



A Qualitative Study on the Personal Finance Experiences of Non-Business College Students in Internet Gaming: Basis for a Proposed Financial Planner

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Abstract

This exploratory qualitative study investigated the personal finance experiences of non-business college students engaged in internet gaming platforms at a private University in the Philippines. Specifically, it examined their spending behaviors, budgeting practices, and financial decision-making processes within gaming contexts. Using a basic qualitative research design, the study selected twenty non-business college students through purposive sampling. The researchers conducted semi-structured face-to-face interviews and analyzed them using thematic analysis. The findings revealed five major themes: (1) gaming as entertainment-driven spending with occasional financial intent; (2) prevalence of unstructured and mental budgeting practices; (3) impulse buying and emotional triggers in gaming expenditures; (4) awareness of financial consequences but inconsistent behavioral control; and (5) limited formal financial education and reliance on informal learning. The study concludes that participants demonstrated fragmented financial management practices, where awareness of financial consequences did not consistently translate into responsible spending behavior. Based on these findings, the study proposed a financial planner booklet to address the identified challenges. The study offers contextual insights into the financial vulnerability of non-business students in digital gaming environments. It provides practical implications for educational institutions, parents, and game developers within the Philippine higher education context.

Keywords: *Microtransaction, Non-Business Students, Budgeting Practices, Gaming-Related Spending, Financial Behavior, Online Gaming*

INTRODUCTION

Personal finance covers how individuals manage income, expenses, and savings and make daily financial decisions. It includes budgeting, debt management, short- and long-term goal planning, and making sound financial decisions to ensure financial security and stability (New York Life, 2023). For many students, lived experience and daily choices shape personal finance more than formal financial instruction (CFL, 2024).

Research has consistently shown that features of commercial gaming can influence spending behavior and contribute to financial stress, particularly when players lack adequate financial awareness or self-control (Platz & Jüttler, 2022). Similarly, recent studies on college students' mental accounting practices have highlighted how financial literacy and decision-making patterns influence spending behaviors (Torres et al., 2024).

At the local level, Lamoste and Prasetyawati (2021) highlighted that games and other online activities in the Philippines are readily available and can easily drain students' funds. Furthermore, in the Philippine context, college students commonly rely on allowances from parents or guardians to cover basic needs like food, transportation, and learning materials, and internet gaming adds financial pressure, creating trade-offs between necessities and discretionary spending. The harms experienced by gamers and those affected can last for many years (Paterson et al., 2020).

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A growing body of literature has examined the relationship between gaming and financial behavior among young adults. Studies have documented how microtransactions, loot boxes, and reward-based systems in modern video games encourage continuous spending, often without careful financial planning (King & Delfabbro, 2019). Costes and Bonnaire (2022) found that spending in free-to-play games is significantly associated with increased risk of Internet Gaming Disorder, with higher spending linked to greater impulsivity and engagement. Similarly, Zendle and Cairns (2019) demonstrated that frequent engagement with in-game purchases is associated with impulsive spending, particularly among students with limited financial resources.

Recent research in the Philippines has investigated the factors influencing microtransaction spending among urban Millennial and Generation Z gamers, identifying habit, social influence, hedonic motivation, and price value as significant predictors of purchasing behavior (Rendon et al., 2026). Sipahutar et al. (2024) further explored how digital literacy affects microtransaction decisions among university students, finding that those with lower digital literacy struggle to discern reliable information, leading to impulsive buying behaviors and financial regret.

Researchers have also examined college students' broader financial behaviors. Studies have identified significant deficiencies in financial knowledge among university students, particularly those from non-business disciplines, which correlate with poorer financial behaviors, including inadequate budgeting and increased financial stress (Assessment of financial knowledge among graduating university students, 2025). Marquez and Sebullen (2023) found that non-business students at Baguio Central University often struggle to save, budget effectively, or make informed financial decisions because their courses rarely include financial education components.

Similarly, Mae and Pascual (2024) observed that while students may gain basic financial knowledge from family support or personal experiences, many still lack practical financial management skills such as budgeting and expenditure control. Rafinda and Gal (2020) further demonstrated that students from non-business disciplines generally have lower levels of financial literacy than those enrolled in business-related programs.

Despite this growing body of research, significant gaps remain in understanding the personal finance experiences of non-business college students specifically within internet gaming contexts. First, existing studies on gaming-related spending have predominantly focused on the psychological and behavioral predictors of microtransaction purchases, such as impulsivity, gaming disorder symptoms, and digital literacy (Costes & Bonnaire, 2022; Sipahutar et al., 2024; Rendon et al., 2026).

While these studies offer valuable insights into why students make in-game purchases, they provide limited understanding of how students manage, budget, and make sense of their gaming-related expenditures within the broader context of their personal finances. Students' everyday financial decision-making processes, budgeting practices, and spending-control mechanisms when navigating gaming platforms remain largely unexplored.

Second, research on college student financial behavior has generally treated gaming expenses as one among many categories of discretionary spending, without examining the unique characteristics of gaming-related financial decisions. Unlike other forms of leisure spending, gaming platforms use psychologically engaging monetization systems that encourage repeated, incremental, and often emotionally driven purchases (King & Delfabbro, 2019).

The intersection of these platform features with students' limited financial resources and potentially low financial literacy creates a context where financial vulnerabilities may be particularly pronounced. However, few studies have examined how students experience and navigate these financial pressures in their daily lives.

Third, while studies have documented lower financial literacy levels among non-business students than their business counterparts (Rafinda & Gal, 2020; Assessment of financial knowledge

among graduating university students 2025), research has not adequately explored how this educational disadvantage manifests in specific consumption contexts such as internet gaming.

Non-business students may be particularly vulnerable to gaming-related overspending because they lack formal financial education that could help them recognize manipulative monetization strategies, evaluate the opportunity costs of in-game purchases, or develop structured budgeting approaches. However, their actual experiences, challenges, and coping strategies in managing gaming-related finances have received minimal empirical attention.

Fourth, most existing research has used quantitative survey methods that, while useful for identifying statistical relationships, cannot capture the richness and complexity of students' lived financial experiences. The everyday realities of financial decision-making—including the emotional, social, and contextual factors that shape spending behavior—require qualitative approaches that allow participants to describe their experiences in their own words.

As Sipahutar et al. (2024) noted, social influences and emotional engagement play important roles in spending decisions, with peer pressure and the desire for social acceptance often driving purchases. Understanding these dynamics requires in-depth exploration of students' personal narratives and financial practices.

The Philippine context is particularly relevant to this inquiry. Filipino college students widely use internet gaming platforms primarily for entertainment and stress relief (Baloran, 2020; Montiel & Uyheng, 2021). National data confirm increasing access to online platforms, including digital gaming, among Filipino youth, driven by improved internet connectivity and mobile device use (Philippine Statistics Authority, 2022). However, most local studies concentrate on the psychological, behavioral, or academic effects of online gaming, with little emphasis on its implications for students' personal financial management.

Rendon et al. (2026) provided important quantitative insights into microtransaction purchasing among Filipino urban gamers. However, their study did not examine how students budget for or manage these expenses within their limited financial resources. Similarly, while research has identified financial literacy deficiencies among Filipino students (Assessment of financial knowledge among graduating university students, 2025), it has not explored how these deficiencies intersect with gaming-related spending.

Given these gaps, the present study aims to explore the personal finance experiences of non-business college students engaged in internet gaming platforms. Specifically, this qualitative inquiry focuses on understanding students' spending behaviors, budgeting practices, and financial decision-making processes within gaming contexts. By examining the firsthand experiences of non-business students who navigate financial decisions in gaming environments, this study seeks to provide contextual insights into their financial vulnerabilities and coping strategies.

Research Objectives

The following research objectives guided this study:

1. To describe the spending behaviors of non-business college students in relation to their engagement with internet gaming platforms, including the types and frequency of gaming-related expenditures.
2. To examine the budgeting practices employed by non-business college students in managing their gaming-related expenses and overall personal finances.
3. To explore the financial decision-making processes of non-business college students when making gaming-related purchases, including the factors that influence their spending choices.
4. To identify the financial challenges and consequences experienced by non-business college students as a result of their gaming-related expenditures.
5. To develop a financial planner booklet that addresses the identified financial management

needs of non-business college students engaged in internet gaming

Research Questions

Specifically, this study sought to answer the following questions:

1. What are the spending behaviors of non-business college students engaged in internet gaming platforms in terms of types of purchases, frequency of spending, and amounts spent?
2. How do non-business college students budget and manage their finances in relation to gaming-related expenditures?
3. What factors influence the financial decision-making of non-business college students when making in-game purchases?
4. What financial challenges and consequences do non-business college students experience as a result of their gaming-related spending?
5. What financial management strategies and resources do non-business college students employ or lack in managing gaming-related expenses?

LITERATURE REVIEW

Personal Finance and Financial Behavior

Personal financial management encompasses how individuals allocate, save, spend, and manage their financial resources. Financial behavior involves making decisions to avoid future financial problems while considering one's income and financial situation. According to [Shi et al. \(2024\)](#), key factors such as financial literacy, capability, and behavior influence personal financial management and collectively contribute to individual and societal financial well-being.

For college students, higher education represents a period of growing financial independence but also introduces challenges that can affect long-term financial habits. Research has identified significant deficiencies in financial knowledge among university students, particularly those from non-business disciplines, which correlate with poorer financial behaviors including inadequate budgeting and increased financial stress.

Students often lack knowledge and experience in managing their money and tend to make relatively poor financial decisions. Managing personal finances can be particularly difficult for non-business students, who often lack formal training in financial management and rely primarily on parental allowances or part-time income to meet daily expenses ([Rosal et al., 2025](#)).

[Marquez and Sebulen \(2023\)](#) found that non-business students at Baguio Central University often struggle to save, budget effectively, or make informed financial decisions because their courses rarely include financial education components. Similarly, [Mae and Pascual \(2024\)](#) observed that while students may gain basic financial knowledge from family support or personal experiences, many still lack practical financial management skills such as budgeting and expenditure control. [Rafinda and Gal \(2020\)](#) further demonstrated that students from non-business disciplines generally have lower levels of financial literacy than those enrolled in business-related programs.

Financial stress has emerged as a major issue among college students, often contributing to poor academic performance and emotional strain. [Scott \(2024\)](#) emphasized that financial capability and self-efficacy significantly influence how students manage stress and make informed money decisions. [Watanapongvanich et al. \(2021\)](#) found that practical financial literacy, particularly in investment and risk management, plays a crucial role in reducing tendencies toward problematic financial behaviors.

The Role of Self-Control in Financial Behavior

Self-control is a critical determinant of financial behavior. Research consistently demonstrates that individuals with higher self-control are more likely to save regularly, manage spending effectively, and make prudent financial decisions. Among university students, self-control has emerged as the strongest predictor of responsible financial behavior. Studies show that self-control significantly mediates the relationship between financial capabilities and consumption outcomes, suggesting that financial knowledge alone is insufficient without the regulatory capacity to apply it.

In the context of digital consumption, self-control serves as a "behavioral filter" that protects students from impulsive spending. Students who lack self-control are more susceptible to the persuasive design features of digital platforms, including gaming environments that encourage continuous spending through reward-based systems and microtransactions (King & Delfabbro, 2019).

The Role of Mental Budgeting in Financial Management

Mental budgeting—the practice of mentally categorizing and tracking expenditures—is a crucial psychological mechanism in financial management. Studies show that individuals who practice mental budgeting report higher levels of financial well-being. Mental budgeting serves as a behavioral mechanism linking financial competence to improved financial stability.

Among students, mental budgeting practices vary widely. While some students employ informal mental accounting to track their spending, many lack structured budgeting approaches (Torres et al., 2024). The absence of formal budgeting systems reduces transparency in spending behavior and increases the likelihood of unintentional overspending. In digital environments where transactions are immediate and intangible, the lack of structured monitoring further diminishes financial awareness and accountability.

The Role of Financial Self-Efficacy

Financial self-efficacy—an individual's confidence in their ability to manage finances successfully—mediates financial behavior. Research shows that students with higher financial literacy have higher levels of financial self-efficacy. Higher self-efficacy is linked to better financial behavior, as confident individuals are more likely to budget, save, and make sound financial choices.

Financial self-efficacy mediates the relationship between financial behavior and financial well-being. Students with greater confidence in their financial management abilities are better equipped to translate financial knowledge into responsible financial actions. This finding underscores the importance of developing not only financial literacy but also the confidence to apply that knowledge in real-world financial decisions.

Internet Gaming Platforms and Monetization

Internet gaming platforms are online systems that allow users to play digital games via the internet on computers, mobile devices, or gaming consoles. These platforms have continued to expand rapidly due to improved internet infrastructure, mobile accessibility, and the popularity of online multiplayer and cloud-based games (Petry et al., 2020).

Modern video games increasingly include financial elements such as microtransactions, tradable virtual items, and esports prize money. Features such as loot boxes, microtransactions, and reward-based systems encourage continuous spending, often without careful financial planning (King & Delfabbro, 2019). Microtransactions involve using real-world currency to purchase virtual items such as weapons, character aesthetics, or premium subscriptions to gain competitive advantages or status (Handojo et al., 2023).

Costes and Bonnaire (2022) found that spending in free-to-play games is significantly associated with increased risk of Internet Gaming Disorder, with higher spending linked to greater impulsivity and engagement. Similarly, Zendle and Cairns (2019) demonstrated that frequent engagement with in-game purchases is associated with impulsive spending, particularly among students with limited financial resources.

Other studies emphasize the potential financial risks of excessive engagement in internet gaming platforms. Männikkö et al. (2022) found that prolonged gaming exposure may lead to poor budgeting, increased discretionary spending, and reduced savings among young adults. This is especially evident among college students, who may prioritize gaming-related expenses over essential financial responsibilities.

In the Philippines, recent studies show that college students widely use internet gaming platforms primarily for entertainment and stress relief (Baloran, 2020; Montiel & Uyheng, 2021). National data confirm Filipino youth's increasing access to online platforms, including digital gaming, driven by improved internet connectivity and mobile device use (Philippine Statistics Authority, 2022).

Recent research has investigated the factors influencing microtransaction spending among Filipino gamers, identifying habit, social influence, hedonic motivation, and price value as significant predictors of purchasing behavior (Rendon et al., 2026). Sipahutar et al. (2024) further explored how digital literacy affects microtransaction decisions among university students, finding that those with lower digital literacy struggle to discern reliable information, leading to impulsive buying behaviors and financial regret.

However, most local studies concentrate on the psychological, behavioral, or academic effects of online gaming, with little emphasis on its implications for students' personal financial management. Specifically, empirical research remains limited on how gaming-related expenses influence budgeting behavior, spending control, and saving practices among non-business students in private universities.

Personal Finance Experiences in Internet Gaming Platforms

Personal finance experiences in modern gaming are defined by the intersection of leisure and economic activity through microtransactions. For many, this experience has shifted from a one-time purchase to a "recurrent revenue" model, where spending is continuous and socially motivated (Handojo et al., 2023).

In the digital gaming ecosystem, university students often experience dual pressures: the social need to belong to a gaming community and the financial reality of managing limited student funds (Sipahutar et al., 2024). Online gamers often purchase in-game items such as skins, characters, weapons, and other upgrades through microtransactions, which can lead to substantial spending (Maharani et al., 2022). These purchases are often driven by peer influence or spontaneous enjoyment rather than actual necessity, increasing the risk of unhealthy financial behavior.

The relationship between financial literacy and gaming-related spending is complex. Research suggests that financial literacy does not always protect individuals from making poor financial decisions in psychologically engaging digital environments (Barone & Graffigna, 2025). Students may remain vulnerable when using internet gaming platforms, particularly when psychological engagement and accessibility override rational financial decision-making. This finding is consistent with broader research showing that even students with financial education remain susceptible to impulsive spending in digital environments designed to encourage continuous consumption.

The Role of Self-Regulation in Gaming Expenditures

Gaming addiction can undermine self-control, often encouraging reckless spending behavior and causing individuals to neglect more essential financial obligations (Silvy & Yulianti, 2020). In such cases, players may prioritize virtual items over real-life responsibilities, thereby risking their financial stability. The psychologically engaging design of gaming platforms—including reward-based systems, social comparison features, and immediate purchase opportunities—can weaken students' self-control and encourage excessive spending (Sipahutar et al., 2024).

Sipahutar et al. (2024) emphasize that digital literacy serves as a crucial filter in students' financial decision-making, enabling gamers to recognize predatory monetization strategies and avoid excessive or impulsive purchases. However, even with digital literacy, the immediate gratification and social pressures inherent in gaming environments can override rational decision-making. Despite the growing body of research on gaming habits and overall student spending trends, significant gaps remain in understanding the personal finance experiences of non-business college students specifically within internet gaming contexts.

Existing studies on gaming-related spending have predominantly focused on the psychological and behavioral predictors of microtransaction purchases, such as impulsivity, gaming disorder symptoms, and digital literacy (Costes & Bonnaire, 2022; Sipahutar et al., 2024; Rendon et al., 2026). While these studies offer valuable insights into why students make in-game purchases, they provide limited understanding of how students manage, budget, and make sense of their gaming-related expenditures within the broader context of their personal finances. Students' everyday financial decision-making, budgeting practices, and spending-control mechanisms when navigating gaming platforms remain largely unexplored.

In addition, research on college student financial behavior has generally treated gaming expenses as one among many categories of discretionary spending, without examining the unique characteristics of gaming-related financial decisions. Unlike other forms of leisure spending, gaming platforms use psychologically engaging monetization systems that encourage repeated, incremental, and often emotionally driven purchases (King & Delfabbro, 2019). The intersection of these platform features with students' limited financial resources and potentially low financial literacy creates a context where financial vulnerabilities may be particularly pronounced.

Moreover, while studies have documented lower financial literacy levels among non-business students than their business counterparts (Rafinda & Gal, 2020), research has not adequately explored how this educational disadvantage manifests in specific consumption contexts such as internet gaming. Non-business students may be particularly vulnerable to gaming-related overspending because they lack formal financial education that could help them recognize manipulative monetization strategies, evaluate the opportunity costs of in-game purchases, or develop structured budgeting approaches.

Also, most existing research has used quantitative survey methods that, while useful for identifying statistical relationships, cannot capture the richness and complexity of students' lived financial experiences. The everyday realities of financial decision-making—including the emotional, social, and contextual factors that shape spending behavior—require qualitative approaches that allow participants to describe their experiences in their own words.

Lastly, most local studies in the Philippines concentrate on the psychological, behavioral, or academic effects of online gaming, with little emphasis on its implications for students' personal financial management. While research has identified financial literacy deficiencies among Filipino students, it has not explored how these deficiencies intersect with gaming-related spending.

RESEARCH METHOD

The study employed a basic qualitative research design to examine and understand the

personal finance experiences of non-business college students who used internet gaming platforms. This design allowed the researchers to examine participants' perspectives and experiences in depth, capturing rich, detailed accounts of financial decision-making in gaming contexts ([Merriam & Tisdell, 2016](#)).

A basic qualitative design is appropriate when the aim is to understand how individuals interpret their experiences, construct meaning, and navigate specific social contexts ([Creswell & Poth, 2018](#)). The study was conducted at a private university in Tuguegarao City, Philippines. The researchers selected this location because of its accessibility and their familiarity with the institutional context, which facilitated participant recruitment and data collection.

Participants and Sampling

The study included 20 non-business college students from the university as informants. The study used purposive sampling to select informants who could provide valuable and relevant information. This sampling strategy is appropriate for qualitative research when researchers intentionally select participants who have specific characteristics and experiences relevant to the research questions (Patton, 2015). Participants were included in the study if they met the following criteria:

1. **Enrollment Status:** Currently enrolled as a college student at the private university in Tuguegarao City
2. **Academic Program:** Enrolled in a non-business academic program (i.e., not pursuing a degree in Business Administration, Accountancy, Economics, or related business disciplines)
3. **Gaming Engagement:** Actively engaged with internet gaming platforms (mobile games, PC games, or console games played online) at least three times per week
4. **Gaming Expenditure:** Has made at least one in-game purchase or microtransaction within the past six months, regardless of amount
5. **Age:** At least 18 years old at the time of data collection
6. **Consent:** Willing and able to provide written informed consent to participate in the study
7. **Communication:** Able to communicate effectively in English or Filipino to participate in interviews

Participants were excluded from the study if they met any of the following criteria:

1. **Academic Program:** Enrolled in business-related programs including Business Administration, Accountancy, Economics, Entrepreneurship, Marketing, Financial Management, or Human Resource Management
2. **Gaming Engagement:** Engages in internet gaming less than three times per week or has ceased gaming activities
3. **Gaming Expenditure:** Has never made any in-game purchase or microtransaction
4. **Age:** Below 18 years old at the time of data collection
5. **Consent:** Unable or unwilling to provide written informed consent
6. **Communication:** Unable to communicate effectively in English or Filipino
7. **Prior Participation:** Previously participated in a similar study on gaming and financial behavior

Participant Profile

The sample size of 20 participants was determined to be sufficient for qualitative research based on established guidelines for basic qualitative designs ([Guest et al, 2006](#); [Hennink & Kaiser, 2022](#)). This sample size enabled the researchers to reach data saturation, the point at which additional interviews no longer generate new information, insights, or themes relevant to the research questions ([Fusch & Ness, 2015](#); [Saunders et al, 2018](#)).

Data collection and analysis occurred concurrently throughout the research process. After each interview, the researchers transcribed the audio recordings and conducted preliminary analysis to identify emerging patterns and themes. This iterative process allowed the researchers to assess whether new interviews provided novel information or merely confirmed existing findings ([Braun & Clarke, 2021](#)).

The researchers checked for saturation systematically using the following procedures:

1. **Ongoing Analysis:** After completing every three interviews, the research team convened to review transcripts, preliminary codes, and emerging themes. This regular debriefing allowed the team to monitor the development of new categories and assess whether subsequent interviews continued to yield novel insights.
2. **Saturation Assessment:** The researchers maintained a saturation log that tracked the emergence of new codes and themes across interviews. By the 15th interview, the researchers observed that codes and themes were increasingly repetitive, with minimal new information. The research team collectively determined that informational redundancy was occurring.
3. **Saturation Confirmation:** To confirm saturation, the researchers conducted five additional interviews (interviews 16-20). These interviews produced no new codes, subthemes, or significant insights beyond what the previous interviews had established. The data from these final interviews consistently reinforced the existing themes without introducing new concepts or perspectives.
4. **Documentation:** The research team documented the point at which saturation was reached (approximately after the 15th interview) and the evidence supporting this determination. This documentation included a codebook showing code frequency across interviews, memos on emerging themes, and notes from team discussions about thematic completeness.

Saturation was considered achieved when additional interviews yielded no new significant information, patterns, or themes relevant to the research questions, and when the existing themes were well-developed with sufficient supporting evidence from multiple participants ([Morse, 2015](#); [Hennink et al., 2017](#)).

Data Collection Instrument

The researchers developed a semi-structured interview questionnaire as the primary data collection instrument. The instrument aimed to examine students' personal finance experiences on internet gaming platforms, including spending habits, budgeting practices, financial challenges, and decision-making processes. The interview guide included ten open-ended questions, allowing informants to express themselves freely. Researchers used follow-up questions as needed to clarify responses, deepen understanding, and encourage discussion of key points raised by informants ([Kallio et al., 2016](#)).

The self-created questionnaire was validated using the Content Validity Index (CVI) following established procedures ([Polit & Beck, 2006](#); [Lynn, 1986](#)). Content validity ensures that the instrument adequately measures the intended constructs and that the questions are appropriate, clear, and relevant to the research objectives ([Yusoff, 2019](#)).

Five subject-matter experts evaluated the interview guide. The expert panel consisted of:

1. Two research advisers with doctoral degrees and extensive experience in qualitative research methods
2. One faculty member with expertise in financial literacy and personal finance education
3. One faculty member with expertise in psychology and behavioral studies
4. One expert in educational measurement and assessment

All validators were provided with:

1. The interview guide with all questions
2. A clear statement of the research objectives and research questions
3. The target population description
4. A rating form for evaluating each item

Each expert independently rated every interview question using a 4-point ordinal scale:

- a. **1 = Not relevant** (Item is not relevant to the research objective)
- b. **2 = Somewhat relevant** (Item is minimally relevant but requires significant revision)
- c. **3 = Quite relevant** (Item is relevant but requires minor revision)
- d. **4 = Highly relevant** (Item is directly relevant and requires no revision)

Experts were also asked to provide qualitative feedback on each item, including suggestions for improving clarity, wording, and appropriateness. They were encouraged to recommend additional questions and identify any redundant or unnecessary items.

CVI Calculation

Two types of CVI were calculated: Item-Level CVI (I-CVI) and Scale-Level CVI (S-CVI).

1. **Item-Level CVI (I-CVI)** was calculated as the proportion of experts who rated an item as either 3 (Quite relevant) or 4 (Highly relevant). For each item, the I-CVI was computed using the formula:

$$\text{I-CVI} = (\text{Number of experts rating the item as 3 or 4}) / (\text{Total number of experts})$$

2. **Scale-Level CVI (S-CVI)** was calculated using the average method (S-CVI/Ave), which is the average of all I-CVI scores across all items.

According to established criteria (Polit & Beck, 2006), items with I-CVI values of 0.78 or higher are considered to have excellent content validity. The S-CVI/Ave should be 0.90 or higher for a scale to be considered to have excellent content validity (Davis, 1992). The S-CVI/Ave of 0.92 indicated that the interview guide had excellent overall content validity.

Based on the validators' feedback and items with lower I-CVI scores (0.80), the following revisions were made to the interview guide:

1. **Item 4 Revision:** "How do you budget your allowance for gaming expenses?" was revised to "How do you plan and manage your allowance specifically for gaming-related expenses? Can you describe your budgeting process step by step?" to improve clarity and elicit more detailed responses.
2. **Item 6 Revision:** "What problems do you face because of gaming expenses?" was revised to "What specific financial challenges or difficulties have you experienced as a result of your gaming-related spending? How did these challenges affect you?" to capture the consequences of spending better.
3. **Item 8 Revision:** "Do you think you have enough knowledge about financial management?" was revised to "What financial management knowledge or skills do you have? Where did you learn these skills? Do you feel you need more financial education?" to prompt more comprehensive responses about financial literacy sources and needs.
4. **Item 10 Revision:** "What advice would you give to other students about gaming expenses?" was revised to "Based on your personal experiences, what financial management strategies or advice would you share with other students who play online games? What do you wish you had known

earlier?" to encourage reflective responses and practical insights.

5. **Additional Probe Questions:** Based on expert feedback, the researchers added suggested follow-up questions for each main question to ensure comprehensive data collection. These probes helped interviewers explore responses in greater depth without imposing leading questions.
6. **Wording Refinement:** Several questions were reworded for improved clarity, cultural appropriateness, and comprehensibility for the target population. Experts recommended using simpler language and avoiding technical financial terminology that might confuse participants.
7. **Question Order Adjustment:** The sequence of questions was reorganized to follow a more logical flow, beginning with general gaming habits before moving to specific financial behaviors, then addressing consequences and reflections.

Data Collection Procedure

Data collection followed a systematic process:

1. **Participant Recruitment:** Potential participants were identified through department coordinators, student organizations, and social media announcements within the university. Recruitment materials explained the study purpose, eligibility criteria, and voluntary nature of participation.
2. **Screening and Selection:** Interested students were screened against the inclusion and exclusion criteria. Those who met the criteria received detailed study information.
3. **Informed Consent:** All participants provided written informed consent before data collection. The consent form explained the study purpose, procedures, duration, potential risks and benefits, confidentiality measures, and participants' rights.
4. **Interview Scheduling:** Individual interview schedules were arranged at times and locations convenient for participants, typically in private rooms on the university campus.
5. **Interview Conduct:** Face-to-face semi-structured interviews were conducted by trained interviewers using the validated interview guide. Each interview lasted approximately 30-45 minutes. Interviews were conducted in English or Filipino based on participant preference.
6. **Audio Recording:** All interviews were audio-recorded with participants' permission. Interviewers also took field notes during interviews.
7. **Transcription:** Audio recordings were transcribed verbatim by the researchers. Participants were assigned pseudonyms to maintain anonymity.

Data Analysis

The data gathered were analyzed using thematic analysis following the six-phase framework of [Braun and Clarke \(2006, 2019, 2021\)](#), which provided a systematic and flexible approach to identifying, analyzing, and reporting patterns in qualitative data. This method is widely used in qualitative research for its accessibility and rigorous approach to meaning-making.

Phase 1: Familiarization with the Data

The researchers began by reading and re-reading the interview transcripts multiple times to immerse themselves in the data. This initial reading helped the researchers understand participants' experiences with internet gaming and personal finance holistically. During this phase, the researchers listened to audio recordings while reading transcripts to ensure accuracy and capture nuances in tone and emphasis. Initial thoughts, observations, and potential patterns were noted as memos.

Phase 2: Generating Initial Codes

The researchers systematically worked through the dataset, identifying and labeling data segments relevant to the research questions. A code is a concise label that captures the essence of a data segment (Saldana, 2016). The researchers used a combination of inductive coding (allowing codes to emerge from the data) and deductive coding (using the research questions and existing literature to inform the coding process). Each code was defined and documented in a codebook. The researchers coded manually using color-coding and electronic tools (spreadsheets) to organize the data.

Phase 3: Searching for Themes

The researchers grouped similar codes and identified broader patterns of meaning. This involved examining the relationships between codes, identifying commonalities and differences, and considering how codes could be combined into potential themes. The researchers sorted and categorized codes into initial themes and subthemes using visual mapping and thematic diagrams. This phase involved both inductive and deductive thinking—patterns emerged from the data while also being shaped by the research questions and existing theoretical frameworks.

Phase 4: Reviewing Themes

The researchers reviewed and refined the candidate themes through a two-level process. First, they checked that the themes were internally coherent and distinct. Second, they reviewed the themes against the entire dataset to ensure they accurately represented the data. This involved revisiting the transcripts and codes to verify that themes were supported by sufficient evidence and not merely present in a few isolated cases. Themes were refined, combined, split, or discarded as needed to create a coherent and meaningful representation of the data.

Phase 5: Defining and Naming Themes

The researchers developed clear definitions and descriptions for each theme. This phase involved identifying the "essence" of each theme—its core meaning, boundaries, and significance to the research questions. The researchers determined how each theme related to the others and how it contributed to understanding the participants' experiences. Each theme was given a concise, evocative name that captured its essence. The research team reached consensus on the final thematic structure through discussion and deliberation.

Phase 6: Producing the Report

The researchers wrote a clear, compelling narrative that told the data's story. This involved selecting vivid, representative participant quotes that exemplified each theme. The researchers connected the themes to the research questions and integrated findings with relevant literature. The final report provided a rich, thick description of the personal finance experiences of non-business college students engaged in internet gaming platforms.

Trustworthiness and Rigor

To ensure the trustworthiness and rigor of the qualitative findings, the researchers used multiple strategies aligned with established qualitative research criteria (Lincoln & Guba, 1985; Korstjens & Moser, 2018). The researchers provided a copy of the analyzed responses to verify that the analyses aligned with what they intended to convey during the interview.

Data Management and Ethical Consideration

The researchers strictly adhered to ethical principles throughout the study, ensuring respect,

honesty, privacy, and protection of all informants. Participation was entirely voluntary, without pressure or undue influence, and the researchers obtained written informed consent before any data collection.

The study included only college students legally capable of giving consent. Participants were clearly informed about the study's purpose, procedures, duration, potential risks and benefits, and their rights as informants. The researchers maintained confidentiality and anonymity using codes or pseudonyms, stored all data securely, and used it only for academic purposes (Merriam & Tisdell, 2016).

Audio recordings and transcripts were stored on password-protected devices accessible only to the research team. Participants were informed that they could withdraw from the study at any time without penalty or loss of benefits. No significant risks were anticipated, though the researchers were prepared to provide referral information for counseling services if participants experienced distress when discussing financial challenges.

FINDINGS AND DISCUSSION

This study explored the personal finance experiences of non-business college students engaged in internet gaming platforms, focusing on students' spending behavior, financial decision-making, and budgeting practices. To protect confidentiality, the researchers used codes or pseudonyms for each informant to ensure anonymity. Table 1 presents a detailed demographic profile of the participants to provide context for the sample.

Table 1. Participant Demographic Profile

Characteristic	Category	Frequency (n=20)	Percentage
Gender	Male	14	70%
	Female	6	30%
Age Range	18-19 years	4	20%
	20-21 years	12	60%
	22 years and above	4	20%
Year Level	1st Year	4	20%
	2nd Year	7	35%
	3rd Year	6	30%
	4th Year	3	15%
Department	SECAP	7	35%
	SACE	7	35%
	SHAS	6	30%
Gaming Frequency	Daily	8	40%
	4-5x/week	4	20%
	3-4x/week	5	25%
	3x/week	3	15%
Monthly Spending	PHP 0-200	5	25%
	PHP 201-500	7	35%
	PHP 501-1,000	5	25%
	PHP 1,001-2,000	2	10%
	PHP 2,001-3,000	1	5%

Thematic Development Process

The thematic analysis followed Braun and Clarke's (2006, 2019) six-phase framework,

beginning with familiarization through repeated reading of transcripts, followed by systematic coding of all relevant data segments. The coding process was conducted manually using color-coding and spreadsheet organization.

Initial codes were generated inductively from the data and informed by the research questions. For example, when participants described purchasing decisions, codes such as "impulsive purchase," "emotional buying," "aesthetic appeal," and "peer influence" were created. When participants discussed budgeting, codes such as "mental budgeting," "no formal system," and "flexible limits" emerged.

The researchers then grouped related codes into preliminary themes. For instance, codes related to "impulsive purchase," "emotional buying," "aesthetic appeal," "fear of missing out," and "immediate satisfaction" formed an emerging theme of impulse buying and emotional triggers. Codes related to "mental budgeting," "no written plan," "flexible limits," and "situational judgment" coalesced into a theme about unstructured budgeting practices. This process of grouping and regrouping codes was iterative, with the researchers moving back and forth between codes, preliminary themes, and the raw data.

After developing the initial themes, the researchers reviewed and refined the candidate themes in two stages. First, they checked that the themes were internally coherent—that the codes within each theme formed a meaningful and consistent pattern. Second, they reviewed the themes against the entire dataset to ensure they accurately represented the participants' experiences. The team refined, combined, or separated themes as needed. For example, initial separate themes about "emotional spending" and "social influence" were merged into a single theme because participants consistently described these factors as intertwined in their purchasing decisions.

The final five themes were named based on their essence and then defined with clear descriptions. We then connected each theme to the relevant research questions and existing literature. The thematic map below illustrates how themes developed from the data.

Table 2. Theme Development from Data

Theme	Key Codes	Research Question Addressed	Participant Representation
Theme 1: Gaming as Entertainment-Driven Spending with Occasional Financial Intent	Entertainment, relaxation, social interaction, financial gain, item trading, showing off	RQ1: Spending behaviors	17 of 20 participants emphasized entertainment; 3 of 20 mentioned financial intent
Theme 2: Prevalence of Unstructured and Mental Budgeting Practices	Mental budgeting, no formal system, flexible limits, situational judgment, no written plan	RQ2: Budgeting practices	16 of 20 participants reported no formal budgeting system
Theme 3: Impulse Buying and Emotional Triggers in Gaming Expenditures	Impulsive decisions, aesthetic appeal, peer influence, temporary desire, immediate satisfaction	RQ3: Decision-making factors	18 of 20 participants described impulsive purchasing
Theme 4: Awareness of Financial	Awareness of consequences, trade-offs, prioritizing virtual	RQ4: Financial challenges and consequences	15 of 20 participants demonstrated awareness but

Consequences but Inconsistent Behavioral Control	purchases, financial regret, inconsistent control	inconsistent control
Theme 5: Limited Formal Financial Education and Reliance on Informal Learning	No formal education, self-learning, parental advice, YouTube, learning from mistakes	RQ5: Financial management strategies and resources

Theme 1: Gaming as Entertainment-Driven Spending with Occasional Financial Intent

This theme emerged from codes related to participants' primary motivations for engaging in internet gaming and making in-game purchases. Codes such as "entertainment," "relaxation," "stress relief," "social interaction," "having fun," and "passing time" were frequently mentioned when participants described why they played games and why they spent money. A smaller set of codes—"financial gain," "item trading," "selling items," and "earning money"—emerged from a subset of participants who described gaming as a potential source of income.

The researchers grouped these codes into a single theme because both categories reflected the underlying pattern that gaming expenditures were driven less by structured financial reasoning than by experiential and social motivations. The researchers noted the variation within this theme, with most participants emphasizing entertainment and a minority (three participants) mentioning financial intent as a secondary motivation.

Most informants engaged with internet gaming platforms for entertainment, relaxation, and social interaction. For these participants, spending on games was perceived as leisure consumption similar to spending on movies, eating out, or other recreational activities. Participants did not typically evaluate purchases in terms of financial necessity or long-term value, but rather in terms of immediate enjoyment and social benefits.

"My friends are playing this game, so I joined them. We buy matching skins sometimes; it is like a group thing." — Informant 17

"Just for entertainment... we buy to show off." – Informant 10

"I play games to relax after classes. It is my way of unwinding. When I buy skins, it makes the game more enjoyable." — Informant 3

"Just for fun, but sometimes also for financial gain." – Informant 13

A subset of informants, however, demonstrated an alternative orientation by engaging in activities that generated financial returns, such as trading in-game items. These participants viewed gaming not only as entertainment but also as a potential source of supplementary income.

"It is for financial gain... skins and items can be sold online... I use the earnings for my allowance." — Informant 1

"I buy rare items when they are cheap and sell them when prices go up. It is like a small business." — Informant 13

"I have earned money from selling game accounts and items. It helps with my daily expenses." —

Informant 20

The distinction between entertainment-driven and financially motivated participants is noteworthy. While most participants (17 out of 20) primarily emphasized entertainment and social motivations, three participants (P01, P13, P20) explicitly mentioned financial gain as a significant factor in their gaming activities. Interestingly, these three participants were all male, in their fourth year or beyond, and reported higher monthly spending (PHP 1,000-3,000). This suggests that as participants gain experience with gaming platforms, they may become more aware of the financial opportunities embedded in gaming ecosystems.

This finding aligns with Männikkö et al. (2022), who found that prolonged gaming exposure may lead to poor budgeting, increased discretionary spending, and reduced savings among young adults, particularly college students who may prioritize gaming-related expenses over essential financial responsibilities. Participants' entertainment-focused spending behavior aligns with Baloran (2020) and Montiel and Uyheng (2021), who found that college students use internet gaming platforms primarily for entertainment and stress relief.

The subset of informants who demonstrated financial motivation in gaming activities supports Hamari et al. (2017), who noted that in-game content has become a major source of financial gain in online gaming, especially through free-to-play games that encourage players to purchase digital items continuously. Torralba (2023) further explained that some players treat gaming as a source of income akin to entrepreneurial activity, investing time and effort in developing gaming skills and in-game assets that can later be monetized.

This theme addresses Research Objective 1 (describing spending behaviors) and Research Question 1 (spending behaviors in terms of types of purchases, frequency of spending, and amounts spent). The findings indicate that spending behaviors are characterized by:

1. Types of purchases: Predominantly aesthetic items (skins, character cosmetics), competitive advantages (weapons, items), and social status markers
2. Frequency of spending: Ranging from weekly to daily, with many participants describing spending as "habitual" or "regular"
3. Amounts spent: Varying from PHP 50 to PHP 3,000 monthly, with the majority (60%) spending between PHP 200-1,000

The findings also reveal that spending is driven primarily by entertainment and social factors rather than structured financial reasoning.

Not all participants fit the dominant pattern. P06, a first-year female student, reported spending almost nothing on gaming:

"I only play free games and do not buy anything. I cannot afford it, and I do not think it is worth it." — Informant 6

P06's perspective suggests that limited financial resources can naturally constrain gaming spending, even when participants are engaged with gaming platforms. This contrasts with participants like P08 and P13, who spent over PHP 1,000 monthly despite also reporting limited allowances. The difference appears to relate to prioritization—P06 prioritized essential expenses, while P08 and P13 prioritized gaming purchases, sometimes at the expense of other needs.

P14, another female participant, reported the lowest spending among those who did make purchases:

"I buy skins sometimes, but only when there is a sale or when I really like the design. I try to limit it to 100 pesos per month." — Informant 14

P14's approach represents a more controlled spending pattern, suggesting that some participants employ informal limits even without formal budgeting systems. This variation suggests that gender may shape spending patterns, with female participants in this study generally reporting lower spending amounts (P03, P06, P10, P14, P17) than male participants. However, the small sample size precludes definitive conclusions about gender differences.

This theme suggests that psychosocial motivations shape financial decision-making in gaming contexts and often take precedence over structured financial reasoning. The researchers interpret this pattern as indicating that participants categorize gaming expenditures as "leisure" or "entertainment" spending, which they perceive as separate from essential financial responsibilities. This mental categorization appears to reduce the perceived seriousness of gaming expenses, making them more susceptible to emotional and social influences rather than careful financial evaluation.

The variation in motivations—entertainment versus financial intent—suggests that some students develop financial awareness and strategic thinking through their gaming experiences. These participants view gaming not merely as consumption but as a potential income-generating activity, demonstrating a more sophisticated understanding of the economic dimensions of gaming platforms. This observation is consistent with research on entrepreneurial behavior in digital spaces (Torralba, 2023).

Theme 2: Prevalence of Unstructured and Mental Budgeting Practices

This theme emerged from codes related to participants' approaches to financial management and budgeting. Codes such as "mental budgeting," "no formal system," "no written plan," "flexible limits," "situational judgment," "spending based on feelings," and "not tracking expenses" were prominent in participants' descriptions of their financial management practices.

The researchers grouped these codes because they all reflected the absence of structured, systematic budgeting approaches. The theme was named "Prevalence of Unstructured and Mental Budgeting Practices" to capture both the dominance of informal methods and the mental (as opposed to written) nature of these practices.

Most informants did not use formal budgeting systems; instead, they relied on mental estimates, impulse decisions, or loosely defined spending limits. While some informants demonstrated awareness of their financial boundaries, their approaches lacked systematic structure and consistency. Without formal budgeting tools, participants often lacked a clear picture of their total gaming expenditures relative to their overall finances.

"No... purchases are sudden... not well thought out... no budget allocation." – Informant 10

"Only mental... I do not write it down... I know how much I will spend." – Informant 13

"I do not literally budget, but I try to limit spending." – Informant 19

"I just estimate in my head how much I can spend. Sometimes I am wrong and run out of money." — Informant 2

"I do not have a written budget for games. I just feel it out, like if I think I have extra money, I spend it." — Informant 11

The reliance on mental budgeting reflects a pattern of passive financial management in which financial decisions are made reactively rather than through deliberate planning. This approach is

particularly problematic in digital environments where transactions are immediate and intangible, as the lack of written records reduces transparency in spending behavior and increases the likelihood of unintentional overspending.

"I do not track my gaming expenses. I just know I spend, but I do not know exactly how much." — Informant 15

"When I check my bank balance, I am sometimes surprised how much I have spent on games." — Informant 8

The results reveal that most informants do not employ formal budgeting systems and instead rely on mental estimation, flexible spending limits, or situational judgment. According to [Rosal et al. \(2025\)](#), managing personal finances is particularly difficult for non-business students, who often lack formal training in financial management. To meet daily expenses such as food, transportation, and school fees, many rely primarily on parental allowances.

Empirical studies show that young adults often struggle to translate financial knowledge into consistent financial practices, leading to fragmented and inconsistent financial behavior ([Lusardi et al., 2020](#)). Moreover, behavioral economics literature emphasizes that the absence of visible tracking mechanisms weakens financial discipline and increases susceptibility to overspending ([Thaler, 2016](#); [OECD, 2020](#); [Fernandes et al., 2019](#); [Netemeyer et al., 2018](#)).

While most participants relied on mental budgeting, a few used more structured approaches, though these were exceptions rather than the rule. P01 described a more systematic approach:

"I set aside a specific amount for gaming each week. If I do not spend it, I save it for next week." — Informant 1

P01's approach suggests that some participants, particularly those who view gaming as a potential income source, may develop more structured financial management practices. However, P01's approach was still informal compared to written budgeting systems, relying on mental allocation rather than written records.

P14 described a system of tracking her gaming spending through her mobile banking app:

"I check my GCash history to see how much I have spent on games. It helps me remember what I bought." — Informant 14

This approach, while not a formal budgeting system, represents a step toward greater financial awareness through digital tools. However, P14 noted that she only checked her spending history occasionally, not as a regular practice.

This theme directly addresses Research Objective 2 (examining budgeting practices) and Research Question 2 (how students budget and manage finances in relation to gaming-related expenditures). The findings reveal that budgeting practices are characterized by:

1. Unstructured approaches: Mental estimation rather than written budgets
2. Reactive management: Spending decisions made in response to immediate situations rather than through planning
3. Limited monitoring: Infrequent or no tracking of gaming expenditures
4. Flexible limits: Spending boundaries that are easily adjusted or disregarded

These characteristics contribute to fragmented financial management and increased vulnerability to overspending.

The prevalence of unstructured and mental budgeting practices suggests that non-business students lack the financial management infrastructure needed to control gaming-related expenditures effectively. The researchers interpret this pattern as indicating a disconnect between participants' awareness of their financial limitations and their actual financial management practices. While many participants knew they should budget, few had the skills, tools, or discipline to implement structured budgeting systems.

The reliance on mental budgeting is particularly concerning given the psychologically engaging nature of gaming platforms. When transactions are immediate, intangible, and emotionally rewarding, mental tracking becomes unreliable. The researchers suggest that the absence of written records and structured monitoring creates an environment where cumulative spending can easily exceed what participants intend or can afford.

Theme 3: Impulse Buying and Emotional Triggers in Gaming Expenditures

This theme emerged from codes related to the decision-making processes and triggers for gaming purchases. Codes such as "impulsive decisions," "sudden purchases," "aesthetic appeal," "peer influence," "temporary desire," "immediate satisfaction," "fear of missing out," "promotional offers," "limited-time items," and "emotional triggers" were repeatedly mentioned. The researchers grouped these codes because they all reflected the affective, non-deliberative nature of many purchasing decisions. The theme was named "Impulse Buying and Emotional Triggers in Gaming Expenditures" to capture both the impulsive nature of purchases and the emotional and social factors that trigger spending.

Informants frequently exhibited impulsive purchasing behavior, often driven by aesthetic appeal, peer influence, or temporary desire. The accessibility and convenience of purchasing virtual items anytime and anywhere intensified these impulsive spending tendencies.

"I am somewhat an impulsive buyer." – Informant 16

"I make sudden decisions... if I see a good item, I buy it immediately." – Informant 11

"I get carried away by impulse buying." – Informant 20

"When a new skin comes out, and it looks cool, I just buy it without thinking." — Informant 4

"I see my friends buying new skins, and I want one too. It is like peer pressure." — Informant 7

"Limited-time items make me want to buy. It is like if I do not buy it now, I will miss out." — Informant 18

Participants described how gaming platforms' design encouraged impulsive spending through limited-time offers, exclusive items, and visually appealing content. The immediacy of purchases—available with a click—further reduced time for thoughtful consideration.

"In-game purchases are so easy. Just one click, and you have it. You do not think about it." — Informant 5

"The game shows you the item with cool effects and other players using it. It makes you want to buy." — Informant 9

"Emotions play a big role. When I am stressed or sad, buying something in the game makes me feel better temporarily." — Informant 12

The emotional dimension of gaming purchases was particularly notable. Several participants described spending as a response to negative emotions or stress, suggesting that gaming purchases may serve as a form of emotional regulation.

"Sometimes when I am stressed with schoolwork, I buy game items to feel better." — Informant 15

"It is like retail therapy but in the game. It gives you a quick dopamine hit." — Informant 19

Not all participants described themselves as impulsive buyers. Some demonstrated greater awareness of their tendencies and employed strategies to counteract impulsivity:

"I used to buy impulsively, but now I try to wait before buying. If I still want it after a few days, then maybe I will buy it." — Informant 14

"I compare prices and wait for sales. I learned from my past mistakes of buying things I later regretted." — Informant 17

"I think about whether I really need the item or if it is just a want. Most of the time, it is just a want, so I do not buy." — Informant 6

These responses indicate that some participants have developed strategies to manage their impulsive tendencies, often after negative experiences with impulsive spending. Developing these strategies suggests that financial education could help students build these skills intentionally rather than through trial and error.

The gender and department differences observed in Theme 1 continued in this theme, with female participants (P06, P14, P17) generally demonstrating more deliberate purchasing processes compared to male participants. However, P10, a female participant, described herself as impulsive:

"I know I should not buy, but sometimes I cannot help it. The items look too good." — Informant 10

This suggests that while gender may be associated with spending patterns, individual differences in self-control and susceptibility to marketing are more significant determinants of impulse buying behavior.

This theme addresses Research Objective 3 (exploring financial decision-making processes) and Research Question 3 (factors influencing financial decision-making). The findings reveal that decision-making is influenced by:

1. Aesthetic appeal: Visual attractiveness of virtual items
2. Peer influence: Social pressure and desire for status among gaming communities
3. Temporary desire: Immediate emotional wants rather than long-term needs
4. Platform design: Limited-time offers, promotional strategies, and ease of purchase
5. Emotional states: Stress, boredom, and desire for emotional relief

Together, these factors create an environment where affective processes dominate deliberative financial reasoning.

This theme suggests that non-business students are highly susceptible to behavioral biases, particularly those associated with instant gratification and limited self-regulation. The researchers interpret this pattern as indicating that gaming platforms are designed to exploit these cognitive vulnerabilities through features that encourage rapid, emotionally driven decisions. The combination of immediate availability, aesthetically appealing content, and social pressures creates conditions where rational financial decision-making is difficult.

The emotional dimension of gaming purchases is particularly significant. The use of spending as a coping mechanism for stress or negative emotions suggests that gaming purchases may be serving psychological functions beyond entertainment. This observation aligns with research on emotional regulation and consumer behavior (Tambun & Nurwanti, 2023). It suggests that financial interventions may need to address not only financial literacy but also emotional regulation strategies.

The variation in participants' ability to resist impulsive spending suggests that some students have developed informal strategies for managing impulsivity. These strategies—such as waiting before purchasing, comparing prices, and reflecting on needs versus wants—represent practical financial management skills that formal financial education could reinforce.

Theme 4: Awareness of Financial Consequences but Inconsistent Behavioral Control

This theme emerged from codes related to participants' understanding of the financial implications of their gaming spending and their ability to control spending. Codes such as "awareness of consequences," "knowing it is wrong," "financial regret," "running out of money," "prioritizing virtual purchases," "inconsistent control," "know but cannot stop," and "trade-offs with necessities" were prominent.

The researchers grouped these codes because they reflected a common pattern: participants knew that their gaming spending was problematic, but this awareness did not translate into consistent behavioral control. The theme was named "Awareness of Financial Consequences but Inconsistent Behavioral Control" to capture this disconnect between cognitive understanding and behavioral regulation.

Informants generally demonstrated awareness of financial consequences but struggled to regulate their spending behavior consistently. Despite knowing the potential negative outcomes of excessive gaming expenditures, many participants continued to prioritize virtual purchases over essential needs. The experiences shared by informants reflect how gaming-related purchases are often driven by immediate emotional satisfaction rather than careful financial planning.

"I used money for our electricity bill to buy a skin." – Informant 5

"My allowance meant for food was wasted." – Informant 7

"I ran out of allowance before the month ended." – Informant 15

"I know I should not spend that much on games. It is not smart. But in the moment, I forget all that." — Informant 8

"I feel guilty after buying. I think about the food I could have bought or the savings I could have had." — Informant 11

"I always say I will stop spending, but then a new event comes, and I spend again." — Informant 18

The participants' experiences illustrate cognitive dissonance—the psychological discomfort experienced when behavior conflicts with beliefs or values. Participants expressed regret and guilt about their spending but continued the behavior, suggesting that the immediate rewards of gaming purchases (enjoyment, status, emotional relief) outweighed the delayed consequences.

"I know I should save money, but the desire for in-game items is stronger." — Informant 2

"After I spend, I always say I will not do it again. But when the next limited edition skin comes out, I buy it." — Informant 9

"It is like gambling but with skins. You know it is a waste of money, but you still do it." — Informant 4

This finding is further supported by the literature, which emphasizes that financial behavior is shaped not only by financial awareness or knowledge, but also by self-control, financial capability, and environmental influences. The findings parallel those of [Sipahutar et al. \(2024\)](#) and [Silvy and Yulianti \(2020\)](#), who noted that gaming environments and digital monetization systems can weaken students' self-control and encourage excessive spending.

The findings also support [Liu and Zhang \(2021\)](#) and [Hernandez-Perez and Rambaud \(2025\)](#), who argue that financial self-efficacy and discipline play a significant role in translating financial knowledge into responsible financial behavior. Participants in this study demonstrated financial awareness but lacked the self-efficacy or discipline to act on it consistently.

While most participants described inconsistent behavioral control, a few demonstrated greater consistency between awareness and behavior. These participants typically reported learning from negative experiences or developing strategies to control spending.

"Before I buy, I think about the consequences. I have learned from experience that impulsive buying leads to problems." — Informant 1

"I make a rule for myself: only spend from extra money, not from allowance for necessities." — Informant 14

"My last year's experience taught me that I overspent. Now I am more careful." — Informant 13

These participants, who tended to be older and more advanced in their studies, showed that experience and self-reflection can improve behavioral control. This suggests that financial management skills can develop over time, but the process accelerates when students have opportunities to learn from mistakes and develop self-regulation strategies.

P06's case is particularly notable:

"I never spend on games because I know I need the money for transportation and food. It is not worth it." — Informant 6

P06's consistent behavior demonstrates that limited financial resources can create natural constraints on spending. However, her approach is driven by necessity rather than developed financial management skills, suggesting that these constraints may be less effective when students have more disposable income.

This theme addresses Research Objective 4 (identifying financial challenges and consequences) and Research Question 4 (financial challenges and consequences experienced). The findings reveal the following challenges and consequences:

1. Financial deprivation: Running out of money for basic needs (food, transportation)
2. Financial regret: Post-purchase guilt and negative emotional consequences
3. Financial vulnerability: Prioritizing gaming purchases over essential responsibilities
4. Cognitive dissonance: Awareness of problematic behavior but inability to change
5. Accumulating financial stress: Cumulative effect of regular gaming expenditures

This theme suggests a critical gap between financial awareness and behavioral control among non-business students. The researchers interpret this pattern as indicating that financial knowledge alone is insufficient to prevent problematic spending in psychologically engaging environments. The disconnect between awareness and behavior highlights the need for interventions that address not only financial literacy but also behavioral regulation skills.

The immediate rewards of gaming purchases—emotional satisfaction, social status, entertainment—appear to override the delayed consequences of financial problems. This pattern is consistent with research on delay discounting, where individuals prefer smaller immediate rewards over larger delayed rewards. The gaming environment is specifically designed to exploit this tendency through features that provide immediate gratification and create urgency (limited-time offers, exclusive items).

Variation in behavioral control suggests that self-regulation skills can develop through experience and intentional practice. Participants who had learned from past financial mistakes or developed explicit spending rules showed more consistent behavior. This observation suggests that financial education programs should include not only knowledge components but also practical skill-building activities.

Theme 5: Limited Formal Financial Education and Reliance on Informal Learning

This theme emerged from codes related to participants' sources of financial knowledge and education. Codes such as "no formal education," "no financial management subjects," "self-learning," "learning from experience," "parental advice," "YouTube," "social media," "trial and error," and "learning from mistakes" were prominent. The researchers grouped these codes because they all reflected the absence of structured financial education in participants' academic programs and their reliance on informal, often unsystematic, learning sources.

Most informants lacked formal financial education and instead relied on self-learning, parental advice, or online content such as YouTube videos and social media posts for financial guidance. The absence of formal financial management instruction in their academic programs left participants to develop financial management strategies through trial and error.

"No one teaches me how to budget... it would help." – Informant 10

"I just watched YouTube for budgeting advice." – Informant 7

"I learned from my own mistakes." – Informant 13

"My parents taught me to save, but they didn't teach me about budgeting for games specifically." — Informant 3

"I follow finance influencers on TikTok. They give tips, but it's not systematic." — Informant 12

"I didn't learn anything about financial management in school. My course doesn't have subjects like that." — Informant 15

The participants' reliance on self-learning, online content, and personal experiences underscores the absence of formal financial guidance in their educational environment. Within internet gaming platforms, this limitation becomes more evident because students are continuously exposed to digital purchasing systems that promote impulsive spending behavior (King & Delfabbro, 2019).

Although online platforms such as YouTube provide accessible financial advice, the information they offer may vary in quality, depth, and reliability, leading to inconsistent financial learning experiences. Participants acknowledged that their informal learning was often reactive—they learned from mistakes rather than being proactively equipped with financial management skills.

"If I had learned about budgeting earlier, maybe I wouldn't have wasted so much money on games." — Informant 8

"The only financial education I got was from watching videos online. It helps, but it's not enough." — Informant 16

"I wish my course had financial management. It's a skill everyone needs." — Informant 19

A few participants reported receiving some formal financial education through family members or elective courses outside their core curriculum. However, even these cases represented limited and unsystematic exposure.

"My mother taught me to always save a portion of my allowance. But I don't always follow it." — Informant 14

"I took an elective subject about personal finance once. It was helpful, but I wish there was more." — Informant 17

"My parents are business people, so I learned some things from them. But it's mostly common sense." — Informant 1

These examples suggest that family background and exposure to financial discussions can provide foundational financial knowledge, but this informal learning varies across participants. Participants from business-oriented families (P01) appeared to have more financial knowledge than those whose families did not discuss financial matters, highlighting the role of family socialization in financial literacy.

This theme addresses Research Objective 5 (developing a financial planner booklet) and Research Question 5 (financial management strategies and resources employed or lacking). The findings reveal:

1. Limited formal education: No financial management subjects in most non-business programs
2. Informal learning sources: YouTube, social media, parental advice, trial and error
3. Reactive learning: Learning from mistakes rather than proactive education
4. Need for practical tools: Participants expressed desire for structured budgeting and expense tracking resources

This theme suggests that the lack of formal financial education significantly contributes to the financial vulnerabilities observed in non-business students. The researchers interpret this pattern as indicating that while informal learning can provide some financial knowledge, it is insufficient to equip students with the comprehensive skills needed to navigate complex financial decisions in gaming environments.

The reliance on YouTube and social media for financial education is concerning because these sources often provide fragmented, generic advice that may not address the specific challenges of gaming-related spending. The quality and reliability of these sources vary widely, and students may lack the financial literacy to evaluate the advice they receive.

The participants' expressed desire for structured financial education and practical tools supports the development of the financial planner booklet. Participants' responses indicate that they recognize their lack of financial skills and would welcome resources to help them manage their finances more effectively.

The five themes identified in this study paint a comprehensive picture of the personal finance experiences of non-business college students engaged in internet gaming platforms. The themes are interconnected, and each contributes to understanding the financial vulnerabilities students face.

Theme 1 (Entertainment-Driven Spending) establishes the foundation: students are motivated to spend by psychosocial factors rather than financial reasoning. **Theme 3** (Impulse Buying and Emotional Triggers) explains how spending decisions are actually made—through affective processes rather than deliberative evaluation. **Theme 2** (Unstructured Budgeting) and **Theme 5** (Limited Financial Education) explain why students lack the tools and skills to manage gaming expenditures effectively. **Theme 4** (Awareness but Inconsistent Control) reveals the key challenge: students know their behavior is problematic but lack the behavioral regulation skills to change.

Together, these themes suggest that non-business students face a "perfect storm" of financial vulnerability in gaming contexts: they are motivated to spend for emotional and social reasons, their spending decisions are driven by immediate gratification rather than deliberation, they lack the budgeting tools and financial education to control their spending, and they lack the behavioral regulation skills to act on their awareness of financial consequences.

This interpretation is consistent with the theoretical framework of financial behavior, which emphasizes the roles of financial literacy, self-control, and environmental influences in shaping financial outcomes (Shi et al., 2024; Scott, 2024). The findings suggest that interventions for non-business students should address not only financial knowledge but also behavioral regulation skills and practical financial management tools.

Development of Financial Planner Booklet

Based on the study's findings, the researchers developed a financial planner booklet designed specifically for non-business college students engaged in internet gaming platforms. The booklet was developed as a proposed practical output, not as an evaluated intervention. The booklet provides students with structured tools and strategies to address the financial management challenges identified in the study.

Each section of the booklet addresses specific findings from the study:

1. **Personal Financial Awareness and Reflection Guide:** Directly responds to Theme 5 (Limited Financial Education) by providing foundational financial knowledge and encouraging self-reflection on gaming spending patterns. This section helps students understand their current financial situation, which many participants in the study lacked.

2. **Budget Planning Sheet (Weekly Budget Allocation):** Addresses Theme 2 (Unstructured Budgeting) by providing a structured template for allocating allowance across essential and discretionary expenses. This is a direct response to participants' reliance on mental budgeting and their expressed need for formal budgeting tools.
3. **Budget Planning Sheet (Weekly Budget Planner):** Enables detailed tracking of planned versus actual spending, addressing the lack of monitoring and tracking systems identified in Theme 2. This tool makes spending more transparent and helps students identify discrepancies between their intentions and actual behavior.
4. **Gaming Expense Tracker, Impulse Control, and Spending Limit Plan:** Specifically addresses Theme 3 (Impulse Buying and Emotional Triggers) and Theme 4 (Awareness but Inconsistent Control) by providing tools to monitor gaming-related expenditures, set personal spending boundaries, and develop strategies for impulse control. This section helps students translate awareness into behavioral control.
5. **Financial Consequences Reflection:** Directly responds to the findings in Theme 4 by encouraging students to consider the trade-offs and opportunity costs of gaming purchases. This reflection exercise helps students internalize the consequences they already recognize cognitively.
6. **Savings Plan:** Addresses the lack of saving practices identified in the findings and helps students build positive financial habits.
7. **Learning and Improvement Section and Commitment Statement:** Responds to Theme 5 (Limited Financial Education) by providing ongoing learning resources and encourages accountability. This section helps students develop proactive learning strategies rather than relying on reactive learning from mistakes.

The financial planner booklet is a proposed practical output developed based on the findings of this qualitative study. It represents the researchers' interpretation of the financial management needs expressed by participants and is intended as a suggested intervention for educational institutions, parents, and students. The booklet has not been tested or evaluated for its effectiveness in improving financial management practices among non-business students. The researchers recommend that future studies evaluate the booklet's effectiveness through intervention research before widespread implementation.

The booklet serves as a resource that educational institutions could consider incorporating into student support services or financial literacy programs. While it could address some of the financial challenges identified in this study, its actual impact would need rigorous evaluation.

CONCLUSIONS

The study concludes that non-business students demonstrate fragmented financial management practices characterized by the absence of formal budgeting systems, susceptibility to impulsive purchasing, and difficulty translating financial awareness into responsible spending behavior. While most participants recognized the financial consequences of excessive gaming expenditures, this awareness did not consistently translate into behavioral control. The lack of formal financial education, combined with the psychologically engaging design of gaming platforms, creates an environment where students remain vulnerable to overspending and financial mismanagement.

The study contributes to theoretical understanding of financial behavior by demonstrating how financial literacy, self-control, and environmental influences shape financial outcomes; extending understanding of mental budgeting in digital consumption contexts; documenting the role of emotional regulation in impulse buying; and revealing the social embeddedness of financial

decision-making. The findings have practical implications for educational institutions, parents, game developers, students, and policymakers.

The developed financial planner booklet addresses the identified challenges by providing structured tools for budget planning, expense tracking, impulse control, and financial reflection. The booklet offers a practical, accessible resource for students who lack formal financial education but need immediate support in managing gaming-related expenditures. However, it is important to emphasize that the booklet is a proposed tool based on the findings, not a proven intervention, and future research should evaluate its effectiveness.

LIMITATION & FURTHER RESEARCH

This study has several limitations. First, the study focused exclusively on non-business college students from a single private university in the Philippines, which limits the transferability of findings to other institutional contexts, geographic locations, or student populations. Participants were drawn from three departments (SECAP with 7 participants or 35%, SACE with 7 participants or 35%, and SHAS with 6 participants or 30%), with an unequal distribution across departments that may not fully represent the diversity of non-business student experiences.

Second, the study relied on self-reported data through interviews, which may be subject to social desirability bias, recall bias, or participants' reluctance to disclose sensitive financial information. Third, the cross-sectional design captured participants' experiences at a single point in time, limiting understanding of how financial behaviors evolve over longer periods.

Fourth, while the study developed a financial planner booklet based on the findings, it did not implement, test, or evaluate the booklet's effectiveness in improving financial management practices among non-business students. The booklet remains a proposed practical output based on the researchers' interpretation of participants' expressed needs, rather than a proven intervention.

Based on these limitations and the study's findings, several directions for future research are recommended:

1. Testing the Financial Planner Booklet

The most important direction for future research is to evaluate the effectiveness of the developed financial planner booklet. Intervention studies are needed to determine whether the booklet actually improves financial management practices, budgeting behaviors, impulse control, and financial awareness among non-business students engaged in internet gaming. Such studies could employ pre-test/post-test designs, randomized controlled trials, or quasi-experimental designs to assess the booklet's impact. Researchers should also gather user feedback to refine the booklet based on real-world use. This would provide valuable evidence for implementing similar interventions in other educational settings.

2. Studies with Larger and More Diverse Participants

Future research should expand the sample size and participant diversity to enhance the transferability of findings. Studies could include non-business students from multiple universities across different regions of the Philippines, as well as students from various socioeconomic backgrounds, age groups, and gaming preferences. A larger sample would allow a more comprehensive understanding of how demographic factors influence financial behaviors in gaming contexts. Additionally, research should aim for more balanced representation across academic departments to capture the full diversity of non-business student experiences.

3. Comparative Studies Between Business and Non-Business Students

Comparative research examining differences in financial behavior, financial literacy, and gaming-related spending between business and non-business students would provide valuable

insights into non-business students' specific financial literacy needs. Such studies could identify whether business students demonstrate greater financial awareness, better budgeting practices, or stronger impulse control in gaming contexts, and whether these differences are attributable to formal financial education. This would strengthen the case for integrating financial education into non-business curricula and help educational institutions design targeted interventions.

4. Longitudinal Research

Longitudinal studies could examine how financial behaviors and gaming spending patterns change over time, particularly as students progress through their academic programs and gain more financial independence. Such research would provide insights into the developmental trajectory of financial management skills and identify critical periods for intervention. Longitudinal designs could also assess whether financial behaviors established during college persist into post-graduation life, informing the long-term impact of financial education initiatives.

5. Psychological Factors in Financial Decision-Making

Future researchers may explore broader psychological variables such as impulsivity, self-regulation, emotional regulation, reward sensitivity, delay discounting, and executive function to further understand financial behavior in digital gaming contexts. Understanding these psychological mechanisms could inform the development of more targeted interventions that address not only financial knowledge but also the cognitive and emotional processes that influence spending decisions.

6. Mixed-Methods Research

While the present study employed a qualitative approach to capture rich, detailed accounts of participants' experiences, future research could employ mixed-methods designs that combine qualitative interviews with quantitative measures. This would allow researchers to quantify the prevalence of specific behaviors, test statistical relationships between variables, and still capture the richness and complexity of students' lived financial experiences.

7. Game Developer and Institutional Perspectives

Future research could also examine the perspectives of game developers, educational institutions, and policymakers on responsible gaming monetization and financial literacy promotion. Understanding how these stakeholders view their roles and responsibilities could inform policy recommendations and industry practices that protect financially vulnerable students.

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