

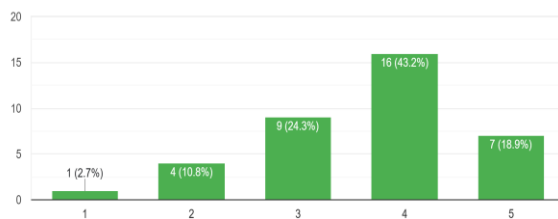
Similarly, "People whose opinions I value think it is acceptable to spend money on in-game purchases" obtained a moderate score of 2.78, corroborating the notion that perceived acceptance from others has a limited but significant influence on purchasing decisions. A more illuminating finding comes from the item "I feel pressured to buy in-game content to stay competitive or relevant," which scored significantly higher. This shows that competitive pressure, rather than just social prestige, could be a more powerful motivator of behavior. The

pressure to remain successful or relevant in a competitive gaming environment may serve as a functional type of social influence, where performance expectations take precedence over purely image-based motives.

Taken together, these findings show that social influence has a moderate and context-dependent impact on purchasing behaviour. While status-seeking and peer approval appear to have minor roles overall, competitive viability offers a unique type of pressure that resonates more powerfully with participants. Thus, while most gamers' actions are self-motivated, there is a subset for whom external validation particularly in performance-driven environments can influence purchasing behaviour.

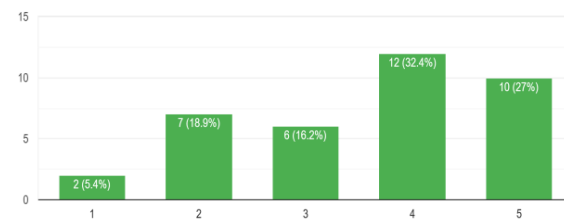
I buy items because I want to not because I have to.

37 responses



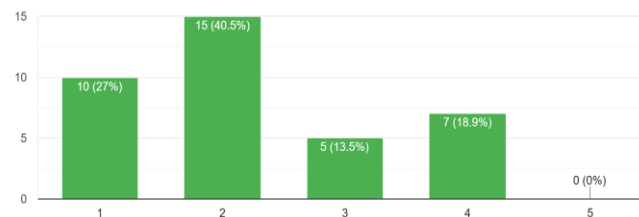
It is entirely up to me whether I choose to buy in-game content.

37 responses



I feel a sense of accomplishment when I unlock or purchase new content.

37 responses



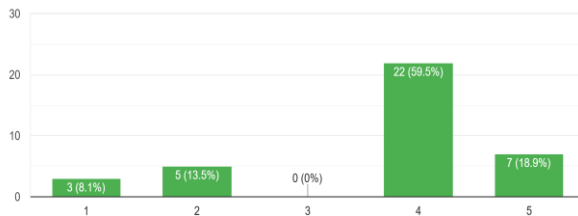
According to the findings, intrinsic motivation plays an important part in gamers' purchasing decisions. According to Self-Determination Theory, behaviours are motivated by psychological requirements for autonomy, competence, and relatedness. In this study, respondents consistently agreed more with phrases that highlighted desire rather than needing to buy in-game material. For example, the item "I buy items because I want to, not because I have to" had a comparatively high mean score of 4, indicating that the act of purchasing is mostly self-initiated and internally motivated. This lends credence to the assumption that gamers see these expenditures as voluntary upgrades to their experiences, rather than responses to obligation or external pressure.

Furthermore, the statement "It is entirely up to me whether I choose to buy in-game content" received a high rating, indicating a strong sense of perceived autonomy in purchasing decisions. This underscores one of SDT's central tenets: the more people feel autonomous in their behaviours, the more intrinsically motivated they become. Interestingly, while autonomy and want were powerful motivators, relatedness and competence were less obvious. Items indicating emotional fulfillment or post-purchase satisfaction, such as "I feel a sense of accomplishment when I unlock or purchase new content," scored low, implying that, while gamers are internally motivated to buy, these purchases may not always provide meaningful psychological rewards.

Overall, the results hint to a purchase pattern shaped by will and personal desire, rather than obligation, peer conformity, or external need. This suggests that marketing techniques that appeal to gamers' fundamental motivations such as emphasizing creative freedom, personalization, or self-expression may be more effective than those based on competitive pressure or artificial scarcity.

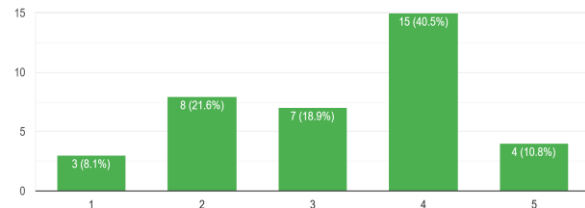
I lose track of time when playing or watching E-Sports related games.

37 responses



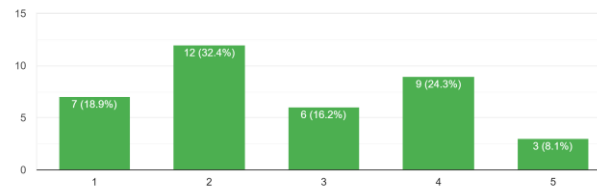
I feel emotionally connected to the game during intense sessions.

37 responses



I feel fully immersed and focused while playing or watching.

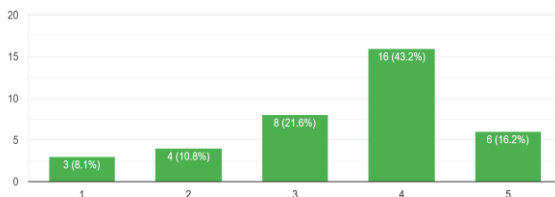
37 responses



The findings indicate that many gamers have moderate to significant levels of flow. Statements such as "I lose track of time when playing or watching E-sports games" (average score: 4) and "I feel emotionally connected to the game during intense sessions" (average: 3.54) reflect widespread experiences with temporal dissociation and emotional engagement. These findings are consistent with the basic components of Flow Theory: immersion, attention, and emotional involvement.

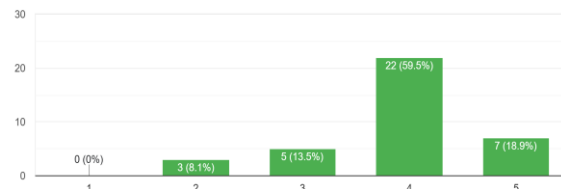
I research in-game content (e.g., reviews, stats) before buying.

37 responses



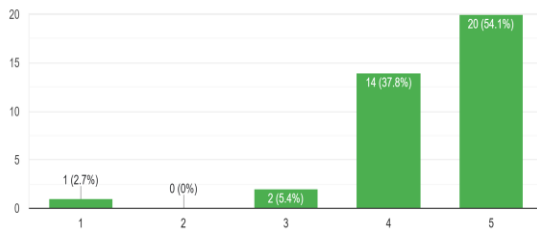
I often learn about new in-game content through streamers or influencers.

37 responses

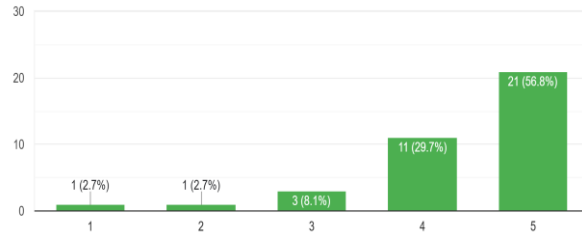


The research's data show that the majority of respondents interact with numerous online touchpoints before engaging in-game purchases, with 68% seeking out reviews, gameplay videos, or social media discussions. Furthermore, 54% said they were impacted by content creators or streamers during the review process. These findings indicate that gamers' digital journeys are highly interactive and socially affected, highlighting the importance of digital information and peer validation in molding purchasing decisions in the gaming setting.

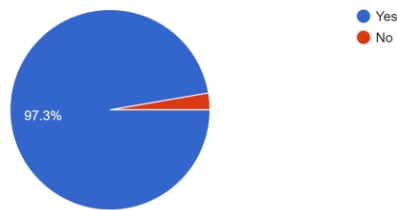
I believe some in-game purchases (e.g., loot boxes) feel similar to gambling.
37 responses



I worry that in-game purchases are becoming too aggressive or manipulative.
37 responses



Do you think game companies should be more transparent or regulated in how they present in-game purchases?
37 responses



The questionnaire's final section addressed gamers' ethical concerns about in-game purchases. A high proportion of respondents were dissatisfied with present industry procedures. Many people felt that in-game purchases are similar to gambling, especially in terms of loot boxes and randomized payouts. Additionally, a large majority expressed concern that in-game monetization is becoming more aggressive or deceptive. Most participants agreed that game makers should be more transparent about pricing models and buying processes. These findings indicate an increasing awareness and mistrust among gamers about the ethical implications of digital monetization.

Conclusion of the Data Gathered

The questionnaire, which was carefully structured around the study's four guiding theoretical frameworks, the Theory of Planned Behavior, Self-Determination Theor, Flow Theory, and the Digital Consumer Decision Journey, allowed for the systematic collection of data that could be both quantitatively and meaningfully analysed.

The questionnaire responses provide light on the motivational and behavioural factors that influence gamers' purchasing decisions. From a TPB standpoint, the data show that attitudes toward in-game content, subjective norms (peer influence), and perceived behavioural control (such as financial means or ease of transaction) all influence a gamer's intent to purchase. This demonstrates that in-game purchases are not always impulsive, but are frequently influenced by rational and social factors.

Similarly, reactions consistent with Self-Determination Theory emphasize the relevance of intrinsic motivation. Gamers frequently purchase to meet requirements for competence, autonomy, and relatedness. For example, several respondents reported that purchasing in-game things improved their performance or allowed them to

express themselves more freely, lending credence to the notion that in-game expenditures are psychologically significant rather than purely ornamental or status-oriented.

The results of Flow Theory show a substantial association between immersion and expenditure. Many gamers reported making purchases during or shortly after intense gaming sessions, implying that heightened levels of involvement can lead to increased transaction activity. This supports previous research indicating that flow states reduce decision resistance and enhance the chance of impulsive purchases in a game setting.

Finally, the use of the Digital Consumer Decision Journey demonstrates that gamers do not take a linear or typical purchasing path. Instead, several respondents described a fluid process in which product awareness, appraisal, and decision-making all happen quickly, sometimes even simultaneously within the game environment. Social media, in-game promotions, and peer recommendations were all identified as influential touchpoints.

In conclusion, the questionnaire not only offered empirical support for the study's theoretical models, but it also demonstrated the intricate, diverse character of gamer purchasing behaviour. According to the research, in-game purchases are heavily influenced by personal motivations, psychological requirements, and immersive experiences, rather than external rewards or superficial appeal. This demonstrates the need of employing a multi-theoretical approach to understanding consumer behaviour in digital gaming settings, as well as the usefulness of this research in terms of contributing to academic theory and practical marketing tactics in the gaming business.

DISCUSSION

THEORETICAL IMPLICATIONS

The current study applies many behavioural theories to better explain gamer purchasing behaviour in both digital and physical domains. However, while each theory gives useful insights, they have limits when applied to the intricacies of modern gaming environments.

The Theory of Planned Behavior (TPB) is frequently used to forecast customer behavior based on intention, which is impacted by attitudes, subjective standards, and perceived behavioural control. In gaming, TPB successfully describes conscious, rational purchasing decisions, such as deciding to support a developer by paying DLC. However, it struggles to account for spontaneous or emotionally driven purchases, such as microtransactions initiated during moments of excitement or social pressure, where intention may be weak or ill-formed.

Self-Determination Theory (SDT) is well-suited to explain the motivational dynamics that drive gamer behaviour, particularly the roles of autonomy, competence, and relatedness. It explains why gamers actively make in-game purchases to improve gameplay or express themselves. Nonetheless, SDT tends to underestimate the impact of extrinsic design mechanisms such as gamified reward systems or time-limited offers that are intended to control behaviour, frequently in ways that encourage compulsive or excessive spending.

Flow Theory offers a strong explanation for spending during deep immersion. Players that are deeply engaged in gameplay may be more likely to make purchases that enhance or sustain their immersive experience. However, the theory fails to account for economic rationality or ethical consequences, such as overspending or buyer's regret, which might result from emotionally charged decisions made during flow phases.

The Consumer Decision Journey (CDJ) provides a useful lens for investigating the nonlinear path that gamers take from awareness to purchase. It monitors how gamers interact with digital touchpoints, content, and communities during the purchasing process. However, CDJ is mostly cognitive and deliberative in character, which means it may overlook spontaneous, emotionally charged, or unconscious spending behaviours, particularly in contexts saturated with persuasive design.

When combined, these theories provide a complementary but imperfect view of gamer purchase behaviour. The current study seeks to apply them critically and contextually, showing where they work and where they fall short particularly in dealing with the emotionally complicated, socially affected, and digitally mediated nature of consumption in modern gaming.

ACADEMIC DEBATE AND GAPS

As the gaming industry evolves, so should the theoretical frameworks that are used to describe gamer behaviour. This move has spurred several academic discussions and highlighted persisting inadequacies in the existing knowledge.

One ongoing argument concerns the continued applicability of the Theory of Planned Behavior (TPB) in environments affected by persuasive design and "dark patterns" design aspects purposefully designed to manipulate user behavior. Critics claim that TPB, which implies rational intention formation, is insufficient to

explain spontaneous or manipulated decisions influenced by real-time stimuli like pop-ups, countdown timers, or reward loops (Jose P Zagal, Bjork and Lewis, 2020). These strategies can trump reflective thinking, raising concerns about whether intention-based theories are still applicable in highly structured digital ecosystems.

Another debated topic is the ethical distinction between motivation and manipulation. Self-Determination Theory (SDT) has typically been invoked to defend gaming elements that increase player motivation, but recent criticisms raise concerns about whether extrinsic motivators such as loot boxes or ranking systems can become coercive in competitive environments like esports. Scholars are increasingly questioning whether game designers transgress ethical boundaries when incentive systems are deliberately designed to encourage compulsive purchasing (Xiao and Henderson, 2019). This debate has ramifications not only for theory, but also for regulation and player safety.

Finally, experts advocate for a stronger integration of psychological and decision-making theories. While TPB, SDT, Flow Theory, and the Consumer Decision Journey all provide some insight, there is a growing consensus that hybrid models are required to completely understand gamer behaviour. Such models would ideally take into consideration both cognitive processes (planning, evaluation) and affective states (immersion, social belonging), recognizing the interactive and nonlinear nature of digital consumption. Without this connection, theoretical models risk becoming compartmentalized and unable to meet the complexities of modern gaming contexts (Liao et al., 2020).

CRITICAL SOCIAL CONSIDERATIONS

The growing monetization of games through microtransactions, notably loot boxes, gacha mechanics, and other randomised reward systems, has provoked heated debate about their psychological impact and ethical validity. These mechanisms frequently mirror traditional forms of gambling, with variable-ratio reinforcement schedules that stimulate recurrent spending in search of rare rewards (Zendle and Cairns, 2018). This design approach carries additional risks for younger and more impressionable consumers, who may lack cognitive maturity or financial independence to make fully informed judgments.

Recent empirical studies have found positive connections between loot box engagement and problem gambling behaviours, implying that exposure to these monetisation schemes may serve as a gateway to gambling or worsen existing vulnerabilities (Macey and Hamari, 2022) (Gibson et al., 2022). Despite these findings, most traditional consumer behaviour theories, including TPB and SDT, fail to account for risk factors such as addiction, impulsivity, or psychological harm, indicating a conceptual gap in literature.

These problems pose serious ethical questions about digital game monetization strategies. In competitive situations such as esports, where players are constantly bombarded with time-sensitive offers, status-related purchases, and aggressive in-game advertising, the pressure to spend is not only persistent but also frequently linked to performance and identity. As a result, regulatory agencies and academics have advocated for stronger regulation and classification of loot boxes as gambling-like activities (Woodhouse, 2023).

In addition to addiction, key social considerations must address economic disparity and accessibility. Players with more financial resources may acquire a competitive advantage in "pay-to-win" schemes, undercutting the meritocratic values that underpin many gaming and esports communities. This economic stratification can lead to exclusionary societies in which success is determined by spending rather than competence.

Furthermore, there are rising worries about data privacy and algorithmic manipulation, since many monetization systems use behavioural tracking to optimise purchase prompts. These algorithms frequently personalize offers

depending on user behaviour, possibly exploiting individual psychological profiles to increase spending, a practice that blurs the distinction between engagement and exploitation (Quach et al., 2022) (Hacker, 2021).

Interjecting would be the topic of 'Dark Patterns'. Dark patterns are user interface designs that are purposefully created to manipulate or pressure gamers into making purchases or providing more personal information than they would otherwise (Brignull, 2011). In gaming, these tendencies are frequently manifested as complicated purchasing processes, false information about chances, urgency cues (countdown timers), or veiled subscription traps all aimed to lure players into spending money impulsively or repeatedly. Such designs take advantage of cognitive biases such as loss aversion and fear of missing out (FOMO), focusing on emotional and psychological weaknesses rather than rational decision-making. This technique presents major ethical considerations, especially as many gamers are adolescents or those who are prone to addictive behavior (Ye, 2025).

Dark patterns can weaken player trust and can elicit negative feedback, harming a game's reputation and long-term viability. From a legislative standpoint, governments around the world are increasingly scrutinizing these practices, with some jurisdictions considering laws to prohibit or regulate dark patterns in digital businesses such as gaming. Addressing dark patterns necessitates a mix of industry self-regulation, open design practices, and consumer education. Developers and marketers should put user autonomy and informed consent first, ensuring that monetization methods are fair, clear, and respectful of the players' agency. Incorporating ethical design principles not only protects players but also promotes viable business models based on trust and great user experiences (Veiga et al., 2025).

In conclusion, while microtransactions have become a key component of the gaming industry, their broader social and psychological implications require careful consideration. The lack of coherence between behavioral theory and ethical discourse poses a substantial barrier to researchers and politicians working to create a more responsible digital economy.

PRACTICAL IMPLICATIONS

Game developers are in a unique position to impact purchasing experiences by designing games that respect and respond to gamers' different incentive drives. Developers can tailor purchase triggers to different motivational types by incorporating Self-Determination Theory principles, such as offering optional cosmetic items that appeal to players' desire for autonomy and self-expression, or progression-based purchases that meet their need for competence and mastery. This approach shifts away from obtrusive monetization and toward player-centric design, which promotes long-term engagement and commitment. Furthermore, developers should consider the ethical implications of their design decisions, avoiding deceptive features like randomised loot boxes or time-limited offers that capitalize on impulsive behaviour. Transparent pricing mechanisms, clear odds information, and opportunities for players to manage or limit their spending can all help to preserve trust while lowering the danger of consumer backlash or regulatory intervention.

Marketers can use the immersive aspect of gaming to boost the effectiveness of their promotional efforts. Working with influencers who authentically connect with gaming communities' results in meaningful touchpoints that influence purchasing decisions via social proof and peer validation. Understanding the timing of adverts and offers, particularly during moments of high immersion or "flow," can boost receptivity while minimizing disruption to gameplay. However, marketers must strike a balance between commercial goals and respect for the player's experience and autonomy. Overly aggressive or poorly timed advertising can harm brand reputation and alienate customers. Data analytics should be used responsibly to personalize offers, with controls in place to prevent the exploitation of vulnerable players, ensuring that marketing techniques remain ethical and sustainable.

The increasing sophistication of monetisation tactics necessitates a fresh emphasis on ethical considerations and legal structures. Stakeholders should lobby for policies that strike a balance between revenue generation and player autonomy and well-being. This includes requiring openness in microtransactions, prohibiting exploitative "dark patterns," and implementing age-appropriate protections for younger gamers. Regulators may also encourage or require industry self-regulation, in which businesses voluntarily follow the best practices for responsible monetization and consumer protection. Cross-disciplinary collaboration among game designers, psychologists, legal experts, and consumer rights advocates will be essential for creating frameworks that safeguard players without restricting creativity.

CONCLUSION

This dissertation sought to investigate gamers' purchasing behaviour, with a particular emphasis on in-game transactions such as downloadable content (DLC), cosmetic products, and microtransactions. Recognizing the complexities of digital consumer behaviour in gaming contexts, the study used a multi-theoretical framework that included the Theory of Planned Behavior (TPB), Self-Determination Theory (SDT), Flow Theory, and the Digital Consumer Decision Journey (DCDJ). This integrated approach established a solid framework for studying the psychological, social, and experiential variables that influence gamers' decisions to make digital transactions.

The primary data collection tool, a structured questionnaire, was carefully developed to capture constructs important to each theoretical framework. The findings provided persuasive evidence that gamers' purchasing

decisions are influenced by a complex combination of cognitive evaluations, intrinsic motives, immersive experiences, and non-linear decision processes. TPB found that attitudes toward in-game objects, subjective norms about peer and community impact, and perceived behavioural control over financial and transactional barriers were all significant predictors of purchase intention. This demonstrates that gamer purchases are influenced by both rational thought and social environment, rather than being solely spontaneous.

Self-Determination Theory added depth by emphasizing the significance of inner motivation. According to the findings, gamers are motivated to buy not only for functional reasons, but also to satisfy psychological requirements for competence, autonomy, and relatedness. These findings highlight how in-game transactions satisfy deeper emotional and identity-related demands, such as game mastery or social affiliation within gaming communities. This contradicts naive notions of microtransactions as just revenue-generating strategies, portraying them as meaningful interactions integrated inside player motivation.

Flow Theory's contribution was especially notable in demonstrating the link between immersive gaming experiences and spending habits. Many respondents reported an increased readiness to spend during or immediately after periods of deep involvement, implying that flow reduces cognitive barrier and increases emotional investment, making in-game purchases more likely. This is consistent with prior research on how interaction might influence consumer decision-making in digital situations.

The use of the Digital Consumer Decision Journey highlighted the dynamic and cyclical nature of gamer purchasing. Unlike typical linear models of consumer behaviour, gamers' choice paths were found to be fluid and iterative, influenced by a variety of touchpoints such as in-game cues, social media, peer recommendations, and promotional events. This insight emphasizes the need of integrated marketing and user experience strategies that recognize and capitalise on these various consumer touchpoints across the game lifecycle.

Collectively, these research findings contribute to academic knowledge of digital consumer behaviour by revealing that gamer purchasing is a multidimensional phenomenon influenced by psychological, social, and experiential factors. Practically, the findings are useful for game developers, marketers, and platform designers seeking to promote responsible monetization practices. By aligning product offerings with players' fundamental incentives and engagement patterns, the industry can improve player satisfaction, stimulate long-term spending, and address concerns about exploitative or unethical monetization tactics.

Despite these contributions, the study has some intrinsic limitations. The use of self-reported questionnaire data may result in answer biases such as social desirability or recall mistakes. The sample, while broad, may not fully represent the global diversity of gamer populations across locations, platforms, and genres. Future study could expand on this work by using qualitative interviews or ethnographic approaches to investigate contextual nuances, or by using longitudinal designs to track changes in purchase behaviour over time.

Ultimately, this dissertation emphasizes the vital relevance of using a multi-theoretical, consumer-centric lens to analyse in-game purchasing behaviour. It combines theoretical models and empirical facts to present a comprehensive picture of the motivations and decision paths that shape gamer consumption in digital settings. These findings are important not only for furthering scholarly debate, but also for creating ethical and productive industry practices in a changing digital environment.

REFERENCES

Reference list

ABI Research (2023). *Gaming Market Revenue: Physical vs Digital*. [online] Abiresearch.com. Available at: <https://www.abiresearch.com/news-resources/chart-data/gaming-market-revenue-physical-vs-digital> [Accessed 13 May 2025].

Ackerman, C. (2018). *Self-Determination Theory of Motivation: Why intrinsic motivation matters*. [online] PositivePsychology.com. Available at: <https://positivepsychology.com/self-determination-theory/> [Accessed 19 May 2025].

admin (2024). *The Psychology of In-Game Purchases: Understanding Player Behavior – Gc weitra*. [online] Gcweitra.com. Available at: <https://gcweitra.com/the-psychology-of-in-game-purchases-understanding-player-behavior/> [Accessed 20 May 2025].

Ai, J., Cross, B. and Bignell, C. (2023). The construction of gamer identity in narratives about video game playing and formal education learning experiences. *Research in Learning Technology*, 31. doi:<https://doi.org/10.25304/rlt.v31.2852>.

Ansari, S. (2023). *The Economics of Microtransactions*. [online] Economics Online. Available at: <https://www.economicsonline.co.uk/definitions/the-rise-of-microtransactions-in-video-games.html/> [Accessed 20 May 2025].

Ballou, N. (2020). *Self-determination theory in Video Games: Misconceptions about Basic Psychological Needs*. [online] Nick Ballou. Available at: <https://nickballou.com/blog/sdt-in-video-games-basic-needs-misunderstandings/> [Accessed 20 May 2025].

Barysevich, A. (2020). *How social media influence 71% consumer buying decisions*. [online] Search Engine Watch. Available at: <https://www.searchenginewatch.com/2020/11/20/how-social-media-influence-71-consumer-buying-decisions/> [Accessed 20 May 2025].

Biasutti, M. (2011). *Flow Theory - an overview | ScienceDirect Topics*. [online] www.sciencedirect.com. Available at: <https://www.sciencedirect.com/topics/psychology/flow-theory> [Accessed 19 May 2025].

Brignull, H. (2011). *Dark Patterns: Deception vs. Honesty in UI Design*. [online] A List Apart. Available at: <https://alistapart.com/article/dark-patterns-deception-vs-honesty-in-ui-design/> [Accessed 19 May 2025].

Chamat, R. (2024). *Understanding Consumer Behaviour in the Digital Age*. [online] 8ways.ch. Available at: <https://www.8ways.ch/en/digital-news/understanding-consumer-behaviour-digital-age> [Accessed 20 May 2025].

Colagrossi, M. (2024). *How Microtransactions Impact the Economics of Gaming*. [online] Investopedia. Available at: <https://www.investopedia.com/articles/investing/022216/how-microtransactions-are-evolving-economics-gaming.asp> [Accessed 19 May 2025].

Court, D., Elzinga, D., Mulder, S. and Jørgen Vetvik, O. (2009). *The Consumer Decision Journey*. [online] Mckinsey & Company. Available at: <https://www.mckinsey.com/capabilities/growth-marketing-and-sales/our-insights/the-consumer-decision-journey> [Accessed 19 May 2025].

Davis, E. (2023). *The Impact of Online Gaming Communities on Social Interaction*. [online] Medium. Available at: <https://ethan-davis.medium.com/the-impact-of-online-gaming-communities-on-social-interaction-8c85f4f89d48> [Accessed 20 May 2025].

Deci, E.L. and Ryan, R.M. (2000). The 'what' and 'why' of Goal pursuits: Human Needs and the self-determination of Behavior. *Psychological Inquiry*, [online] 11(4), pp.227–268. doi:https://doi.org/10.1207/S15327965PLI1104_01.

Divers, G. (2023). *Gaming Industry Dominates as the Highest-Grossing Entertainment Industry*. [online] Gamerhub. Available at: <https://gamerhub.co.uk/gaming-industry-dominates-as-the-highest-grossing-entertainment-industry/> [Accessed 12 May 2025].

Dwivedi, A. (2022). *The Influence of Flow State in Game Design*. [online] Medium. Available at: <https://medium.com/@aniketisg/the-influence-of-flow-state-in-game-design-2b26a0408da0> [Accessed 20 May 2025].

Genie, G.M. (2021). *5 Game Marketing Examples That Brands Used in Marketing Campaigns*. [online] www.gamemarketinggenie.com. Available at: <https://www.gamemarketinggenie.com/blog/brands-that-used-video-game-marketing> [Accessed 20 May 2025].

George, J.F. (2004). The theory of planned behavior and Internet purchasing. *Internet Research*, 14(3), pp.198–212. doi:<https://doi.org/10.1108/10662240410542634>.

Gibson, E., Griffiths, M.D., Calado, F. and Harris, A. (2022). The Relationship between Videogame micro-transactions and Problem Gaming and gambling: a Systematic Review. *Computers in Human Behavior*, [online] 131(131), p.107219. doi:<https://doi.org/10.1016/j.chb.2022.107219>.

Goh, E., Al-Tabbaa, O. and Khan, Z. (2023). Unravelling the complexity of the Video Game Industry: An integrative framework and future research directions. *Telematics and Informatics Reports*, [online] 12(12), p.100100. doi:<https://doi.org/10.1016/j.teler.2023.100100>.

Gough, C. (2024). *Topic: Video Gaming Industry*. [online] www.statista.com. Available at: <https://www.statista.com/topics/868/video-games/> [Accessed 19 May 2025].

Grand View Research (2020). *Video Game Market Size, Share | Industry Report, 2020-2027*. [online] www.grandviewresearch.com. Available at: <https://www.grandviewresearch.com/industry-analysis/video-game-market> [Accessed 19 May 2025].

Green, S., Champion, K. and Eade, L. (2024). *Game On: The Expanding Universe of Gaming Merchandise*. [online] Lexology. Available at: <https://www.lexology.com/library/detail.aspx?g=10f5b95a-0a1c-40a6-82d3-6da5364f5432> [Accessed 19 May 2025].

Hacker, P. (2021). Manipulation by algorithms. Exploring the triangle of unfair commercial practice, data protection, and privacy law. *European Law Journal*, 29(1-2). doi:<https://doi.org/10.1111/eulj.12389>.

Hamari, J. and Keronen, L. (2017). Why Do People Buy Virtual goods: a meta-analysis. *Computers in Human Behavior*, 71, pp.59–69. doi:<https://doi.org/10.1016/j.chb.2017.01.042>.

Hamari, J. and Sjöblom, M. (2017). What Is eSports and Why Do People Watch it? *Internet Research*, [online] 27(2), pp.211–232. doi:<https://doi.org/10.1108/intr-04-2016-0085>.

Hollebeek, L.D., Abbasi, A.Z., Schultz, C.D., Ting, D.H. and Sigurdsson, V. (2022). Hedonic consumption experience in videogaming: A multidimensional perspective. *Journal of Retailing and Consumer Services*, [online] 65, p.102892. doi:<https://doi.org/10.1016/j.jretconser.2021.102892>.

Hu, Y.Z., Wei, H.T. and Chignell, M. (2023). Impact of rewards on cognitive game performance: Competition with peers increases enjoyment in easy, but not difficult tasks. *Computers in Human Behavior*, [online] 149, p.107952. doi:<https://doi.org/10.1016/j.chb.2023.107952>.

Huang, R.F. (2023). The Impact of Flow State and Immersion in Video Games. *Communications in Humanities Research*, [online] 5(1), pp.43–48. doi:<https://doi.org/10.54254/2753-7064/5/20230028>.

Hussain, A., Mirza, F., Sarker, M. and Ting, D.H. (2024). From Play to Pay: Exploring Imaginal and Emotional Virtual Item Retail Experiences in Online Game Environment. *International Journal of Human-Computer Interaction*, pp.1–15. doi:<https://doi.org/10.1080/10447318.2024.2415758>.

Jose P Zagal, Bjork, S. and Lewis, C. (2020). Dark Patterns in the Design of Games. *Core.ac.uk*. [online] doi:oai:generic.eprints.org:5552/core10762.

Lehdonvirta, V. (2009). Virtual Item Sales as a Revenue model: Identifying Attributes That Drive Purchase Decisions. *Electronic Commerce Research*, 9(1-2), pp.97–113. doi:<https://doi.org/10.1007/s10660-009-9028-2>.

Liao, G.-Y., Tseng, F.-C., Cheng, T.C.E. and Teng, C.-I. (2020). Impact of gaming habits on motivation to attain gaming goals, perceived price fairness, and online gamer loyalty: Perspective of consistency principle. *Telematics and Informatics*, 49, p.101367. doi:<https://doi.org/10.1016/j.tele.2020.101367>.

Macey, J. and Hamari, J. (2022). Gambification: a Definition. *New Media & Society*, [online] 26(4), p.146144482210839. doi:<https://doi.org/10.1177/14614448221083903>.

Marchand, A. and Hennig-Thurau, T. (2013). Value Creation in the Video Game Industry: Industry Economics, Consumer Benefits, and Research Opportunities. *Journal of Interactive Marketing*, [online] 27(3), pp.141–157. doi:<https://doi.org/10.1016/j.intmar.2013.05.001>.

Meriläinen, M. (2023). Young people’s engagement with digital gaming cultures – Validating and developing the digital gaming relationship theory. *Entertainment Computing*, [online] 44, p.100538. doi:<https://doi.org/10.1016/j.entcom.2022.100538>.

Munteanu, T. (2024). *The Role of Emotions in Consumer Decision-Making*. [online] Tokinomo.com. Available at: <https://www.tokinomo.com/blog/role-emotions-consumer-decision-making> [Accessed 20 May 2025].

Oppland, M. (2025). *8 Ways to Create Flow According to Mihaly Csikszentmihalyi*. [online] PositivePsychology.com. Available at: <https://positivepsychology.com/mihaly-csikszentmihalyi-father-of-flow/> [Accessed 19 May 2025].

Ozuem, W., Borrelli, M. and Lancaster, G. (2015). Leveraging the co-evolution of Offline and Online Video games: an Empirical Study. *Journal of Strategic Marketing*, 25(1), pp.75–97. doi:<https://doi.org/10.1080/0965254x.2015.1076883>.

Psychology, P. (2021). *Variable Ratio Reinforcement (Examples)*. [online] Practical Psychology. Available at: <https://practicalpie.com/variable-ratio-reinforcement/> [Accessed 20 May 2025].

Quach, S., Thaichon, P., Martin, K.D., Weaven, S. and Palmatier, R.W. (2022). Digital technologies: Tensions in Privacy and Data. *Journal of the Academy of Marketing Science*, [online] 50(1), pp.1299–1323. doi:<https://doi.org/10.1007/s11747-022-00845-y>.

Raneri, P.C., Montag, C., Rozgonjuk, D., Satel, J. and Pontes, H.M. (2022). The role of microtransactions in Internet Gaming Disorder and Gambling Disorder: A preregistered systematic review. *Addictive Behaviors Reports*, 15(100415), p.100415. doi:<https://doi.org/10.1016/j.abrep.2022.100415>.

Roggeveen, A.L., Grewal, D., Karsberg, J., Noble, S.M., Nordfält, J., Patrick, V.M., Schweiger, E., Soysal, G., Dillard, A., Cooper, N. and Olson, R. (2021). Forging meaningful consumer-brand relationships through creative merchandise offerings and innovative merchandising strategies. *Journal of Retailing*, [online] 97(1), pp.81–98. doi:<https://doi.org/10.1016/j.jretai.2020.11.006>.

Ryan, S. and Carr, A. (2023). *Theory of planned behavior - an overview*. [online] www.sciencedirect.com. Available at: <https://www.sciencedirect.com/topics/medicine-and-dentistry/theory-of-planned-behavior> [Accessed 19 May 2025].

Scavilla, B. (2016). *The Digital Consumer Decision Journey*. [online] FourFront. Available at: <https://www.fourfront.us/blog/digital-consumer-decision-journey/> [Accessed 19 May 2025].

Tue Le Ngoc, M. (2024). *Spotlighting Women Gamers and How They Play and Spend on Video Games*. [online] Newzoo. Available at: <https://newzoo.com/resources/blog/spotlighting-women-gamers-and-how-they-play-and-spend-on-video-games> [Accessed 19 May 2025].

Tyack, A. and Mekler, E.D. (2024). Self-Determination Theory and HCI Games Research: Unfulfilled Promises and Unquestioned Paradigms. *ACM transactions on computer-human interaction*. [online] doi:<https://doi.org/10.1145/3673230>.

Uysal, A. and Yildirim, I.G. (2016). Self-Determination Theory in Digital Games. *Gamer Psychology and Behavior*, pp.123–135. doi:https://doi.org/10.1007/978-3-319-29904-4_8.

Veiga, E., Silva, N., Gadelha, B. and Conte, T. (2025). *Dark Patterns in Games: An Empirical Study of Their Harmfulness*. [online] ResearchGate. Available at: https://www.researchgate.net/publication/390235729_Dark_Patterns_in_Games_An_Empirical_Study_of_Their_Harmfulness [Accessed 20 May 2025].

Woodhouse, J. (2023). Loot boxes in video games. *commonslibrary.parliament.uk*. [online] Available at: <https://commonslibrary.parliament.uk/research-briefings/cbp-8498/> [Accessed 19 May 2025].

Xiao, L.Y. and Henderson, L.L. (2019). Towards an Ethical Game Design Solution to Loot Boxes: a Commentary on King and Delfabbro. *International Journal of Mental Health and Addiction*, [online] 19, pp.177–192. doi:<https://doi.org/10.1007/s11469-019-00164-4>.

Ye, X. (2025). *Dark Patterns and Addictive Designs | Weizenbaum Journal of the Digital Society*. [online] Weizenbaum-institut.de. Available at: https://ojs.weizenbaum-institut.de/index.php/wjds/article/view/5_3_2/189 [Accessed 19 May 2025].

Zendle, D. and Cairns, P. (2018). Video Game Loot Boxes Are Linked to Problem gambling: Results of a large-scale Survey. *PLOS ONE*, [online] 13(11). doi:<https://doi.org/10.1371/journal.pone.0206767>.

