

# From players to payers: Understanding consumer motivations behind microtransactions in video games in Singapore

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# **Abstract**

This study explores the psychological and behavioral motivations that drive consumer engagement with microtransactions in video games, focusing specifically on the Singaporean context. With the gaming industry increasingly reliant on microtransaction-based revenue models, understanding why players choose to spend money within games is both timely and critical.

Anchored in Self-Determination Theory (SDT) and the Theory of Planned Behavior (TPB), this qualitative research draws on semi-structured interviews with 12 avid gamers aged 21 to 30. Thematic analysis revealed four key themes: (1) value perceptions and rationalization of spending, (2) the influence of social dynamics and peer environments, (3) emotional gratification and psychological triggers, and (4) tensions between control and compulsion. While findings align with global literature on motivation and digital consumption, they also highlight culturally nuanced behaviors and emerging tensions in self-perception among gamers in Singapore.

The study contributes to existing knowledge by refining theoretical applications of SDT and TPB within the microtransaction context and offers practical insights for developers, policymakers, and educators seeking to understand or manage in-game spending.

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#### **CHAPTER 1: INTRODUCTION**

#### 1.1 Background

The rise of microtransactions has transformed the economics of the video game industry. Once limited to mobile and free-to-play titles, in-game purchases are now embedded across a wide range of genres, including premium and competitive games (Lehdonvirta, 2018). These purchases can range from cosmetic items and currency bundles to battle passes and loot boxes, offering players new ways to personalise their experiences or accelerate in-game progression (Hamari et al., 2017). As microtransactions become increasingly central to gameplay and game design, they raise critical questions about player motivations and consumer behaviour in digital environments (Kim & Ross, 2021).

Although much of the early research on microtransactions focused on monetisation strategies and industry revenue models, there is a growing interest in the psychological and social mechanisms that drive players to spend (Kim & Kim, 2020). These motivations extend beyond traditional economic reasoning, encompassing emotional gratification, peer validation, fear of missing out (FOMO), and identity expression (Schmidt, 2019). Researchers have drawn on theories such as Self-Determination Theory (SDT) and the Theory of Planned Behaviour (TPB) to better understand how intrinsic needs and social norms shape consumer behaviour in games (Ryan & Deci, 2006; Ajzen, 1991).

Microtransactions are especially prevalent in multiplayer games where cosmetics, ranks, and exclusive content can serve as markers of status and individuality (Wohn & Lee, 2013). Players may feel compelled to spend not only to improve gameplay but to maintain visibility and social capital within online communities (Gentina & Rowe, 2020). Additionally, time-limited offers and unpredictable reward systems such as loot boxes or Gacha mechanics can induce urgency and impulsive spending, particularly when psychological needs such as competence and relatedness are at play (Dreier et al., 2017; Hamari & Keronen, 2017).

Singapore offers a unique cultural and economic context for studying these behaviours. As a highly connected and tech-savvy society, Singapore has a vibrant gaming scene where both casual and competitive play are common among young adults (Kim & Kim,

2020). However, despite the popularity of games with monetised features, academic research on microtransaction motivations in Southeast Asia remains limited. Cultural norms around spending, digital identity, and social conformity may influence how players in Singapore approach in-game purchases, yet these regional dynamics are underrepresented in the literature (Hofstede, 2001; Xiao & Henderson, 2021).

This study addresses this gap by exploring how players in Singapore experience, justify, and reflect on their microtransaction purchases. Using a qualitative, interview-based approach, it investigates the psychological and social motivations behind spending decisions, while also considering how these motivations evolve over time. In doing so, the study aims to provide context-specific insights that contribute to global conversations around ethical monetisation, consumer psychology, and gaming culture.

#### 1.2 Justification of Research

As microtransactions continue to dominate game monetisation strategies, understanding player motivations has become increasingly important for both academia and industry. While many existing studies have examined the mechanics and profitability of microtransactions, there is a lack of research that explores the lived experiences of players, especially through qualitative methods (Kim & Kim, 2020). Quantitative surveys and behavioural models can reveal patterns, but they often miss the nuance behind why players choose to spend or refrain from spending in specific contexts (Fischer & Otnes, 2022).

Much of the current literature also focuses on Western gaming markets, where cultural attitudes toward digital spending may differ significantly from those in Southeast Asia (Lehdonvirta, 2018). In Singapore, where disposable income, gaming habits, and digital consumer trends are rapidly evolving, there is a need for region-specific research that takes into account cultural values, social pressures, and local economic realities (Xiao & Henderson, 2021).

This study also contributes methodologically by adopting an interpretivist, qualitative approach. Through in-depth, semi-structured interviews, it captures the subjective experiences and motivations of players, including emotional triggers, social influences, and rationalisation strategies. These insights are essential for understanding how microtransaction behaviour is shaped by both internal and external forces, including game design, peer interaction, and individual financial considerations (Ryan & Deci, 2006; Ajzen, 1991).

By exploring these dimensions within the Singaporean context, the study not only expands the geographic scope of existing research but also addresses ethical questions around responsible game design and player well-being.

### 1.3 Aim and Objectives

The aim of this dissertation is to understand the psychological and social motivations that influence microtransaction spending among video game players in Singapore.

To address this aim, the study is guided by the following objectives:

- 1. To explore how psychological motivations, including emotions and identity expression, influence players' decisions to purchase microtransactions.
- 2. To examine the influence of social factors, such as peer pressure and community dynamics, on microtransaction spending.
- 3. To understand how players rationalise or reflect on their microtransaction purchases over time, including the experience of regret or justification.

#### 1.4 Structure of the Dissertation

This dissertation is organised into five chapters. Chapter 1 introduces the research topic, rationale, objectives, and questions. Chapter 2 presents a review of the relevant literature, focusing on SDT, TPB, psychological drivers, social dynamics, and ethical considerations in game design. Chapter 3 outlines the research methodology, including the philosophical stance, sampling approach, and thematic analysis strategy. Chapter 4 presents the findings from the primary research, structured around four key themes. Finally, Chapter 5 discusses the study's theoretical and practical contributions, offers suggestions for future research, and concludes the dissertation.

#### **CHAPTER 2: LITERATURE REVIEW**

The gaming industry's transition from traditional purchases to microtransaction-driven models has fundamentally altered player spending behavior. Microtransactions, including cosmetic purchases, loot boxes, and pay-to-win mechanics, now represent a dominant monetization strategy, raising important questions about why players choose to engage in in-game purchases (Lehdonvirta, 2018). While extensive research has explored game monetization from a business perspective, fewer studies have examined the psychological and behavioral motivations behind microtransaction spending, particularly in Singapore and Southeast Asian gaming markets (Kim & Kim, 2020). This literature review synthesizes existing research to build a theoretical foundation for understanding player spending habits, focusing on the psychological drivers, social influences, and ethical considerations associated with microtransactions.

This review is framed by two core psychological theories:

- Self-Determination Theory (SDT) Examines how intrinsic and extrinsic motivations influence players' decisions to engage in microtransactions (Ryan & Deci, 2006).
- 2. Theory of Planned Behavior (TPB) Explains how attitudes, subjective norms, and perceived behavioral control shape purchase intentions in digital gaming environments (Ajzen, 1991).

#### **Research Questions**

This dissertation aims to answer the following research questions:

- 1. How do psychological motivations, including emotions, goal achievement, and exclusivity, influence players' decisions to purchase microtransactions in video games?
- 2. How do social factors, including peer influence and community engagement, shape microtransaction spending behavior among video game players?
- 3. How do in-game features, including reward systems and game design mechanics, influence players' perceptions of value and spending habits on microtransactions?

This review is structured as follows: Section 2 presents theoretical foundations, discussing SDT and TPB as explanatory models for microtransaction behavior. Section

3 explores psychological motivations, including FOMO, impulse spending, and self-reward behaviors. Section 4 examines social and cultural influences, such as peer validation, esports communities, and social norms. Section 5 discusses game design and ethical concerns, analyzing how developers use behavioral reinforcement techniques to encourage spending. Finally, Section 6 highlights research contributions, positioning this study within the broader discourse on digital consumer behavior and ethical gaming monetization.

By integrating existing research on microtransactions, this literature review establishes a strong theoretical foundation for analyzing player spending behavior, which will be further explored through qualitative interviews with gamers in Singapore.

## 2.1 Theoretical Foundations: Understanding Microtransaction Spending

# **Self-Determination Theory (SDT) and Player Motivations**

Self-Determination Theory (SDT), developed by Ryan and Deci (2006), explains human motivation based on three core psychological needs: autonomy (control over choices), competence (achievement and mastery), and relatedness (social connection and validation). In gaming, these needs influence why players engage in microtransactions, shaping whether spending is intrinsically or extrinsically motivated (Hamari & Keronen, 2017).

Intrinsic motivation refers to purchases driven by personal satisfaction, such as customization, creativity, and immersion. Players may buy cosmetic items to enhance their self-expression without gaining a gameplay advantage (Wohn & Freeman, 2020). In contrast, extrinsic motivation involves external rewards, such as pay-to-win mechanics, battle passes, and competitive advantages (Lehdonvirta, 2018). Game developers often reinforce extrinsic motivations by designing progression loops and scarcity-based incentives, making purchases feel essential for achievement and status (Schmidt, 2019).

SDT provides insight into why players spend on in-game content beyond traditional consumer models. The theory suggests that monetization strategies in gaming cater to psychological needs, making purchases feel meaningful or necessary (Kim & Kim, 2020). The next section explores how the Theory of Planned Behavior (TPB) expands upon SDT, incorporating decision-making factors such as attitudes, social norms, and perceived control over spending behavior (Ajzen, 1991).

# Theory of Planned Behavior (TPB) and Microtransaction Decision-Making

The Theory of Planned Behavior (TPB), developed by Ajzen (1991), explains how attitudes, subjective norms, and perceived behavioral control influence decision-making. In the context of microtransactions, TPB helps explain why players choose to spend money in games, beyond just intrinsic or extrinsic motivation.

Attitudes toward microtransactions play a key role in purchase behavior. Players who perceive in-game purchases as fair, rewarding, or necessary for enjoyment are more likely to engage in spending, whereas those who view them as exploitative or pay-to-win tend to resist (Kim & Kim, 2020). Subjective norms, or the influence of peers and gaming communities, also impact spending behavior. Many players purchase in-game content to maintain social status, conform to group spending trends, or gain recognition within gaming circles (Wohn & Lee, 2013).

Perceived behavioral control determines how much autonomy a player feels over their spending decisions. Players who believe they can budget their spending or control impulses engage in occasional, discretionary purchases, whereas those influenced by scarcity marketing and theorreward loops may develop habitual or excessive spending patterns (Xiao & Henderson, 2021).

By integrating TPB with Self-Determination Theory (SDT), researchers can better understand how both psychological needs and social influences drive microtransaction behavior. The next section explores specific psychological motivators, including impulse spending, FOMO, and self-rewarding behaviors (Schmidt, 2019).

# 2.2 Psychological Motivations Behind Microtransactions

#### **Intrinsic and Extrinsic Motivations in Gaming Purchases**

Self-Determination Theory (SDT) provides a foundational framework for understanding why players engage in microtransactions by differentiating between intrinsic and extrinsic motivations (Ryan & Deci, 2006). Intrinsic motivation refers to behaviors driven by personal enjoyment or fulfillment, such as purchasing in-game content that enhances self-expression (e.g., skins, avatars) or enriches immersion (Wohn & Lee, 2013). Extrinsic motivation, on the other hand, involves external rewards or pressures, such as acquiring power-ups to gain a competitive edge or progressing faster in a game (Hamari & Keronen, 2017).

Research indicates that intrinsically motivated purchases are more common in games that emphasize self-expression and customization, such as role-playing games (Mäntymäki & Salo, 2013). Conversely, extrinsic motivations often drive spending in competitive or freemium games, where advantages such as "pay-to-win" mechanics are available (King & Delfabbro, 2019). The balance between player autonomy and game

design-induced extrinsic rewards plays a crucial role in shaping spending habits (Deterding, 2015).

### **Emotional Triggers: FOMO, Impulse Buying, and Self-Rewarding Behavior**

Emotions are a significant driver of microtransactions, with studies highlighting Fear of Missing Out (FOMO) as one of the strongest motivators (Schmidt, 2019). Limited-time offers and seasonal events create artificial scarcity, compelling players to make purchases impulsively (Dreier et al., 2017). This urgency is particularly effective in multiplayer games, where status and exclusivity can influence purchasing decisions (Wohn & Freeman, 2020).

Impulse buying is another key psychological factor, often linked to reward anticipation and dopamine-driven behavior (Kim & Ross, 2021). Loot boxes, for example, exploit random reinforcement mechanics, similar to gambling, where players experience a surge of excitement upon opening them (Zendle & Cairns, 2020). Research suggests that the uncertainty of rewards can lead to compulsive purchasing behaviors, particularly among younger gamers (Griffiths, 2018).

Microtransactions also serve as a form of self-reward, where players justify purchases as a way to enhance their gaming experience or celebrate achievements (Alha et al., 2018). This aligns with findings that hedonic consumption spending for pleasure rather than necessity plays a central role in digital consumer behavior (Fischer & Otnes, 2022).

#### **Goal Achievement and Progression Loops**

Game mechanics often incorporate progression loops that encourage continued engagement and spending (Hunicke et al., 2004). Many games use incremental difficulty scaling, making free progression increasingly challenging, thus nudging players toward purchasing in-game currency or experience boosts (Liao et al., 2017).

Battle passes, a monetization model that rewards players for consistently engaging with a game over a season, reinforce commitment-based spending (Petrovskaya & Zendle, 2020). Players who have already invested time and money into unlocking premium tiers are more likely to continue spending to maximize their rewards (Hamari et al., 2017). This aligns with the sunk cost fallacy, where prior investments create psychological pressure to keep spending (Xiao & Henderson, 2021).

#### **Habit Formation and Addiction-Like Spending**

Studies suggest that repetitive engagement with in-game purchases can lead to habitual or even addiction-like spending patterns (Dreier et al., 2017). Loot box

mechanics, in particular, have been criticized for mimicking gambling behaviors, with players developing compulsive tendencies toward repeated spending (King & Delfabbro, 2019). Regulatory discussions have emerged on whether such mechanics should be categorized under gambling laws due to their psychological impact on consumers (Kim & Kim, 2020).

Research on digital spending habits highlights that habitual microtransaction purchases are reinforced by small, frequent expenditures rather than large, one-time purchases (Griffiths, 2018). This aligns with findings from consumer psychology, where low-cost, repeat purchases contribute to long-term spending engagement (Schmidt, 2019).

#### 2.3 Social and Cultural Influences on Microtransactions

#### The Role of Social Influence and Peer Pressure

Social influence plays a significant role in consumer decision-making, particularly in digital environments where status, recognition, and peer validation shape purchasing behaviors (Wohn & Lee, 2013). Within multiplayer gaming communities, microtransactions are often linked to identity expression and competitiveness, reinforcing the desire to spend in order to maintain or elevate social standing (Gentina & Rowe, 2020).

Peer pressure is a strong driver of in-game spending, as players often feel compelled to match their peers' spending habits to remain socially relevant in gaming spaces (Wohn & Freeman, 2020). This is particularly evident in multiplayer and esports settings, where players use cosmetic purchases (e.g., skins, avatars, exclusive items) to establish a distinct identity or signal expertise (Kim & Ross, 2021). Studies suggest that in online communities, seeing peers with premium content increases spending likelihood, a phenomenon known as social contagion in consumer behavior (Dreier et al., 2017).

Additionally, competition in online games creates a sense of status hierarchy, where microtransactions act as a means of distinguishing oneself from others (King & Delfabbro, 2019). In games that promote leaderboards or ranking systems, players are more likely to engage in purchases that offer perceived advantages or aesthetic superiority (Xiao & Henderson, 2021).

### **Community Identity and Social Validation**

Microtransactions also serve as a tool for social bonding and group belonging (Wohn & Freeman, 2020). Many games encourage spending through guild systems, collaborative challenges, and event-based rewards, where group participation fosters collective engagement (Kim & Ross, 2021). Spending in these settings is often justified as a

contribution to the community, reinforcing social dynamics where players feel obligated to keep up with group norms (Schmidt, 2019).

Social validation is particularly influential in live-streaming cultures and esports, where professional players and influencers often showcase premium in-game content (Wohn & Freeman, 2020). Research suggests that seeing respected figures using premium items influences audience purchasing decisions, aligning with aspirational consumer behavior theories (Gentina & Rowe, 2020).

Furthermore, group identity formation in gaming communities strengthens spending patterns. Players often purchase exclusive items tied to their in-game affiliations, reinforcing loyalty and group cohesion (Kaplan & Haenlein, 2010). The need to maintain in-group status can make microtransactions feel less like a purchase and more like an investment in one's gaming persona (Kim & Kim, 2020).

## **Cultural and Regional Influences on Digital Spending**

Cultural norms shape how players perceive digital ownership and spending in gaming environments (Hofstede, 2001). Studies show that players from collectivist cultures (e.g., East Asia, Southeast Asia) tend to prioritize community-based spending, while those from individualist cultures (e.g., Western markets) often engage in microtransactions for self-enhancement (Xiao & Henderson, 2021).

In Singapore, microtransactions are influenced by digital economy trends, disposable income levels, and regional gaming preferences (Kim & Kim, 2020). Compared to Western markets, where regulations on loot boxes and pay-to-win models are stricter, Southeast Asian gaming markets exhibit higher engagement in mobile and free-to-play games, making microtransactions a dominant revenue model (Lehdonvirta, 2018).

Additionally, regional gaming preferences impact spending habits. Studies indicate that players in Southeast Asia prefer aesthetic and status-driven microtransactions, whereas Western players prioritize gameplay-enhancing purchases (Kaplan & Haenlein, 2010). These differences highlight the cultural relativity of microtransaction behaviors, emphasizing the need for region-specific research in gaming economics (Kim & Kim, 2020).

#### 2.4 Game Design, Monetization Strategies, and Ethical Concerns

## **Monetization Models in Gaming**

The shift from traditional one-time game purchases to continuous revenue models has led to the widespread adoption of microtransactions, significantly altering how games

are monetized (Lehdonvirta, 2018). Game developers implement various monetization strategies that are carefully designed to maximize player spending while maintaining engagement. These models are often built upon psychological reinforcement mechanisms, leveraging intrinsic and extrinsic motivations to encourage purchases (Kim & Ross, 2021).

One of the most common monetization models is cosmetic purchases, where players buy non-essential digital items such as character skins, outfits, and emotes. These purchases do not impact gameplay but appeal to players' desire for self-expression and identity formation, particularly in multiplayer gaming environments (Wohn & Freeman, 2020). Research suggests that players are more likely to purchase cosmetic items if they enhance social validation and status within the gaming community (Kaplan & Haenlein, 2010).

Another widely used model is loot boxes, which contain randomized rewards. This model is particularly controversial, as it mimics gambling mechanics by exploiting reward uncertainty, reinforcing dopamine-driven purchasing behaviors (Zendle & Cairns, 2020). Studies have shown that players who frequently purchase loot boxes exhibit higher tendencies toward problem gambling, raising concerns about their ethical implications, particularly among younger players (Griffiths, 2018).

Battle passes represent a different type of engagement-based monetization, where players pay upfront to unlock tiered rewards over time. This model encourages consistent engagement, as rewards are gradually unlocked based on playtime and progress (Petrovskaya & Zendle, 2020). However, battle passes also leverage the sunk cost fallacy, where players who have already paid for access feel compelled to continue playing and, in some cases, make additional purchases to maximize their investment (Xiao & Henderson, 2021).

The most debated monetization model is pay-to-win mechanics, where players can purchase in-game advantages such as stronger weapons, faster progression, or stat boosts. This model is often criticized for undermining fair competition, as it creates inequalities between paying and non-paying players (King & Delfabbro, 2019). Pay-to-win mechanics also contribute to game design imbalances, forcing players to either grind excessively or spend money to remain competitive (Kim & Kim, 2020).

These monetization strategies are designed to tap into psychological drivers, such as scarcity, exclusivity, and competitive pressure, ensuring that purchases feel necessary for progression or social standing (Deterding, 2015). While these models are effective for revenue generation, they also raise concerns regarding ethical consumer protection, particularly when targeting vulnerable players. The following sections will further explore

the psychological mechanisms behind these spending behaviors and the ethical debates surrounding microtransactions.

# The Psychology of Spending in Game Design

Game developers strategically incorporate behavioral psychology principles into their monetization strategies to encourage spending. By leveraging scarcity, reward uncertainty, and commitment-based mechanisms, developers ensure that players perceive purchases as essential to their gaming experience (Schmidt, 2019). These techniques are rooted in consumer behavior theories, which explain why players are inclined to spend on digital items that offer no tangible value but fulfill psychological needs such as social recognition, progression, and excitement (Kim & Ross, 2021).

One of the most effective techniques is the Fear of Missing Out (FOMO), which relies on artificial scarcity to drive purchases. Limited-time events, exclusive skins, and seasonal battle passes create a sense of urgency, prompting players to spend impulsively to avoid regret (Dreier et al., 2017). As a result, FOMO-driven spending often leads to unplanned purchases that players might not have considered under normal circumstances.

Another widely used strategy is the variable reward schedule, commonly observed in loot boxes and gacha mechanics. This technique, based on operant conditioning, reinforces spending by offering randomized rewards, mimicking gambling behaviors (Zendle & Cairns, 2020). The anticipation of a rare item triggers a dopamine release, making loot box mechanics highly engaging and, in some cases, addictive (Griffiths, 2018). Studies have shown that players often underestimate how much they spend on randomized rewards, leading to compulsive purchasing patterns (Kim & Kim, 2020).

Games also employ commitment-based spending strategies, such as battle passes and progression loops, to ensure consistent player engagement. The battle pass model rewards players for frequent play over a set period, encouraging them to return daily to unlock premium content (Petrovskaya & Zendle, 2020). This model takes advantage of the sunk cost fallacy, where players who have already spent money feel obligated to continue playing to justify their initial purchase (Xiao & Henderson, 2021). In doing so, developers create habitual spending cycles, where players invest small amounts regularly rather than making one-time large purchases (Lehdonvirta, 2018).

These psychological techniques highlight how game design subtly manipulates player behavior to maximize spending. By exploiting cognitive biases and emotional triggers, developers can ensure that purchases feel necessary for progression, status, or exclusivity. While these techniques are highly effective for revenue generation, they raise concerns about ethical transparency and responsible game design, which will be discussed in the next section.

### **Ethical Concerns and Consumer Protection**

As microtransactions have become a dominant revenue model in the gaming industry, concerns about ethical monetization practices and consumer protection have gained significant attention. While microtransactions provide an avenue for continued game development and player engagement, certain monetization models particularly loot boxes and pay-to-win mechanics have been criticized for their exploitative nature and potential harm to consumers (King & Delfabbro, 2019). Critics argue that these practices intentionally manipulate player psychology, encouraging excessive spending through mechanisms that mimic gambling behavior and addiction-forming patterns (Zendle & Cairns, 2020).

One of the most debated ethical concerns is the psychological impact of loot boxes, which function similarly to gambling due to their randomized reward structures (Griffiths, 2018). Studies have shown that frequent loot box purchasers exhibit higher tendencies toward problem gambling behaviors, raising concerns about their accessibility, particularly among younger players (Kim & Kim, 2020). As a result, several countries, including Belgium and the Netherlands, have banned loot boxes, classifying them as a form of gambling (Xiao & Henderson, 2021). Other regulatory bodies, such as those in the UK and Australia, have pushed for odds transparency and spending caps to mitigate potential harm (Kim & Ross, 2021).

Another major issue is pay-to-win monetization, where players can purchase in-game advantages, creating gameplay imbalances that favor those willing to spend money over skill-based progression (Lehdonvirta, 2018). This model has sparked controversy over fairness and consumer rights, as some argue that it diminishes the competitive integrity of gaming while subtly coercing non-paying players into spending to remain competitive (Dreier et al., 2017).

In response to these ethical concerns, game developers and policymakers have introduced measures to promote fairer monetization practices. These include loot box probability disclosures, parental spending controls, and voluntary spending caps, aimed at reducing the risk of compulsive purchases (Wohn & Freeman, 2020). However, critics argue that self-regulation by the gaming industry is insufficient, calling for stricter external regulations and player protection policies (Schmidt, 2019).

While microtransactions continue to be a lucrative business model, ensuring that they balance profitability with ethical responsibility remains a key challenge. The next section will explore the theoretical implications and research contributions of this study, linking the findings to broader academic discourse in consumer behavior and gaming studies.

## 2.5 Research Contribution and Theoretical Implications

This study contributes to the growing body of research on consumer behavior in digital economies, particularly in the gaming industry's microtransaction model. While previous studies have examined microtransactions in Western markets, limited research has explored spending motivations within the Southeast Asian gaming community, particularly in Singapore (Kim & Kim, 2020). By addressing this gap, this study provides new insights into the psychological, social, and economic factors influencing microtransaction spending in a region where mobile and free-to-play gaming models dominate (Lehdonvirta, 2018).

The research extends Self-Determination Theory (SDT) by demonstrating how intrinsic and extrinsic motivations interact with game design incentives, shaping consumer behavior beyond traditional retail environments (Ryan & Deci, 2006). Findings indicate that FOMO-driven spending, social validation, and progression loops reinforce habitual spending cycles, expanding existing applications of motivational psychology in digital consumption (Wohn & Freeman, 2020). Additionally, by incorporating the Theory of Planned Behavior (TPB), the study highlights the role of peer influence and subjective norms in shaping players' spending habits, reinforcing the need for further integration of social psychology into digital consumer behavior research (Ajzen, 1991).

Moreover, this research contributes to ongoing ethical debates on game monetization by identifying psychological vulnerabilities that developers exploit to encourage spending (Zendle & Cairns, 2020). The findings align with global regulatory concerns regarding loot boxes and pay-to-win mechanics, emphasizing the need for player protection policies and ethical game design principles (King & Delfabbro, 2019). The study also provides practical implications for game developers, policymakers, and consumer advocates by highlighting the importance of fair monetization practices that balance revenue generation with consumer well-being (Schmidt, 2019).

By bridging psychological, social, and economic perspectives, this study lays the groundwork for future research on sustainable monetization models in digital gaming. The next phase of this dissertation will analyze primary data collected from qualitative interviews, assessing how real-world player experiences align with theoretical frameworks and industry trends.

#### **CHAPTER 3: METHODOLOGY**

The methodology chapter outlines the research design, philosophical stance, and data collection methods used to explore the motivations behind microtransaction purchases in video games among Singaporean players. Understanding why and how players engage with microtransactions requires a qualitative approach, as it enables the collection of rich, in-depth insights into individual experiences, decision-making processes, and social influences (Creswell & Poth, 2018).

Given the complex nature of consumer motivations, a qualitative research design is chosen to explore how psychological, social, and economic factors influence in-game spending. Unlike quantitative surveys, which measure predefined variables, qualitative research allows participants to share their perspectives freely, uncovering motivations that may not be easily quantified (Fischer & Otnes, 2022). Semi-structured interviews are the primary data collection method, allowing for flexibility in responses while ensuring consistency across key themes (Bryman, 2016).

To ensure a systematic research structure, this study follows Saunders' Research Onion framework (Saunders, Lewis, & Thornhill, 2019). The model consists of multiple layers, starting from philosophical assumptions (ontology, epistemology, axiology) and moving towards research approach, strategy, data collection methods, and analysis techniques. Each layer provides a logical basis for methodological decisions, ensuring alignment with the study's research objectives.

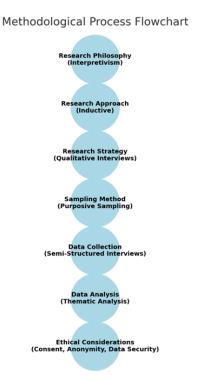


Figure 1 (Saunder's Research Onion)

This research follows an interpretivist epistemology and an inductive research approach to examine the subjective perceptions of video game players regarding microtransactions. Since player motivations are influenced by emotions, social norms, and game design, an interpretivist lens allows for a nuanced exploration of these factors (Alha et al., 2018; Hamari & Keronen, 2017). Thematic analysis (Braun & Clarke, 2006) will be used to identify key themes in participant responses, helping to uncover patterns in consumer behavior and digital spending habits.

By employing a structured qualitative methodology, this study contributes to consumer psychology and gaming monetization research, providing insights into how psychological, social, and economic factors influence spending behaviors in digital environments (Ryan, Deci, & Rigby, 2006; Lehdonvirta, 2018).

# 3.1 Research Philosophy: Ontology, Epistemology, Axiology

# **Research Philosophy**

The research philosophy defines the assumptions that guide a study's approach to knowledge, reality, and values. In Saunders' Research Onion framework (Saunders,

Lewis, & Thornhill, 2019), research philosophy influences methodological choices and shapes how data is interpreted. This study adopts an interpretivist paradigm, focusing on subjective meanings and personal experiences to understand why and how video game players engage in microtransactions.

While positivism seeks generalisable laws through objective measurement and hypothesis testing (Collins, 2010), it is ill-suited for this study's focus on individual motivations and meaning-making. Positivist approaches would reduce microtransaction behavior to quantifiable patterns, potentially overlooking the emotional, social, and contextual factors that drive such spending. Interpretivism, in contrast, allows for richer, more nuanced understandings of player behavior by engaging directly with their lived experiences (Eriksson & Kovalainen, 2016).

# Ontology: Subjectivism in Consumer Behavior

Ontology refers to the nature of reality and how it is perceived in research (Bryman, 2016). This study follows a subjectivist ontology, which assumes that reality is socially constructed and varies between individuals (Creswell & Poth, 2018). Since motivations behind microtransactions are shaped by emotions, social influences, and individual gaming experiences, a subjectivist view allows for the exploration of diverse personal perspectives (Hamari & Keronen, 2017). Instead of treating spending behaviors as universally predictable, this research seeks to understand how players perceive and rationalize their purchases in different gaming contexts (Alha et al., 2018).

#### **Epistemology: Interpretivism and Consumer Motivations**

Epistemology concerns how knowledge is generated and understood. This research adopts an interpretivist epistemology, emphasizing qualitative insights over numerical data (Saunders et al., 2019). Since microtransaction behavior is influenced by personal motivations, social dynamics, and game design, an interpretivist lens helps uncover individual experiences and meaning-making processes (Fischer & Otnes, 2022). Unlike positivist approaches, which assume that behaviors can be objectively measured and predicted, interpretivism acknowledges the complexity and contextual nature of consumer decisions (Bryman, 2016; Tracy, 2020). It encourages empathetic engagement with participants and values depth over breadth (Eriksson & Kovalainen, 2016).

### Axiology: The Role of Researcher Bias

Axiology examines the role of values in research (Creswell & Poth, 2018). In qualitative research, the researcher's perspective and biases influence data interpretation (Fischer & Otnes, 2022). Recognizing this, reflexivity will be maintained to ensure that preconceived notions do not overshadow participant narratives (Braun & Clarke, 2006). Ethical considerations, such as anonymity and informed consent, will also be prioritized to minimize biases and ensure research integrity (Bryman, 2016). Acknowledging the value-laden nature of the research process aligns with the interpretivist paradigm, which sees researcher involvement not as a limitation but as an inherent aspect of knowledge production.

By employing a subjectivist ontology, interpretivist epistemology, and reflexive axiology, this study ensures that microtransaction motivations are explored holistically, allowing for in-depth, participant-driven insights into digital consumer behavior.

# 3.2 Research Approach

The research approach determines how data is collected and analyzed, guiding the study's overall structure. In Saunders' Research Onion framework (Saunders, Lewis, & Thornhill, 2019), research approaches are classified as deductive, inductive, or abductive. This study follows an inductive approach, meaning that theories are developed based on patterns observed in the data rather than testing existing hypotheses (Creswell & Poth, 2018).

A deductive approach, commonly used in quantitative research, starts with a predefined theory and seeks to confirm or reject it through numerical analysis (Bryman, 2016). However, this study focuses on understanding subjective motivations behind microtransactions, which are influenced by individual emotions, social contexts, and game design mechanics (Alha et al., 2018). As such, an inductive approach is more appropriate, allowing theories to emerge from participant narratives rather than being imposed (Braun & Clarke, 2006).

By analyzing semi-structured interview data using thematic analysis, this study seeks to identify recurring themes in psychological, social, and economic motivations for spending on microtransactions (Hamari & Keronen, 2017). This approach ensures flexibility, enabling new insights beyond existing consumer behavior models (Fischer & Otnes, 2022).

Ultimately, an inductive, qualitative approach ensures that findings are grounded in real experiences rather than pre-existing theoretical assumptions. This aligns with the interpretivist epistemology of the study, emphasizing rich, contextual insights into digital consumer behavior.

# 3.3 Research Strategy

The research strategy defines how data will be collected and analyzed to answer the research questions. Based on Saunders' Research Onion framework (Saunders, Lewis, & Thornhill, 2019), this study adopts a qualitative strategy using semi-structured interviews to explore consumer motivations behind microtransactions. This approach is chosen because qualitative methods allow for in-depth exploration of personal experiences, emotions, and decision-making processes (Creswell & Poth, 2018).

A quantitative strategy, which relies on numerical data and statistical analysis, would be insufficient for capturing the subjective nature of motivations behind microtransactions (Bryman, 2016). For example, while surveys can quantify spending habits, they cannot provide insights into the psychological and social reasoning behind those spending behaviors (Fischer & Otnes, 2022). A qualitative approach, on the other hand, allows participants to describe their motivations in their own words, uncovering deeper themes related to psychological satisfaction, peer influence, and in-game design elements (Hamari et al., 2017).

# Semi-Structured Interviews as the Primary Research Method

This study employs semi-structured interviews, a widely used qualitative method that provides a balance between structured guidance and open-ended flexibility (Bryman, 2016). Unlike fully structured interviews, which limit responses to predefined questions, semi-structured interviews enable researchers to probe deeper into emerging themes (Creswell & Poth, 2018). This flexibility ensures that participants' unique gaming experiences, spending patterns, and personal motivations are fully captured (Braun & Clarke, 2006).

Each interview will last 30–45 minutes and will explore key themes such as psychological motivations, social influences, financial considerations, and game design factors that influence microtransaction spending (Alha et al., 2018). The interviews will be conducted via online calls or in-person, depending on participant availability. Responses will be audio-recorded and transcribed for analysis, ensuring accuracy in identifying themes during thematic coding (Braun & Clarke, 2006).

By using semi-structured interviews, this study ensures rich, contextual insights into microtransaction behavior, aligning with its interpretivist epistemology and inductive research approach.

# 3.4 Sampling Strategy

A well-defined sampling strategy is essential to ensure that data collection captures relevant and diverse perspectives on microtransaction spending. This study employs a purposive sampling method, selecting participants based on specific criteria to ensure that they have relevant experience with in-game purchases. This aligns with qualitative research best practices, where participant selection is based on information-rich cases rather than randomization (Creswell & Poth, 2018).

### **Target Population and Participant Criteria**

The study focuses on video game consumers in Singapore, specifically those aged 21–30, as this demographic represents a key consumer segment for microtransactions due to their financial independence, digital engagement, and gaming habits (Hamari, Hanner, & Koivisto, 2017). Participants will be required to have actively engaged in microtransactions within the past six months to ensure that their responses reflect recent, relevant purchasing decisions (Alha et al., 2018).

To gain balanced insights, efforts will be made to recruit an equal number of male and female participants, as gender may influence spending patterns and motivations (Wohn & Freeman, 2020).

#### **Sampling Method and Recruitment Process**

A purposive sampling approach is chosen to ensure the selection of participants with direct experience in microtransactions (Bryman, 2016). Recruitment will take place via online gaming forums, social media platforms (Facebook gaming groups, Discord communities), and word-of-mouth referrals. Prospective participants will be screened through a brief pre-interview questionnaire to confirm eligibility (Saunders, Lewis, & Thornhill, 2019).

A total of 12 participants (6 female and 6 male) will be interviewed, based on the principle of data saturation where new interviews cease to reveal additional insights (Creswell & Poth, 2018). This sample size is sufficient for qualitative thematic analysis, allowing for the identification of recurring themes and behavioral patterns (Braun & Clarke, 2006).

By using purposive sampling, this study ensures that participants have relevant, first-hand experience with microtransactions, enabling a rich exploration of consumer motivations within the Singaporean gaming community.

# 3.5 Data Collection and Analysis

The data collection process in qualitative research is crucial for obtaining rich, in-depth insights into participants' experiences and motivations. This study uses semi-structured interviews as the primary data collection method, allowing for flexible yet focused discussions on microtransaction behaviors (Creswell & Poth, 2018). This approach aligns with the study's interpretivist epistemology and inductive research approach, ensuring that insights emerge naturally rather than being constrained by rigid question structures (Bryman, 2016)

#### **Data Analysis**

To analyze the qualitative data collected from semi-structured interviews, this study employs thematic analysis using Word Document, a widely used approach in qualitative consumer research (Braun & Clarke, 2006). Thematic analysis allows for the identification of patterns and recurring themes in participant responses, providing a structured way to interpret psychological, social, and economic motivations behind microtransactions. This approach aligns with the study's inductive research strategy, ensuring that findings emerge organically from the data rather than being imposed by pre-existing theories (Creswell & Poth, 2018).

# **Thematic Analysis and Coding Process**

Thematic analysis follows a systematic six-step process (Braun & Clarke, 2006):

- Familiarization with the Data Transcribing interviews and reading through responses multiple times to gain a deep understanding of participants' experiences.
- 2. Generating Initial Codes Assigning short descriptive labels (codes) to relevant data points (e.g., "emotional gratification," "peer influence," "limited-time purchases").
- 3. Searching for Themes Identifying broader themes that group related codes (e.g., "Psychological Motivations" may include impulse spending and exclusivity-driven purchases).
- 4. Reviewing Themes Refining themes by ensuring they accurately represent participant responses and are distinct from one another.
- 5. Defining and Naming Themes Finalizing and naming each core theme that represents key findings in the study.

6. Writing the Report – Integrating themes into the research findings, supported by direct participant quotes to enhance validity (Bryman, 2016).

## **Interpreting the Data**

The final themes will be analyzed in relation to Self-Determination Theory (Ryan & Deci, 2023) and the Theory of Planned Behavior (Ajzen, 1991) to understand intrinsic and extrinsic motivations for spending in video games. This interpretation will provide meaningful insights into how psychological, social, and game-design factors shape consumer behaviors in the digital economy (Hamari & Keronen, 2017).

By following a rigorous thematic analysis approach, this study ensures systematic interpretation of participant data, leading to meaningful contributions to gaming and consumer psychology literature.

#### 3.6 Ethical Consideration

Ethical considerations are crucial in qualitative research to ensure the protection, autonomy, and well-being of participants. This study adheres to the ethical principles outlined by Creswell & Poth (2018) and Bryman (2016), ensuring transparency, confidentiality, and voluntary participation.

#### **Ethical Considerations in Data Collection**

Ethical protocols are followed to ensure participant safety, autonomy, and data security (Creswell & Poth, 2018):

- Informed Consent: Participants will receive an information sheet and consent form before the interview.
- Anonymity & Confidentiality: Participants' identities will be anonymized in transcripts and findings (Saunders et al., 2019).
- Right to Withdraw: Participants can withdraw from the study at any point without providing a reason (Bryman, 2016).
- Secure Data Storage: Audio recordings and transcripts will be stored securely, accessible only to the researcher.

By adhering to robust ethical guidelines and rigorous data collection methods, this study ensures validity, reliability, and participant well-being while capturing meaningful insights into microtransaction behaviors.

# **Informed Consent and Voluntary Participation**

All participants will receive a detailed information sheet and consent form explaining:

- The purpose of the study
- Their right to withdraw at any time without consequences
- How their responses will be used in research findings
- How their privacy and confidentiality will be maintained

Participants will be required to sign a consent form before interviews begin (Saunders, Lewis, & Thornhill, 2019). No deception will be involved, ensuring full disclosure of the research objectives and methods.

# **Anonymity and Data Protection**

To protect participant identity, pseudonyms will be used in transcripts and research reports. No personally identifiable information (e.g., names, gaming usernames) will be recorded (Bryman, 2016).

All interview recordings and transcripts will be securely stored on an encrypted device, with access restricted to the researcher. Data will be retained for one year post-research completion before being permanently deleted (Creswell & Poth, 2018).

# Minimizing Psychological and Social Risks

Although this study does not involve sensitive topics, some participants may reflect on regretful or impulsive spending behaviors. To mitigate discomfort:

- The interview setting will be non-judgmental and conversational.
- Participants can skip any question they are uncomfortable answering.
- Support resources will be provided if needed.

By implementing these ethical safeguards, this study ensures participant protection, data integrity, and research credibility while complying with academic ethical standards.

#### **CHAPTER 4: FINDINGS**

The previous chapters have outlined the background of this study, reviewed relevant literature, and described the research methodology. This chapter presents the findings from the primary research, which explored the motivations behind microtransaction spending among gamers in Singapore. Using thematic analysis, key patterns and themes were identified and compared against existing literature discussed in Chapter 2.

The main themes that emerged from the interviews include Emotional Spending and Regret, Aesthetics Over Gameplay, Social Influence and FOMO, and Rationalization and Financial Awareness. Each theme will be examined and supported with selected quotes from participants, followed by critical analysis and links to relevant theory.

### Participant list and their demographic factors

| Participant<br>s | Age | Occupatio<br>n               | Monthl<br>y<br>Income<br>range<br>(SGD) | Gaming<br>Experienc<br>e | Frequenc<br>y of<br>Gaming | Preferred<br>Gaming<br>Genres                      | Average<br>Monthly<br>Spending<br>s (SGD) |
|------------------|-----|------------------------------|---|--------------------------|----------------------------|--|---|
| P1               | 26  | Unemploy<br>ed               | NA                                      | 17 Years                 | Every<br>night             | FPS,<br>Adventur<br>e, RPG                         | \$0-\$50                                  |
| P2               | 23  | Student/M<br>arketing        | NA                                      | 12 Years                 | 3hrs/Day                   | Horror, simulatio n, action, adventur e, RPG       | <\$20                                     |
| P3               | 24  | Marketing<br>Coordinat<br>or | \$5000<br>>                             | 13 Years                 | Everyday                   | FPS,<br>RPG,<br>Adventur<br>e, MOBA                | \$50-\$100                                |
| P4               | 25  | Student                      | NA                                      | 20 Years                 | Everyday                   | FPS,<br>Adventur<br>e,<br>MMORP<br>G,<br>Simulatio | \$0-\$100                                 |

|     |    |                       |             |          |                         | n  |                |
|-----|----|-----------------------|-------------|----------|-------------------------|--|----------------|
| P5  | 26 | Manager               | NA          | 10 Years | Everyday                | FPS,<br>RPG,<br>MOBA   | \$0-\$50       |
| P6  | 26 | Retail<br>Assoicate   | NA          | 15 Years | Everyday                | FPS,<br>RPG,<br>Horror,<br>Simulatio<br>n                          | \$50>          |
| P7  | 24 | Computer<br>Engineer  | >\$400<br>0 | 10 Years | Everyday                | FPS,<br>Adventur<br>e, Horror                                      | \$40<          |
| P8  | 27 | Aerospace<br>Engineer | >\$400<br>0 | 21 Years | Every<br>night          | FPS,<br>Strategy<br>Games,<br>MMORP<br>G,<br>Adventur<br>e, Puzzle | Below<br>\$100 |
| P9  | 23 | Student               | NA          | 14 Years | Once<br>every 2<br>days | FPS,<br>Adventur<br>e, Puzzle                                      | \$0-\$15       |
| P10 | 24 | Student               | \$400       | 14 Years | Everyday                | FPS,<br>MOBA   | \$20           |
| P11 | 26 | Retail<br>Advisor     | >\$300<br>0 | 13 Years | Everyday                | FPS,<br>Puzzle,<br>Strategy,<br>Adventur<br>e                      | Below<br>\$100 |
| P12 | 21 | Student               | \$500       | 10 Years | Everyday                | FPS,<br>Adventur<br>e,<br>MMORP<br>G                               | \$50>          |

### 4.1 Emotional Spending and Regret

10 out of 12 participants revealed that their microtransaction purchases were heavily influenced by emotions, particularly excitement, gratification, and eventual regret. This theme reflects the short-term pleasure and long-term dissatisfaction that many participants experienced, especially when purchases were driven by impulse or made under time pressure. These emotional highs and lows appear to be an integral part of the digital spending experience, raising concerns about the sustainability of microtransactions as a source of enjoyment.

Participants often described a sense of thrill or satisfaction immediately after making a purchase, followed closely by feelings of guilt or financial regret. Participant 1 reflected,

"I feel happy at first, and excited... But then maybe a few minutes later I'm like, 'shit, I shouldn't have bought that, I just wasted money."

Similarly, Participant 11 explained,

"I dropped \$300... it's for nothing. It was for packs. Basically, Gacha... now I realise it was just a waste."

These statements highlight a recurring cycle of emotional spending where immediate gratification often gives way to financial reflection and disappointment.

This pattern aligns with research by Schmidt (2019), who suggests that microtransactions are often designed to trigger emotional responses, using in-game stimuli such as sound cues, countdown timers, and flashy visuals to provoke rapid decision-making. Kim and Ross (2021) similarly argue that digital purchases, particularly in environments with Gacha systems or limited-time offers, are strategically constructed to override rational evaluation and encourage spontaneous buying behaviour. These techniques foster a sense of urgency, which several participants admitted to succumbing to, even when they had doubts about the actual value of the purchase.

The emotional conflict expressed by participants can be interpreted through the lens of the Theory of Planned Behaviour (TPB), particularly the construct of perceived behavioural control. While participants were often aware that their spending habits were not always justifiable, many lacked the self-regulation to stop themselves. This lack of control is especially relevant in gaming environments that combine psychological pressure with reward mechanics, creating an ideal scenario for impulsive actions. As such, even when participants had the intention to limit their spending, their ability to act on that intention was frequently compromised by emotional triggers.

From the perspective of Self-Determination Theory (SDT), this emotional spending could be interpreted as a response to unmet psychological needs, such as competence, autonomy, or relatedness. However, instead of fulfilling these needs, many purchases appeared to offer only surface-level satisfaction. The hedonic reward, whether in the form of a rare skin or flashy animation, provided a temporary mood boost but lacked deeper motivational value. This is in contrast to SDT's emphasis on intrinsic motivation and long-term well-being (Deci & Ryan, 2000), suggesting that microtransactions may only provide shallow psychological benefits.

Interestingly, some participants demonstrated a growing awareness of this emotional pattern and began adjusting their behaviour accordingly. Participant 8 noted,

"Sometimes I wait a day or two... because I know if I buy it now, I might regret it. I try not to let the hype get to me."

This reflective behaviour hints at a maturing consumer mindset, one that attempts to resist the emotional traps set by game design and marketing strategies.

Furthermore, these findings challenge the widely held assumption in the literature that microtransactions are primarily associated with hedonic enjoyment (Alha et al., 2018). While the purchases are often framed as fun and harmless, participants' experiences suggest that emotional conflict and post-purchase regret are equally common, if not more impactful. This raises important questions about how microtransactions are marketed and the ethical responsibility of developers when designing emotionally manipulative features.

In summary, this theme highlights the emotionally conflicted nature of microtransaction spending. Although purchases may bring short-term excitement and gratification, many participants also reported regret and a sense of loss afterward. These findings offer a more nuanced understanding of the emotional drivers behind in-game purchases and reveal that pleasure is often fleeting, undermined by impulse, pressure, and the realisation of unfulfilled expectations.

#### 4.2 Aesthetics Over Gameplay

9 out of 12 participants reported that the visual appeal of in-game items was the primary reason behind their microtransaction purchases. Rather than purchasing for gameplay advantage or progression, participants expressed a strong preference for cosmetics that aligned with their personal style, mood, or in-game identity. This indicates that, for many players, microtransactions serve a deeper symbolic or expressive function rather than a practical one.

Participant 7 explained,

"I like skins that are my aesthetic, my style... punk or like metal or emo."

Similarly, Participant 4 noted,

"It's not about gameplay... it's like a way I express myself. I like to create something that's me in the game."

These responses suggest that players are not merely seeking entertainment through in-game performance but are using microtransactions to construct and communicate aspects of their identity within digital spaces.

This finding supports previous research by Wohn and Lee (2013), who highlight the role of customisation in fulfilling identity-related motivations in games. The concept of *the digital self* (Belk, 2013) also helps explain this behaviour, as players increasingly see their avatars as extensions of themselves. In such cases, the purchase of aesthetically pleasing skins or cosmetics becomes a form of symbolic self-representation, akin to dressing oneself in real life to reflect mood, style, or social role.

From a Self-Determination Theory (SDT) perspective, this theme aligns strongly with the need for autonomy. Players seek to personalise their experiences and make choices that reflect their internal preferences, rather than being constrained by in-game utility or meta strategies. The act of buying a particular skin, emote, or cosmetic item offers a sense of control and creativity within the game environment. Rather than being extrinsically motivated by competitive performance, these players are intrinsically motivated by the desire to express themselves.

In contrast to earlier literature that positions microtransactions as largely utilitarian or progression-based (Lehdonvirta, 2018), these findings point to the psychological significance of non-functional items. Many participants described feelings of satisfaction or increased attachment to the game after purchasing an aesthetically appealing item. Participant 2 mentioned,

"Even if it doesn't help me win, it makes the game more enjoyable for me. I like how it looks. That's enough reason."

Some participants also noted that cosmetics could impact their mood or sense of immersion. For example, Participant 9 explained,

"When I'm using a skin that looks cool or fits my vibe, it makes me want to play more. It just feels better."

This emotional connection underscores the idea that aesthetic value enhances the overall gaming experience, making it feel more personal and meaningful, even in the absence of gameplay benefits.

Interestingly, participants often reflected on the longevity of their purchases in terms of aesthetic enjoyment. While gameplay boosts might offer short-term benefits, visual items were described as more "timeless." Participant 5 shared,

"If I like the skin, I'll keep using it for months. It's worth it because I still enjoy how it looks every time."

This contrasts with previous findings that portray cosmetic purchases as superficial or disposable.

However, not all participants were equally motivated by aesthetics. A minority indicated that they were indifferent to how their character looked, prioritising function or value instead. This divergence suggests that aesthetic motivation may vary based on personality, playstyle, or emotional investment in the game.

Overall, these findings reveal that aesthetic microtransactions are far more than surface-level indulgences. For many players, they serve as meaningful tools for identity expression, emotional engagement, and intrinsic satisfaction. This challenges conventional perspectives that frame cosmetic purchases as purely frivolous and instead positions them as central to how modern players relate to their gaming experiences.

#### 4.3 Social Influence and FOMO

11 out of 12 participants reported that social influence significantly affected their decisions to purchase microtransactions. This influence primarily came from friends, gaming communities, and social media platforms such as TikTok. Many participants described situations where they were encouraged either directly through peer pressure or indirectly through exposure to content to buy items they would not have otherwise considered. This theme also reflects the role of *fear of missing out (FOMO)*, as limited-time items and trends prompted participants to act quickly to avoid being excluded. Participant 3 described the impact of peer encouragement:

"I was just gonna cave in and make that purchase... my friends were convincing me like, 'just buy it, it's going to be gone soon."

Likewise, Participant 10 shared a similar experience:

"My friends... were watching and they were like, 'just buy it, buy small... you're going to get it.' So I spent around \$60."

These findings support the subjective norms component of the Theory of Planned Behaviour (TPB), where individuals are influenced by their perceptions of how others think they should behave. In this context, social expectations from peers and the wider gaming community created a form of pressure that led participants to make purchases, even when those purchases were not originally part of their intentions. This is especially apparent in group settings or games with strong cooperative or social dynamics.

Participants also highlighted the influence of social media platforms, especially TikTok, which were described as key sources of exposure to in-game content. Participant 7 explained,

"I always see skins and purchases on TikTok... I see someone using it and I want to get it."

This demonstrates the role of social contagion, where observing others' actions in digital spaces can rapidly shape one's own behaviour.

From a psychological standpoint, the role of FOMO was particularly strong in driving microtransaction purchases. Multiple participants expressed anxiety around the idea of missing out on limited-time content or exclusive items. Participant 1 admitted,

"Sometimes it's not even like I want it, but it's just because it's limited... I might not get it again."

This highlights how urgency, rather than desire, can often be the dominant factor behind a spending decision.

This behaviour is consistent with previous research by Wohn and Freeman (2020), who argue that social influence in gaming is not only widespread but often emotionally charged. Their findings suggest that players are motivated by the desire to maintain social standing, avoid exclusion, or stay visually consistent with their in-game peer group. Several participants in this study echoed this sentiment, with some admitting that they made purchases to avoid feeling left out or to match their friends' characters.

Interestingly, while most participants admitted to being influenced by others, several also demonstrated a degree of awareness or resistance. Participant 9 shared,

"I'm tempted, for sure. But sometimes I wait it out. If I still want it after a few days, then I'll get it."

This self-regulatory approach suggests that while social pressure is impactful, it is not always deterministic individuals may still retain a sense of control over their spending, depending on context and personality.

This theme also reveals a tension between autonomy and conformity. While players express a desire to customise their experience (as seen in the previous theme), they simultaneously feel pressure to conform to group norms or trends. The resulting purchases are therefore often shaped by both internal preferences and external expectations.

In summary, this theme highlights how peer influence and fear of missing out play central roles in microtransaction spending. Friends, social media, and in-game communities act as powerful motivators sometimes overriding individual preferences or financial caution. These findings support TPB's emphasis on subjective norms and expand on literature suggesting that gaming culture is as much about social identity as it is about play.

#### 4.4 Rationalisation and Financial Awareness

6 out of 10 participants reported that they had become more financially conscious over time, especially as their life circumstances changed. Many described a shift from impulsive, emotionally driven purchases to more deliberate spending habits, guided by internal cost-benefit analysis and personal budgeting. This theme highlights how players are not passive consumers but often engage in rationalisation processes to justify or reject spending decisions. Participant 9 reflected on how their thought process evolved:

"How much I'll profit... like benefit in the game compared to how much I'm spending for it."

Similarly, Participant 8 explained,

"I wait for a few days... most of the time it's impulse, and when I purchase things on impulse, I tend to regret."

These responses reflect an increasing awareness of the value and longevity of purchases. Several participants described strategies for evaluating whether an item was worth the cost, such as estimating how long they would use it, whether it aligned with their play habits, or if it provided long-term enjoyment. In some cases, participants even developed informal cost-per-use models to gauge whether a purchase was "worth it."

This behaviour aligns with the perceived behavioural control element of the Theory of Planned Behaviour (TPB). Unlike participants in earlier themes who felt emotionally overwhelmed by impulse or pressure, these individuals demonstrated greater self-efficacy in managing their purchasing decisions. This suggests that as players become more experienced or financially independent, they develop stronger internal regulation mechanisms that influence whether or not they engage in microtransactions.

Rationalisation also emerged as a coping strategy to reduce cognitive dissonance. Participants who spent money often described their actions in terms of supporting developers, rewarding good design, or "treating themselves" after a long day. Participant 5 stated, "It's like a hobby. I'd spend money on games the same way someone else would spend on movies or food." This reframing positions gaming expenditures as part of a broader leisure economy, comparable to other forms of entertainment.

These findings support literature by Xiao and Henderson (2021), who suggest that digital consumers often create moral or practical justifications to resolve feelings of guilt associated with non-essential spending. This contrasts with literature that frames microtransactions primarily as impulsive or addictive behaviours (e.g., Griffiths, 2018), highlighting instead that many players approach in-game purchases with considerable thought and personal criteria.

Participant 10 illustrated this shift, reflecting on how life stage impacts spending behaviour:

"Back then during NS [National Service], I spent a lot more. I had a steady income and no real expenses. Now I'm working part-time and thinking more about rent, savings, food. I definitely think twice before buying something in a game."

This quote highlights how financial awareness can grow alongside life responsibilities, prompting players to become more selective or conservative in their spending.

That said, rationalisation does not always prevent overspending. A few participants admitted to creating justifications for large or repeated purchases, particularly in Gacha-based games. While they claimed to "think it through," their reasoning often included emotional anchors such as attachment to a favourite character or fear of missing a rare drop. This suggests that rationalisation can serve both as a restraint and an enabler, depending on how it is framed.

Overall, this theme reflects a more complex, reflective side of player behaviour one that includes planning, self-awareness, and even regret management. Rather than viewing microtransaction consumers as emotionally impulsive or socially manipulated, these findings show that many players are active decision-makers who weigh emotional desires against financial priorities.

In conclusion, rationalisation and financial awareness are increasingly important factors in shaping microtransaction behaviour. While some players are still swayed by social or emotional triggers, others are developing strategies to align their purchases with personal values, practical use, and long-term satisfaction, suggesting a more mature, considered approach to digital consumption.

# **CHAPTER 5: CONCLUSION**

#### 5.1 Introduction

This final chapter concludes the dissertation by reflecting on the key findings, their theoretical significance, and practical relevance. The aim of this study was to explore the psychological and social motivations behind microtransaction spending among video game players in Singapore. In doing so, the study sought to understand how emotions, identity, peer dynamics, and personal rationalisation influence digital consumption behaviours in gaming contexts.

The research adopted a qualitative approach and identified four central themes through thematic analysis: emotional spending and regret, aesthetics over gameplay, social influence and FOMO, and rationalisation and financial awareness. These themes offered insights into the internal and external drivers of microtransaction behaviour, revealing both consistency with and divergence from existing literature.

This chapter is structured to reflect on how the study addressed its research objectives and contributes to theoretical understanding. Each objective is discussed in turn and compared against relevant literature to highlight similarities, contradictions, and new contributions to knowledge. Following this, the chapter outlines the practical implications of the findings for game developers and industry stakeholders, and provides recommendations for future research. The chapter ends with a brief summary of the study's overall contribution.

## **5.2 Theoretical Contributions**

# Objective 1: More Than Just a Skin: The Emotional Highs and Lows of Microtransaction Spending

This study revealed that psychological motivations, particularly emotional gratification, aesthetic appeal, and exclusivity, play a central role in players' decisions to engage with microtransactions. Participants frequently described feelings of excitement and satisfaction during the purchasing process, especially when acquiring desirable cosmetic items. These findings support prior research by Kim and Ross (2021) and Schmidt (2019), who identified positive emotional states as common triggers for impulsive spending in digital environments.

However, this study also uncovered an important nuance many participants reported that such emotional gratification was short-lived and often followed by regret. While Alha et al. (2018) highlight the hedonic value of microtransactions, the current findings challenge this view by revealing that emotional responses can be inconsistent and occasionally negative. The recognition of regret shortly after purchase suggests that emotional motivations may be more complex than previously assumed, particularly when purchases are driven by urgency or impulsivity.

Aesthetic motivations also emerged as a dominant theme. Similar to Wohn and Lee (2013), participants explained that customising avatars or obtaining skins helped them express their personality and identity within the game. These behaviours align with the autonomy component of Self-Determination Theory (Deci & Ryan, 1985), which emphasises the motivational role of self-expression. Lehdonvirta (2009) further reinforces the idea that cosmetic items in virtual environments are often used for symbolic self-representation. However, unlike prior research that suggests such items are trend-driven or status-oriented, this study found that players often retained long-term emotional attachments to specific items. This suggests a deeper identity connection, introducing a new interpretation of aesthetic-based motivation as a sustained form of engagement.

Additionally, the concept of exclusivity particularly through time-limited offers was found to heavily influence decision-making. These findings align with Hamari et al. (2017), who argued that scarcity tactics effectively drive consumer urgency. However, the present study extends this conversation by showing that these urgency-based tactics can also lead to dissatisfaction, especially when the item lacks perceived long-term value. This tension between short-term desire and post-purchase reflection raises

concerns about the sustainability of scarcity-based marketing in games, particularly when it encourages players to act against their better judgment.

From a theoretical perspective, the findings support both SDT and the Theory of Planned Behaviour (TPB). Players were largely driven by intrinsic motivations (autonomy and identity), as described in SDT, but also demonstrated variability in perceived behavioural control, a key component of TPB (Ajzen, 1991). When emotions were heightened or limited-time offers were present, players often struggled to act in line with their intentions, resulting in outcomes they later questioned. This misalignment between intention and behaviour reflects TPB's notion that even when attitudes and intentions are favourable, perceived control in the moment can disrupt rational decision-making.

Thus, this study supports existing literature by reaffirming the central role of psychological motivations in microtransaction behaviour. However, it also contributes new insights by revealing the emotional inconsistency of spending, the long-term symbolic significance of aesthetic items, and the dual effect of exclusivity as both a motivator and source of regret. These findings expand existing interpretations of SDT and TPB and offer a more nuanced understanding of how psychological drivers manifest in real-world digital consumption.

# Objective 2: FOMO, Feeds, and Friends: How Social Influence Shapes (and Challenges) Microtransaction Choices

The findings of this study demonstrate that social influence plays a significant role in microtransaction spending, particularly through peer dynamics, community engagement, and exposure to content on social media platforms. Participants described situations where their spending was directly or indirectly shaped by what friends, online acquaintances, or influencers were purchasing. These behaviours are consistent with the subjective norms element of the Theory of Planned Behaviour (Ajzen, 1991), which proposes that individuals are motivated to conform to the expectations or actions of others within their social group.

This study supports the work of Wohn and Freeman (2020), who found that social validation and in-group norms were strong predictors of digital spending. Many participants in the present study admitted to being influenced by what was popular among their peers or widely visible in gaming spaces. Similarly, Gentina and Rowe (2020) argue that cosmetic purchases often serve as symbolic markers of group belonging and social standing, a pattern clearly evident in how participants referenced wanting to "keep up" with friends or avoid being left out.

However, this study contributes new insight by identifying TikTok as a uniquely powerful source of social influence. Participants frequently cited seeing short-form videos showcasing new skins or bundles, which triggered spontaneous interest or reinforced peer trends. While previous research has acknowledged the influence of platforms like Twitch and YouTube (Hamari et al., 2017), TikTok has received limited attention in academic literature. This study therefore introduces a new social vector into the discussion one that is algorithmically curated, highly visual, and easily shareable. The combination of these features appears to intensify social comparison and purchasing pressure, particularly among younger players.

Importantly, the study also revealed instances of conscious resistance to social pressure. Some participants reflected on moments where they paused before purchasing, recognising that their motivation stemmed more from group influence than personal desire. This adds nuance to TPB's model of subjective norms, suggesting that players do not uniformly internalise or act upon perceived social expectations. Instead, they may actively negotiate or reject them depending on individual values, financial considerations, or past experiences. This selective acceptance of peer norms represents a more autonomous decision-making process than typically portrayed in studies that emphasise the dominance of social influence.

Furthermore, while existing literature such as Lehdonvirta (2009) and Wohn and Lee (2013) describe social motivations in the context of identity signalling or group recognition, this study found that players often oscillated between belonging and individuality. For example, a skin purchase might be prompted by a friend's recommendation but chosen specifically for its personal aesthetic value. This duality complicates the idea that social influence leads only to conformity and suggests a more integrated motivation where social validation and self-expression work in tandem.

Hence, this study supports and extends existing literature by affirming the importance of social dynamics in microtransaction behaviour. It contributes new understanding by identifying TikTok as a rising influence platform and highlighting players' capacity to resist or selectively engage with peer expectations. These findings refine the application of TPB and offer a more layered view of how social influence operates in digital game environments.

# Objective 3: Rational or Justified? How Gamers Reflect, Resist, and Reward Themselves Through Microtransaction Spending

This study revealed that many players engage in reflective thinking when deciding whether to spend money on microtransactions. Participants frequently described

evaluating the cost, frequency of use, or perceived value of an item before making a purchase. Others admitted to learning from past impulsive behaviour and adjusting their approach over time. These findings indicate a shift from impulsive consumer patterns towards more rational, strategic decision-making particularly as players mature or become more financially independent.

This aligns with elements of the Theory of Planned Behaviour (TPB), particularly the concept of perceived behavioural control (Ajzen, 1991). Participants described moments where they were able to delay gratification or walk away from a purchase after evaluating its worth. In these cases, players demonstrated a high degree of self-regulation and control, which positively influenced whether they followed through with an intended action. These findings contrast with previous studies that tend to emphasise impulse and addiction as the primary drivers of microtransaction spending (e.g., Griffiths, as discussed in your review), by showing that players can and do exercise control over their decisions.

The use of rationalisation was also consistent with Xiao and Henderson (2021), who found that digital consumers often justify their purchases by comparing them to other entertainment-related expenses. In this study, players used similar comparisons, viewing game purchases as equal to or more worthwhile than other paid media such as streaming subscriptions. While Xiao and Henderson focused on justification after a purchase, this study extends the concept by showing that rationalisation often occurs before the transaction, as part of the decision-making process. This pre-emptive rationalisation adds a new dimension to our understanding of how players negotiate the tension between desire, value, and financial priorities.

Another key contribution of this study is the observation that rationalisation serves both protective and enabling functions. On one hand, it helped participants avoid impulsive purchases by setting personal budgets, taking time to reflect, or limiting themselves to promotional bundles. On the other hand, some players used rationalisation to justify unnecessary spending such as "treating themselves" or spending to feel productive despite acknowledging that the item had little long-term value. This dual function highlights the complex role of rational thinking in digital consumption and suggests that not all rationalisation results in responsible outcomes.

Additionally, the findings emphasised the influence of life stage and financial responsibility on spending behaviour. As players progressed from adolescence into adulthood, many described becoming more cautious with their money and more selective about what they chose to purchase. This relationship between income stability and behavioural control has not been widely addressed in the literature on microtransactions and represents a meaningful contribution to the field. It adds a

temporal dimension to the TPB framework by showing how control mechanisms evolve alongside personal growth and changing priorities.

Therefore, this study supports existing research on rationalisation while also expanding it to include pre-purchase deliberation and life-stage variation. The findings contribute to TPB by offering a more flexible view of behavioural control that accounts for both situational and developmental factors. They also introduce the idea that rationalisation is not inherently protective but can be used to justify both responsible and questionable spending behaviours revealing the need for a more nuanced understanding of reflective consumption in digital gaming environments.

# **5.3 Practical Implications**

In addition to its theoretical contributions, this study presents several practical implications for game developers, marketing teams, and platform managers involved in designing and promoting microtransactions. The findings emphasise the importance of understanding how players' psychological and social motivations influence their spending decisions, particularly in relation to emotional triggers, social pressure, and rational reflection.

One of the key implications is the need for developers to promote more ethical and transparent monetisation strategies. Many participants described experiencing regret after emotionally driven purchases, especially those influenced by limited-time offers or visual appeal. To address this, developers could consider implementing design features that encourage reflective spending such as optional timers before high-cost transactions, reminders of previous purchases, or clearer previews of item value. These features may help reduce impulsive behaviour and foster greater trust between players and developers.

The study also highlights the enduring importance of personalisation in digital marketplaces. Participants consistently valued cosmetic items that reflected their identity or personal taste, and many maintained long-term emotional attachment to particular skins or avatars. Developers should therefore prioritise features that allow players to discover and express individuality such as curated storefronts, recommendation engines based on gameplay behaviour, and flexible customisation tools. A focus on personal meaning, rather than trend-based urgency, may lead to higher long-term satisfaction and reduce post-purchase regret.

Furthermore, the influence of social platforms, particularly TikTok, presents both opportunities and risks. While these platforms provide high visibility for in-game items and can support community engagement, they also introduce new pressures and forms of social comparison. Marketing teams should be aware of the emotional and

behavioural consequences of exposure-driven influence and consider ways to ensure that promotional content especially that involving influencers is presented in a responsible and non-exploitative manner. This is particularly relevant for younger or more impressionable audiences who may be more susceptible to peer-driven spending.

Another important consideration is the diversity of player spending behaviour across different life stages. As participants in this study demonstrated, financial maturity, income stability, and shifting priorities all affected how and when players engaged with microtransactions. This suggests that one-size-fits-all monetisation strategies may be less effective or even alienating. Instead, developers may benefit from offering multiple pricing tiers, seasonal bundles, or value-based loyalty rewards that cater to different levels of financial comfort and gameplay commitment.

Overall, the findings of this study point to the value of designing monetisation systems that balance profitability with player well-being. By acknowledging the emotional, social, and financial complexities behind microtransaction decisions, developers can create more meaningful and sustainable engagement models. In doing so, they not only reduce the likelihood of player dissatisfaction or backlash but also strengthen long-term relationships with their user base.

# 5.4 Limitations

While this study aims to provide in-depth insights into consumer motivations behind microtransactions, several limitations must be acknowledged. These limitations primarily relate to sample size constraints, potential biases, and generalizability issues inherent in qualitative research (Bryman, 2016).

# Sample Size and Generalizability Constraints

This study is based on 12 semi-structured interviews (6 male, 6 female) with video game players in Singapore. While qualitative research prioritizes depth over breadth, the findings may not be fully generalizable to the broader gaming population, particularly different age groups, geographic locations, or gaming subcultures (Creswell & Poth, 2018). Additionally, as gaming preferences and spending behaviors evolve over time, longitudinal studies may be needed to capture shifting consumer motivations (Hamari, Hanner, & Koivisto, 2017).

# **Self-Reported Bias and Social Desirability Effect**

Since interviews rely on self-reported data, participants may unintentionally misrepresent their spending habits due to memory recall issues, personal biases, or social desirability concerns (Alha et al., 2018). For example, some participants may

downplay impulsive spending or overemphasize rational decision-making. While open-ended questions and a conversational interview style help mitigate this, the possibility of biased responses remains (Fischer & Otnes, 2022).

# **Variability in Microtransaction Behaviors**

Microtransactions vary across different game genres (e.g., mobile vs. PC, casual vs. competitive games), and player motivations may differ based on game mechanics, community norms, or monetization strategies (Lehdonvirta, 2018). This study focuses on general gaming experiences, but future research could explore genre-specific spending behaviors in greater detail (Wohn & Freeman, 2020).

Despite these limitations, this study provides valuable insights into the psychological, social, and economic motivations behind microtransactions, laying the groundwork for future research and industry applications.

# 5.5 Recommendations for Future Research

While this study has provided in-depth insights into the psychological and social motivations behind microtransaction spending, it also highlights several areas that warrant further investigation. Due to the qualitative and context-specific nature of the research, future studies could benefit from broader and more diverse sampling. This study focused primarily on young adult gamers in Singapore, a relatively homogenous group. To enhance the generalisability of findings, future research could include different age groups, particularly adolescents or older adults, as previous literature has suggested that age and self-esteem play significant roles in digital behaviour and social comparison (Djafarova & Rushworth, 2016; Bergagna & Tartaglia, 2018).

Additionally, while this research adopted an exploratory qualitative design, there is a need for quantitative studies that can statistically examine the relationships suggested here such as the correlation between peer influence, emotional gratification, and purchase frequency. Constructs like subjective norms and perceived behavioural control from the Theory of Planned Behaviour (Ajzen, 1991) could be operationalised and measured across larger samples to validate or extend these qualitative insights. This would also enable more robust cross-cultural comparisons, which remain limited in current literature on microtransaction behaviours (Hamari et al., 2017).

Future research could also explore the long-term psychological effects of microtransaction engagement, including how patterns of regret, rationalisation, or self-control evolve over time. While this study found that some participants adjusted

their behaviour as they gained financial independence, longitudinal studies could help clarify how spending strategies change in relation to life events or shifting digital habits. This would build upon the idea of the extended self in digital environments (Belk, 2013) and how identity-related purchases may sustain or fade across gaming careers.

The influence of social media platforms particularly TikTok also presents an evolving research opportunity. Existing literature has recognised the impact of platforms like YouTube and Twitch (Hamari et al., 2017), but TikTok's short-form, algorithm-driven structure may intensify social comparison and purchase motivation in unique ways. Further investigation is needed into how platform-specific design affects consumer behaviour, especially among emerging digital natives who are increasingly exposed to game-related content in casual, entertainment-driven contexts.

Another potential avenue for future research is the role of aesthetic-based motivation in reinforcing digital identity. While Wohn and Lee (2013) and Lehdonvirta (2009) discuss customisation as a form of self-expression, the present study suggests that aesthetic items may also hold long-term emotional significance. Future studies could explore how players' emotional attachment to cosmetic items influences their sense of agency, belonging, or even self-esteem within gaming communities, particularly in highly social or avatar-based environments.

Finally, as ethical concerns around monetisation continue to grow, future research could explore player perceptions of fairness and transparency in microtransaction systems. This would be particularly relevant in the context of limited-time offers and scarcity-driven mechanics, which, as noted in this study, can produce both excitement and post-purchase regret. While some literature has acknowledged the persuasive power of exclusivity (Hamari et al., 2017), its potential for long-term consumer dissatisfaction remains an open question.

In summary, future research should aim to deepen and broaden the understanding of microtransaction behaviour by incorporating more diverse methods, samples, and theoretical angles. As gaming economies become more embedded in everyday digital life, continued investigation is essential to support both academic knowledge and responsible industry practice.

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# **Appendices**

# **Appendix 1: Interview Guide**

# **Psychological Motivations**

- 1. Can you walk me through your thought process when deciding to purchase a microtransaction?
- 2. What feelings or emotions do you experience when you make a purchase in a game?
- 3. What types of rewards or items make you feel that a purchase is worthwhile?
- 4. How does the idea of exclusivity (e.g., limited-time offers) influence your decision to buy in-game items?
- 5. Have you ever bought a microtransaction for reasons other than gameplay benefits? If so, why?
- 6. Do you think achieving goals in a game influences your decision to spend money?
- 7. How do you feel about spending money on a game that you've already paid for versus free-to-play games?
- 8. Can you describe a situation where you regretted or felt satisfied with a microtransaction purchase?

# **Social Factors**

- 9. How do your interactions with other players influence your decision to buy microtransactions?
- 10. Can you describe a time when peer pressure or social dynamics in a game influenced you to make a purchase?
- 11. How does being part of a gaming community affect your spending habits?
- 12. Do you feel that social recognition or approval plays a role in your spending on in-game items?
- 13. How important is it to you that your in-game character or status reflects your personality?
- 14. How do multiplayer or cooperative game modes affect your spending decisions?
- 15. Do you think competition with other players influences your spending behavior?

# **Demographic Factors**

- 16. How does your current financial situation influence how much you spend on microtransactions?
- 17. Do you think your age, gender, or life stage affects your approach to spending in games?
- 18. Have your spending habits changed as your income has changed?
- 19. How do you think cultural values or societal norms in Singapore influence your decisions to spend on in-game items?
- 20. How do you perceive the pricing of microtransactions in games compared to other entertainment expenses?
- 21. Do you feel that gaming companies target specific demographic groups when designing microtransactions?

#### **In-Game Features**

- 22. What types of in-game items or features make you most likely to spend money?
- 23. How do you decide whether an in-game item is worth purchasing?
- 24. Can you describe how limited-time events or offers influence your decision to buy microtransactions?
- 25. How does the design or functionality of a game influence your spending habits?
- 26. Do you think the way a game rewards or punishes players for spending or not spending affects your decisions?
- 27. Can you share an example of a game feature or mechanic that led you to spend more than usual?

# **Player Satisfaction and Identity**

- 28. How do microtransactions contribute to your overall satisfaction with a game?
- 29. Do you feel that the items or features you buy help you express your identity within the game?
- 30. How do you think microtransactions affect your long-term enjoyment of a game?

# **Appendix 2: Interview Transcript**

# <u>Interviewer</u>

Hello. Thank you for participating in my interview for my research. So first of all, I'll go through the psychological motivations. So can you walk me through your thought process when deciding to purchase a microtransaction?

## **Interviewee**

So mainly for microtransactions, I do see a part where whether you save value for money, whether do I need those items or not or whether do I need to make a microtransaction. But there are times where I don't consider this factor and just go and buy the cosmetics or do a microtransaction to get the cosmetics that I want because it's either limited cosmetic or I just really like the skin.

#### Interviewer

So would you say that your more inclined to buying cosmetic, aesthetics in general in the game?

# <u>Interviewee</u>

Yes, because I'm not tied down to my so-called monetary wise. It is just a small portion of my income where I feel is OK to invest a bit of money to fund my my hobbies so that little bit of money that I spend I feel is a fair trade off to to spending such microtransactions.

#### <u>Interviewer</u>

So what feelings or emotions do you experience when you make a purchase in a game?

### <u>Interviewee</u>

I mean definitely you will feel happy, that's for sure. I feel a bit of excitement, a bit of hype and anticipation. So like when I purchased the skin or cosmetic or even like do a in game purchase of like currency so that I can further my progress in the game. It does make gives me a bit of motivation to commit more time into the game, further, my skills in the game and yeah, it's about it.

#### Interviewer

So you mostly feel it's a positive feeling?

# <u>Interviewee</u>

Yeah, definitely a positive feeling. There are time to time where I will just have this like so-called regret when I buy a skin because for free to play games most of the time. Their main source of income is via microtransactions, so they were always pushed to for more in game content and such as cosmetics, DLC's so and so forth. And for cosmetics wise, where it's always pumping out every few months or every month even. There are times where I buy the skin or the cosmetic and the following month they they produce something that is more more. I'll say attractive to me and that's where the the feeling of regret like comes in.

# **Interviewer**

So what types of rewards or items make you feel that a purchase is worthwhile?

#### <u>Interviewee</u>

OK, because I mainly play like competitive first person shooter games where progress wise is not so much of like you buy this cosmetics or this skin or whatever thing that you purchase. It doesn't really affect your gameplay, it's just for cosmetic wise, whereas for like the mobile games that I play, which is like Gacha games where you're constantly pushing for end game content where certain characters or certain limited summons or even items can affect your game drastically by just having them.

# **Interviewer**

So how does the idea of exclusivity, such as limited time offers influence your decision to buy in game items?

#### <u>Interviewee</u>

Definitely like make me feel like I I need to get them because it's a once in a lifetime opportunity to buy those and it's not confirmed that it will come back and if if it's so-called limited, it won't come back for a long time. Because if let's say it's limited most of the time from what I can experience or what I can tell you from my experience is that. Whenever there's a limited summon, is not usually limited. They will want to bring back those items so that for those player base who are really looking forward to to those cosmetics items in game currencies, so and so forth. They will want to so-called gain revenue from them so but it will take a long time for those content to come back. So for me personally, since money is not an issue, I would definitely just spend and get the worries out of it and just see whether it's worth it or not. But most of the time I don't really regret my decision to buy because most of the time those transactions that I made or in the game. That's really helped me progress with the game itself. Except for cosmetics, cosmetics wise, if it's limited I it depends on whether I like it. If i don't then I don't see the point.

# Interviewer

So you've talked about cosmetics, right? So have you ever bought a microstransaction for reasons other than gameplay benefits? If so, why?

# <u>Interviewee</u>

you're talking about none-game-play benefits right, OK.

#### <u>Interviewer</u>

Yeah, non-game player, yeah.

#### **Interviewee**

One example I can give you is Valorant for example, where you can buy skins for the game, for your ,for the particular weapon that you like to use whatsoever, and comes sometimes in a bundle, and if, let's say you do miss out that chance on the bundle you you get the chance to at random times to buy the skin again but it's at the full price, not discounted. So mainly is just due to the attraction of the skin and how hype it is. Personally, for me, I don't go with hype. I go for more of my personal feelings where whether I feel like I want it or not, if I do want it, I will just go ahead and make the microtransaction to go and buy the skin. But like I said before, there are times where you know when they push on new content and I see that new skin or new cosmetic I tend to regret because I tell myself like, oh, I should have waited just a little bit longer just for something better.

# **Interviewer**

So do you think achieving goals in a game influences a decision to spend money?

# **Interviewee**

Definitely because OK. There's 2 examples I can give you for Gacha games. What we tend to do is there's a lot of grinding or like so-called leveling and upgrading of your your account through proceeding with the storyline proceeding with like PvP content ,PPE content even. Most of the time you would want to reach the end game product which is like finish the game itself but that's the problem where once you hit the end game of the the content that they have, you tend to get. It'll get boring so you need to wait for the the the content creators to like so called produced out or dish out new content for you to go and play. Whereas for so called more of like competitive shooters like Valorant and Counter Strike. They have a rank system where there's a different grade over like rank. Like it goes from like iron, bronze, gold, silver so and so forth and definitely you would want to set a target for yourself if you, let's say, want to play this kind of competitive games where there's a certain goal that you want to reach, like maybe for example, like immortal per say, which is like the second best rank in the game. It would definitely. When you make the microtransaction to play to to so-called bring out, your cosmetics for your account. It does give you a bit of motivation to like so-called play the game and reach the goal of your rank.

# **Interviewer**

So you would say that games such as Valorant, even though the skins don't bring out any gameplay benefits, they actually psychologically motivate you to rank up?

# <u>Interviewee</u>

These kind of games, where is competitive, where a lot of mental and mechanical skill is in play, but at the same time you will want your mental to be at it's best where you feel like you're the best player and most of the time when you feel your'e the best is when you perform the best.

#### <u>Interviewer</u>

So how do you feel about spending money on a game that you've already paid for versus free to play games?

## Interviewee

OK, so for this is a very mix of like good and bad. I I feel like it's based on the whether the game is like so-called doing is worth for the story itself for the base game that you you paid for rather than the DLC that is gonna like so-called come out and then the content that you're gonna buy. Because most of the time now games I would say they're more of pushing out the game much earlier and leaving the rest of the story, which should have been included in the game, the original game, and they're like making it as a DLC. So technically they're pushing out games that are not complete. Whereas like one good example I can tell you is a Witcher 3. It's a game by City Project where it's a story based game RPG elements from a third person point of view, you're playing this character, Garrett Riviera. I would say that the benchmark of what games should be the kind of content they push out the DLC's that they make is not expensive. Is very affordable and the content is quality, so I feel like a lot of games now are pushing out games way too quick. Without considering that the of the price of the game plus the content of the game that they they want to produce in the future.

# <u>Interviewer</u>

I am curious whether you rather pay for what you paid for, or would you pay something which was already free?

# <u>Interviewee</u>

From my like experience with free play games, there's not much like so-called DLCs that you have pay for unless it's I would say new skins, I would say cosmetics and maybe. I'm not too experienced in that field, but I do hear that some games you require some so-called. What do you call that subscription to play the game like World of Warcraft, which doesn't really attract me to the to that idea, so I don't really go near to those kind of games. So I rather pay for a game that is so-called a AAA kind of quality kind of game than rather have to play a free to play game and makes you pay for more content. If that makes sense, yeah.

# <u>Interviewer</u>

So can you describe a situation where you regretted or felt satisfied with a microtransaction purchase? Can talk about two of this experience if you like.

# **Interviewee**

OK, for good experiences I would'nt say is good or bad? I would say generally I don't regret it. Mainly is just buying skins in the game for those kind of like Gacha games on my mobile phone where I play on a daily basis where certain limited characters where it really helps you to push your your account to the end game content. Those are the kind of like purchases that I don't regret and because I don't didn't need to spend so much at the same time, it's a Gachca game where you can spend as much money and you can be really unlucky with the the so-called

summons for that character or that new content that they push out and there are times where you can buy the cheaper bundle of the in game content and then get within your your first few tries of summoning the character. Whereas for things I regret like I said before, it's the skins that I purchase in game. So it's mainly the skins in game where I like I said where I purchased the skin for Valorant. For, let's say a particular gun and a month later or so maybe two months later they come out with another skin that is much more attractive to me, and I feel like the current skin I have is like of the lower tier. Even though at that point of time two months ago, I feel it was like one of the best. So yeah, those are the kind of things that make me regret.

#### Interviewer

So now I'll move on to the social factors. So how do your interactions with other players influence your decision to buy microtransactions?

# Interviewee

I mean, I do try to get like so call advice from my friends who plays the same game as me and seeing maybe some streamers or some content creators when they so-called market the the skin if you would like to say it or market the the content. It does influence my decision whether I want to buy or not, but ultimately at the end of the day. I do take a step back for a day or so to just see whether I really need the skin need the transaction to be done or not. It's not our just, I'll just let the the feeling die down.

# <u>Interviewer</u>

Can you describe a time when peer pressure or social dynamics in a game influence you to make a purchase?

# <u>Interviewee</u>

No, not really. Like I said, I will wait for a few like maybe a day or so to see whether I still have that feeling because most of the time it's on impulse, and when I purchase things on impulse, I tend to regret because I don't use it as often, or I feel like I actually didn't need it, yeah.

#### Interviewer

So how does being part of a gaming community affect your spending habits?

#### Interviewee

So far, gaming communities as well. I do like so-called join some discords to see how maybe certain players certain suggestions from players can help you in game but they don't really affect me at all. Like if you want to like compare. I don't feel the difference if I have it or not is the same.

### Interviewer

Do you feel that social recognition or approval plays a role in your spending on in game items.

# **Interviewee**

For that case as well same thing not really because a lot of times where I play the game is for my own satisfaction. I don't really play for recognition. I play as to enjoy the game to have fun with my friends. Not so much of like, oh you reach this rank already, wow, you're so good at getting blah blah. It's more of like I I'm just trying to enjoy myself, play the game, reach the content level where I want, hit the characters that I want. Yeah that's about it not so much of recognition.

#### **Interviewer**

So it's just all for yourself and your own achievements and goals.

#### **Interviewee**

Yes correct.

## **Interviewer**

So how important is it to you that your in game character or status reflects your personality?

# <u>Interviewee</u>

I mean, if I feel like this particular so-called character fits my playstyle, it will definitely make me more inclined to play because it resonates well with me to how I want to play the game. I don't think there's there's. There's much to it other than than just me enjoying the game. Playing the the game as to how I want to play with the characters that they have certain maybe classes of like RPG games. Yeah, they do tend to to, like, give you a diversify character where you can build your character however you want, but most most of the time is I go with the flow I don't really like what take, note of what there is.

#### Interviewer

So it's more of like play style and not not much not much on the cosmetic side.

# Interviewee

Yeah, yeah, it's not really much on cosmetics. If let's say you're talking about Valorant, yes, time to time you do like feel like, oh, this skin like gives you better aim, gives you better skills, blah blah. But at the end of the day you tend to forget about those kind of things and then just go with the flow with the gameplay.

#### <u>Interviewer</u>

How do multiplayer or cooperative game modes affect your spending decisions?

# <u>Interviewee</u>

Only if I'm playing with friends and we so-called need to make this like additional purchase of like content so that we can experience something new like there's something new in the game that we want to try. Yeah, definitely, I'll be more than likely to purchase that microtransaction

because is to have fun with my friends have a good time and mainly for myself as well to enjoy the game.

# **Interviewer**

So do you think competition with other players influences your spending behavior?

#### Interviewee

Competition wise, I'm not much of a person that that take part in take part in like competition. I I just do my own gaming at home with my friends. Not so much on the competitive side. Even if we do play competitively, it's more like there's not much there is to it. It is just to have fun, enjoy the game and then have a good night.

# **Interviewer**

So I'll move on to the demographic factors. How does your current financial situation influence how much you spend on microtransactions?

# <u>Interviewee</u>

I mean, it does play a part to how I think, whether I can make the spending or not, because most of the time if let's say for not so much of Valorant maybe for my gacha games. But I feel like I need this. This particular character. To help me push to the end game stage. I'm more likely than not to overspend. If you would like to say cause most of the time is by chance or by luck that you get these characters because at the end of the day it's a Gacha game. Whether you're lucky or unlucky. That depends on how much you you have to spend. Yeah so my salary, I guess even if I were to overspend, I can still manage.

# **Interviewer**

OK, so you will spend a lot, you will know to stop?

# <u>Interviewee</u>

Yeah.

## <u>Interviewer</u>

Do you think your age, gender or life stages affect your approach to spending in games.

# <u>Interviewee</u>

I mean definitely for sure where I I feel like, like what I said before a lot of times is based on impulse, when maybe when you're younger in your teens, where money wasn't that much of an issue because you're thankfully provided by your parents and what not. You will not see the side effects until you earn your own money. Where you start to so called answer to your own actions when and then when you don't have the money, you'll start to regret. So definitely yes. I think I grew older myself. I try not to spend if I can, but if I feel like I need to, I'll attempt to wait a few days before I actually make the spending.

# Interviewer



So you will see when you're younger, you'll spend more impulsively compared to as of now.

# Interviewee

Yes, correct.

## Interviewer

So I mentioned gender. What do you think for male and female? Do you think it affects?

# <u>Interviewee</u>

For now I don't think so. I have like female friends that plays games and I think they spend quite a bit of money as well depending on whether they like the skin or not, or the cosmetic or not. It doesn't really matter at this day and age where gender is a thing now. If you're within your means, and if you like it, I think a lot of people just go for it.

# **Interviewer**

So have your spending habits changed as your income has changed? Maybe I give an example to one of my interviewees where NS and now. Yeah, maybe we can talk about that.

# **Interviewee**

I'll say from when I finish NS. I was fortunate enough to actually find a a decent so-called job where I can work and study and provide me at least a higher income than my NS pay and even then, also my NS pay was paying me quite well because I'm an officer in the army. So I'm technically on the better side of the pay or the income when it comes to NSF. Yeah, definitely. As as I grew as I progress in life as my income increase is is giving me more of a like a buffer to see how much I can actually spend the game or just spend in general.

#### <u>Interviewer</u>

10 so how do you think cultural values or societal norms in Singapore influence a decision to buy to spend on in game items?

# **Interviewee**

I think for Singapore itself, I don't think there's much like so-called awareness about it. Like I said before, I don't really pay attention to what other people think. It's more of like whether I feel like it and just maybe a few opinions here around me to just validate how I feel. Yeah, that's basically how I go.

#### Interviewer

So do you feel like Singaporeans spend a lot in games? How do you think?

# <u>Interviewee</u>

Singaporeans I feel like there's a it's very broad spectrum because Singaporeans, you can if you want to talk about gamers, I'm pretty sure there's just more than just Singaporeans in

Singapore, so there's really it depends on whether they can or they want, even if they cannot and if they want, they will still buy the in game currency. So I feel there's a lot of factors to whether they can spend they want to spend or what is their final decision as to whether they spend or not. I feel at this day and age people still do spend as much as they want as long as they make some happy.

# **Interviewer**

So how do you perceive the pricing of microtransactions in games compared to other entertainment expenses such as Netflix, Disney plus or anything?

#### **Interviewee**

I feel for games nowadays where microtransactions are thing. As a variety or a range of products that they show you, where can get the cheaper one or you can get the most expensive one and then even if it's in the bundle, you can buy them separately, but they try to so-called market it in a way that if you buy it as a bundle you're technically paying cheaper for individual items, so there's a lot of like strategy for you to make you spend a bigger amount, but at the same time make you feel like you're spending less. As compared to like maybe like OK, Netflix, Spotify so and so forth. These kind of entertainment is a constant number that you always see at the end of the month, it's not really an increase or a decrease. It's most of the time it will increase maybe. That depends on the terms and conditions on whether they feel like they need to increase their price of the subscription.

# <u>Interviewer</u>

So what do you? Like which one would be more affordable in your opinion?

# <u>Interviewee</u>

I think the normal entertainment ones will be more affordable because people tend to follow in games. People tend to to, for example, Gacha games where if you're unlucky, you definitely need to spend more for in game currency to spend for that particular character or summons. If I'm not wrong for that, maybe that character is a 1% chance of the other characters. So, and then even if you do get like that particular like Rarity or grade, it may not be that character because like I said before, it's Gacha Game.

# **Interviewer**

So do you feel that gaming companies target specific demographic groups when designing a microtransaction?

## <u>Interviewee</u>

Definitely for like what I said before, there's a lot of like bundles. There's a range of products that you can choose to buy. The cheaper one as compared to the like the more expensive one, then there's the mid-tier one so. It definitely targets like all over like the different income groups where somebody who can afford more will definitely buy the higher tier where somebody who's like maybe a student or what they trying to maybe see that this is a cheaper bundle and it's quite value for money most of the time. They're more inclined to buy the cheaper one.

# <u>Interviewer</u>

Yeah. So I'll move on to the in game features. So what types of in game items or features make you most likely to spend money?

# **Interviewee**

Let's say for a particular game if let's say I'm playing like a competitive shooter, the main thing I look at is whether the cosmetics is nice to me. Whether it's attractive, whether the effects are nice, the reload animation. The kill animation so and so forth. Yeah, it's mainly the effects of the skin rather than th gameplay because the skins were definitely not affect gameplay at all is just cosmetics. Whereas maybe some other games where, let's say this particular character can finish most of the game in game content if you use it and then you're more likely to spend money just to get it if you're unlucky. If whatever currency that you have and you summon them and you still cannot get them. You definitely need to spend more money to like get those currency into your account to so called summon that character.

# **Interviewer**

So how do you decide whether an in game item is worth purchasing?

# <u>Interviewee</u>

I think it's worth purchasing I think it's not much of a deal. I don't really think about that much of the time, if I will do my own research, whether I think this is a necessary buy or not. Whereas like I said before, if I feel it is impulse buy, I will wait a few days before, like, making my spending.

#### Interviewer

How does the design of functionality of a game influence your spending habits?

# **Interviewee**

If let's say the game is very attractive to me and I put a lot of time and effort into the game. It will definitely feel like like spending I make in the game is worth it because it's something that I invested myself into, not so much of those kind of games where I play awhile and then, I need to spend more money to so-called progress in the game. Those kind of games thankfully doesn't really attract me, and I'll probably play for a few days and then I'll stop. There's those games where I've really invested my time and effort into the game. It makes me more inclined to, like, spend more money in the game, even spend a bit of money even if I spend more money in the game, I will feel like more worth buy than most games I played for awhile.

#### Interviewer

So do you think the way a game rewards or punishes players for spending or not spending affects your decision?

#### Interviewee

I feel if let's say games do punish players for not spending is a bad game because that would mean the game is running based on whether a player their player base spends money or not. That's not what they want. They want the players to actually spend their time on the game and then produce all these microtransactions for the players to so-called advance in the game better not to so-called make it a mandatory spending for the players to to so called spend to progress in the game.

# <u>Interviewer</u>

So can you share an example of a game feature or mechanic that let you play to spare more than usual? You can talk about how much you spend in total.

# <u>Interviewee</u>

Yeah. Sorry. Can you can you repeat the question again?

# Interviewer

So can you share an example of a game feature mechanic that let you spend more than usual?

# Interviewee

I will just say mainly limited content for certain characters, certain items, even certain skins or cosmetics for the game. It makes me feel like I am losing out or like, if I don't have this particular item character, skin it makes me feel like I'm not with the rest of the people. If you want to say it, yeah. Not so much of like whether I I feel like I need to spend, but mainlyI feel like this for Gacha games not so much for cosmetics.

# **Interviewer**

Yeah. So how muchHow much will you say that you spend on one go for this gacha game?

# **Interviewee**

Maybe per month if let's say I'm on the luckier side I can really spend like 20-30 dollars on the unlucky side, I can spend up to like 100 plus.

#### Interviewer

So how do microtransactions contribute to your overall satisfaction with a game?

# **Interviewee**

I would say it gives me like so-called better game play in a sense, where I feel like I enjoy it more because of these skins or cosmetic. For Gacha games as well, it helps me to like so-called reach my end game goals much quicker, much easier because the characters are so-called omnipotent if that's a good way to put it where they can clear any any particular in game content with with ease and not much difficulty.

#### **Interviewer**

OK. So you would say the overall positive satisfaction, positive feel feeling?

# Interviewee

Yes.

## Interviewer

Do you feel that the items or features you buy help you express your identity within the game?

# <u>Interviewee</u>

I mean based on like so-called cosmetics, you can tell whether a person's like a guy or girl or like they like which colors. What kind of person they are? Like, let's say, if I go for very dark colours very edgy kind of feeling then you know that this guy most likely is a guy, but don't get me wrong, there are times where girls as well do like this design as well.

# <u>Interviewer</u>

So last question, how do you think microtransactions affect your long-term enjoyment of a game?

# <u>Interviewee</u>

I feel microtransaction shouldn't be the main thing that you resort to to playing games. I feel like it tends to kill the satisfaction a bit because you feel like you need to to so-called put your time and effort in the game because you spend that money and then over time it's not so much about because you enjoy the game, but it's because you spend the money in the game. I feel in the long run spending time to time is OK, but spending too much and excessively in one go is I feel that's a very bad thing to do for your in-game enjoyment.

# **Interviewer**

Thank you so much. That's the end of the interview.