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Online gambling Behaviour, mobile money payments, and financial well-being of college students in the selected higher education institutions (HEI) in Calapan city

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Abstract

This study examines the relationships between online gambling behavior, mobile money usage, and the financial well-being of 372 college students across the selected higher education institutions in Calapan City. Utilizing a descriptive-correlational research design, the study assessed how gambling frequency and platforms, alongside the convenience and anonymity of mobile payments, influence spending patterns, debt management, and emergency savings. Findings reveal that online gambling is prevalent, with online casinos, notably BingoPlus, being the most common platform. Students reported high levels of perceived convenience and anonymity when using mobile money for these transactions. While participants maintained adequate emergency savings and debt management, they exhibited moderately unhealthy spending patterns. Statistical analysis identified a significant relationship between specific gambling types and debt management. Notably, a moderately significant correlation was found between the perceived anonymity of mobile money and debt management. These results underscore the financial risks integrated into mobile money payments. The study recommends that academic institutions and policymakers implement targeted intervention programs informed by the Problem Gambling Severity Index (PGSI). These efforts should prioritize a structured approach, ranging from prevention and awareness to skill-building, structured accountability, and clinical rehabilitation tailored specifically to the individual's level of gambling severity.

Keywords: Online Gambling; Mobile Money Payments; Financial Well-Being; Higher Education Institutions; Problem Gambling Severity Index (PGSI)

1. Introduction

Online gambling, encompassing any betting conducted via internet platforms or applications, has become a significant global concern, with approximately 7.8% of adults participating annually (Tran et al., 2024). Studies indicate that these digital platforms carry a higher risk of developing gambling problems compared to traditional land-based venues (Marionneau et al., 2024). In the Philippines, the industry continues to expand through mobile apps and increased internet access despite recent government bans on POGOs and online cockfighting (Research & Market, 2025). This rapid growth raises alarms for young adults, as research suggests that over 6% of students may face pathological gambling issues, while 10.23% exhibit problematic behaviors (Nowak, 2018). Additionally, Filipino students are particularly vulnerable to these risks due to the easy accessibility of these platforms and a lack of stringent regulatory monitoring (Ban-eg et al., 2025).

Mobile money systems significantly drive the rise of instant gambling by allowing users to deposit funds anytime and anywhere (Gainsbury & Blaszczynski, 2020). Although the Bangko Sentral ng Pilipinas suspended direct gambling links

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within GCash and Maya in August 2025 to curb rising financial concerns, these measures did not successfully stop youth from gambling (Salcedo, 2025). Players frequently bypass these restrictions by manually transferring funds to bank accounts or third-party intermediaries, maintaining the same financial flow (Klein, 2025). Furthermore, gamblers readily utilize alternative methods such as PayPal, InstaPay, and PESONet to ensure their betting activities remain uninterrupted (Truong, 2024). The seamless integration of these digital payment systems into daily life can facilitate and potentially worsen the harms associated with gambling (Lakew et al., 2024).

The consequences of student gambling extend far beyond simple monetary loss, often resulting in relationship conflicts, emotional distress, and significant academic setbacks (Galap, 2025). This research specifically examines financial well-being, defined as an individual's perception of their ability to maintain a desired standard of living and achieve financial freedom (Brugen, 2017). According to Watson, Barber, and Dziurawiec (2015), the way students perceive their financial strain directly influences their coping behaviors and overall psychological health. The findings emphasize that subjective perception, rather than actual income or debt levels, is a critical indicator of financial health. Understanding these perceptions is vital for addressing the impact of gambling on the student population.

A preliminary survey conducted among students from the City College of Calapan, Divine Word College of Calapan, and Mindoro State University revealed a significant involvement in online gambling. All fifteen students surveyed reported using their school allowances to fund their bets, and 93% used mobile payment platforms for transactions. The participants primarily engaged in one to three different activities, including online casino games, sports betting, and in-app games with betting features. The result is evident, as 10 students reported feeling significant stress regarding their monetary situation. Finally, 11 out of the 15 respondents explicitly admitted that their gambling habits have negatively impacted their overall financial status.

By aligning with SDG 4 (Quality Education) and SDG 12 (Responsible Consumption and Production), this study highlights how the intersection of digital transactions and online gambling impacts the financial well-being of college students in Calapan City. The research evaluates how the accessibility of mobile money influences student spending patterns and debt management, exposing the unique financial vulnerabilities created by modern gambling platforms. Using the Problem Gambling Severity Index (PGSI), the findings provide a data-driven look at the socioeconomic hazards that threaten the long-term financial stability of young adults. These insights offer a crucial framework for policymakers and academic administrators to develop targeted financial literacy programs and mental health interventions. This study catalyzes fostering sustainable financial habits and protecting students from the risks of exploitative digital consumption in an increasingly cashless society.

1.1. Review of Related Literature

1.1.1. Online Gambling Behavior

Online gambling behavior is defined as multidimensional engagement in betting activities conducted through digital devices. It is characterized by dimensions such as patterns of frequency, duration, and platform choice, as well as by the psychological motivations and the potential financial or mental health consequences associated with participation. Although traditionally less prevalent than offline gambling, online gambling has rapidly increased in popularity among younger demographics due to greater legalization, aggressive marketing, and increased technological accessibility (Gómez et al., 2020). A study published in the Journal of Gambling Studies (2015) found that most college students gamble more than six times per month, but less frequently than daily. The relatively young age of college students, combined with the widespread use of the internet in college environments, makes online gambling more normative in this group compared to adult populations. Furthermore, Soh (2024) identified gambling frequency and gambling type as key predictors of whether gambling behavior remains non-problematic or progresses into problem gambling. Lostutter, T. W. et al, (2020) observed that retention-time attitudes were not significantly associated with gambling behaviors and may not be directly relevant to college students, given their often-limited fiscal circumstances. Furthermore, financial gain is often not the primary driver for this student who engages in online gambling; as noted in another study, fun and enjoyment were the modal motivations in students scoring as non-problem gambling and low-risk gambling on the PGSI, respectively (Zolkwer, M.B. et al., 2022).

1.1.2. Gambling Frequency

Harris et al. (2020) define gambling frequency as how often an individual engages in gambling activities. In the United States, most college students gamble once a month, some gamble weekly, and only a few gamble daily, with sports betting as the main driver of frequent gambling (Pause Before You Play, 2024). In Lagos State, most student gamblers engage in online gambling at least once a week, while gambling multiple times a week is less common, likely due to easy access to online platforms and peer influence (Abolaji, 2023). Although a large proportion of students gamble (Osborne,

2024), most participation remains recreational or infrequent because of limited allowance-based spending and academic responsibilities (Humphreys et al., 2021). Gambling frequency was examined using the Money Attitude Scale (MAS) to explain differences in gambling behavior. The MAS suggests that individuals who gamble less tend to have strong retention-time attitudes and view gambling as a poor return on investment. When gambling becomes uncontrollable, problem gamblers often increase their spending, leading to financial difficulties such as the inability to meet basic needs and reliance on multiple loans (NVCPG, 2023). In contrast, less frequent gamblers experience fewer negative consequences because they risk smaller amounts of money and maintain better control over their gambling habits (NIH, 2023). However, recreational gambling—defined as controlled and non-repetitive participation—may still have positive effects on some individuals' health and well-being (Humphreys et al., 2021).

1.1.3. Gambling Types

A gambling type refers to a specific category or form of gambling activity defined by its rules, gameplay, and setting (Ronzitti, 2016). In the Philippines, online gambling is diverse and strictly categorized by PAGCOR (2025) and other regulatory bodies. This includes online casino games, sports betting, e-sabong, online bingo and lotteries, online adaptations of traditional Filipino games, such as Color Game and Tongits, and e-sports betting on titles such as Dota 2 and Mobile Legends. Among these, online slots, a specific category of casino games, represent the most popular activity (TGM Research, 2024). Their prevalence is due to convenience, accessibility, low wagering requirements, the lack of a necessary strategy, and various online casino promotions in the media (BetMGM, 2025). Additionally, Brijesh (2025) suggests that online casinos are highly popular because they offer virtual adaptations of traditional casino games. The specific gambling types in which an individual participates are closely connected to the likelihood of experiencing problem gambling. In Massachusetts, participating in casino gambling was more significantly associated with problem gambling than other formats across all levels of involvement (Mazar et al., 2020). Beyond its effect on behavioral risk, specific gambling types also affect an individual's financial well-being. The use of online slots and live sports betting, which are among the most frequently used platforms, can lead to losses of savings and accrued debt because their rapid rewards and constant excitement may prevent players from making careful, rational financial decisions. (Mohan, 2025).

1.1.4. Gambling Platforms

Gambling platforms refer to the network of systems and technologies that facilitate gambling activities (Wheaton, 2021). In 2025, the Philippine government significantly tightened its control over gambling by implementing a total ban on Philippine Offshore Gambling Operations (POGOs), which led to the blocking of over 10,000 illegal and fake gambling platforms (Dizon, 2025). Consequently, some of the remaining domestic PAGCOR-licensed platforms include BingoPlus, InPlay, S5 Casino, OKBet, and Solaire (Bastock, 2025). Among these platforms, BingoPlus is the most widely used, with 38 million registered users, largely due to its early integration with e-wallets. Moreover, its popularity is attributed to its role as the primary sponsor of the Philippine Basketball Association (PBA) (AGBrief Editorial, 2025). This finding aligns with the study conducted by Peres et al. (2024), which states that gambling usage increases when platforms employ advertising, promotion, and sponsorship strategies. However, these strategies pose significant risks to problem gamblers, particularly when they are targeted with personalized bonus offers through email or other channels, as such practices encourage continued betting. Aside from influencing online gambling behaviors, these platforms also pose financial risks to gamblers. Online gambling platforms offer 24/7 mobile access and e-wallet integration, which can lead to impulse-driven betting and facilitate easy and seamless deposits, thereby negatively affecting the financial well-being of individual gamblers (Afable, 2024).

1.2. Mobile Money Payments

According to Hoernig and Bourreau (2016), mobile money payments refer to financial transactions conducted using digital funds stored in accounts managed by mobile network operators, allowing users to send, receive, and pay money through mobile devices without the need for a traditional bank account. Mobile money applications have become the backbone of online gambling systems. In the Philippines, commonly used mobile money applications include GCash, Maya, GrabPay, ShopeePay, and Coins.ph (Birhanu, 2025). In 2025, the Bangko Sentral ng Pilipinas (BSP), through Memorandum M-2025-029, ordered all e-wallet providers to remove direct in-app links, shortcuts, and icons leading to gambling platforms. This policy was intended to reduce "one-tap" impulsivity, which had been associated with significant financial harm among students and low-income families. As a result, features such as GCredit and Maya Credit can no longer be used to fund gambling accounts. Instead, only actual cash balances may be used for gambling transactions (Yogonet, 2025). Abdullah (2025), in a theoretical study, examined how mobile money, as a payment method for online gambling, influences financial well-being, particularly by highlighting factors such as convenience and anonymity. The findings suggest that these features may encourage more frequent gambling among students, consequently having a significant negative impact on their financial well-being.

1.2.1. Convenience

Convenience in the context of mobile money payments refers to the ease and comfort individuals experience when using technology to complete transactions and engage in related activities (Wardana et al., 2022). Panganiban et al. (2022) emphasize that mobile money reduces the need to carry physical payment methods such as cash or credit cards. As a result, mobile money has emerged as an alternative to traditional payment systems. According to Hing et al. (2022), features such as instant deposits, user-friendly navigation, and rapid access enhance the convenience of smartphone-based betting, which in turn contributes to more frequent and impulsive gambling among young adults. Moreover, Wardana et al. (2022) notes that factors such as expected performance and cultural influences further reinforce the perceived convenience of mobile money payments. These include 24/7 availability, daily login bonus offerings, and the ability to place bets on live games at optimal odds. This is further supported by Wijaya et al. (2022), whose findings suggest that increased convenience enhances consumers' willingness to pay. By minimizing the physical effort required to complete payment transactions, mobile money payments can transform deliberate financial decisions into impulsive online gambling behaviors. This tendency toward impulsivity is also supported by Liu and Wu (2020), who found that students exhibit more spontaneous consumption behaviors when non-cash payment systems are easily accessible. Aside from impulsivity, mobile money payments also promote longer betting sessions, higher expenditures, and loss-chasing behaviours. This underscores convenience as a key factor in mobile money use for gambling, with implications for users' financial well-being (Hing et al., 2022).

1.2.2. Anonymity

Perceived Anonymity is the psychological state in which an individual believes that their personal identity remains unknown to others, or that their actions cannot be easily traced back to them (Craw, 2025). This private feature of smartphones and mobile-based betting allows students to conceal their activities, where some bettors prefer the discretion afforded by mobile platforms because it enables them to hide betting from peers and family, thereby promoting more frequent and secretive gambling (Hing et al., 2022). However, in the Philippines, mobile money payment systems are not fully anonymous, as they require Know Your Customer (KYC) registration (PhilSys, 2024). Although mobile money applications store users' personal information, some gamblers rely on agents who act as financial intermediaries and retain user details instead of the gambling platforms themselves. These agents facilitate a shadow-transaction process in which players manually transfer funds to GCash or Maya accounts controlled by intermediaries, rather than directly to gambling sites (Klein, 2025). Even though gamblers' personal information is held either by the platforms or by their agents, the perception of anonymity persists. This perception makes online gambling more attractive, even to individuals who typically avoid physical casinos and prefer to gamble from home, as it is viewed as safer and less intimidating (Ghelfi et al., 2024). Consequently, this invisible outflow of money contributes to monthly overspending and the accumulation of digital debt among Gen Z consumers (Karthikeyan et al., 2025).

1.3. Financial Well Being

Financial well-being is defined as having control over day-to-day finances and the freedom to enjoy life. García-Mata and Zerón-Félix (2022) emphasize that this security results in overall happiness and social stability. Duncan (2024) adds that true well-being depends on a personal sense of freedom and on how secure one feels both now and in the years ahead. For students, the goal is to reach what Riitsalu (2024) calls a target state," where they can maintain their lifestyle, cover necessary expenses, and save for future needs. Macalagay et al. (2025) note that many attempt this through discipline and independent income, but stability is often threatened by risky behaviors such as online gambling. Smith (2025) explains that problem gamblers accumulate debt while chasing losses, leaving them unable to pay for essentials like rent, bills, or food. Swanton et al. (2021) highlight the psychological toll of this strain, where constant worry erodes quality of life. Buchanan et al. (2020) further describe the cycle that financial stress drives students to gamble as a quick escape, only worsening their situation. Ultimately, this volatility pushes students toward even riskier betting in hopes of a "big win" (Swanton et al., 2021). Abolaji et al. (2023) confirm a strong negative correlation between gambling and financial well-being, showing that as gambling increases, financial stability declines. These findings reveal how gambling undermines the core pillars of financial health, spending, debt management, and savings that students strive to build.

1.3.1. Spending Pattern

Spending patterns are defined by Nasrudin (2025) as the way individuals allocate money for goods and services, which naturally change over time. This concept is important because Jeolin and Manigo (2024) found that spending on both necessities, such as food, shelter, and leisure activities, strongly predicts a person's financial well-being. Bona (2018) emphasizes that developing good spending habits and a clear plan is essential for financial success, though she notes that for college students, these habits are often shaped by their family background. For students, however, the reality is complicated by limited budgets (Lostutter et al., 2020) and weak financial management skills. Bona (2022) explains that

this often leads them to prioritize non-essential items over academic needs. The digital environment makes this worse. She et al. (2021) found that social media triggers compulsive spending, pushing financially anxious students toward betting as a quick fix. Boland (2025) revealed that gambling expenses now rival grocery costs for many students, with some even cutting back on food to fund online betting. Kamwela (2024) adds that this behavior is often driven by relative deprivation, where students gamble to match the spending power of wealthier peers. Once this cycle begins, it becomes difficult to escape due to psychological traps. Fiedler (2019) notes that problem gambling drives excessive spending, while King and Delfabbro (2019) explain that students continue spending because they cannot accept the money they have already lost, a sunk cost. This creates a dangerous pattern where poor financial decisions and the urge to recover losses undermine student stability, highlighting a critical area for research.

1.3.2. Debt Management

Debt management is a structured process for repaying what you owe, which Nowacki (2025) explains can be done independently or with professional help. This has become a global concern because, as Liew et al. (2025) note, young adults today are entering adulthood already burdened by student loans and rising living costs. To navigate this challenge, Mendez et al. (2025) emphasize that financial planning is essential; without these skills, individuals are prone to over-indebtedness. In some cases, students can manage debt effectively if they have the right mindset. Nwiado and Wordu (2023) found that those with sufficient financial support and a positive attitude are better equipped to meet their obligations. However, even responsible students can fall into a trap called mental accounting. Garman and Fox (2024) observe that individuals often use this informal way of thinking for small or fragmented debts instead of tracking them formally, a habit that can ultimately distort their perception of their overall financial health. This distorted view becomes even more dangerous when it meets gambling-related debt, which Sulkunen et al. (2021) describe as borrowing specifically to fund more betting or to cover losses. Modern technology intensifies this issue, as Swanton and Gainsbury (2020) and Marionneau et al. (2024) explain that instant digital loans make borrowing feel too easy, encouraging excessive gambling and rapid financial strain. This type of borrowing is so distinct that Oksanen et al. (2018) identify it as a key symptom of problem gambling. For students, Galap (2025) warns that it creates a destructive feedback loop. Gambling is used to cope with stress, but the resulting debt only worsens financial instability and undermines academic focus. The evidence shows that while support and planning can help students manage ordinary debts, the impulsive nature of gambling-related borrowing bypasses these defenses and leads to long-term financial harm.

1.3.3. Emergency Savings

Emergency savings are defined by the Consumer Financial Protection Bureau as a dedicated cash reserve meant to cover unexpected costs, serving as a safety net to prevent people from falling into debt. Costa et al. (2025) explain that this buffer is critical for peace of mind; people with emergency savings are generally less stressed, more productive, and enjoy higher financial well-being because they do not constantly worry about money. In the local context, Zapanta (2025) reports that while 73% of Filipinos claim to have emergency funds, most admit these savings would only last a single month, showing how fragile financial security often is. For students, building this safety net is especially difficult. Bona (2022) found that their spending is often driven by social activities and lifestyle choices, leaving little money left for dedicated savings. The problem becomes worse when gambling is involved. Adabor (2025) notes that gamblers tend to prioritize immediate rewards over future stability, leading to poor habits and a failure to separate savings from spending money. Nower et al. (2015) add that covering gambling losses often wipes out any emergency funds students manage to save. Ironically, Wicker (2015) points out that many students still view gambling as a way to earn money and supplement their emergency fund, which contradicts the findings of Khiatani et al. (2025); it is actually non-gamblers with stronger financial knowledge who succeed in saving and exploring legitimate financial products. Ultimately, the lack of a safety net leaves students vulnerable when unexpected expenses arise. Koomson et al. (2022) and Tabri et al. (2022) conclude that gambling losses drain both financial and social resources, destroying the very funds meant to protect them during hard times. This highlights a critical gap where the misconception of gambling as a source of income directly undermines the ability to build genuine financial resilience.

Research indicates that online gambling among college students is a complex issue fueled by the frequent use of mobile money apps and targeted advertisements. These digital platforms make betting so seamless that students often lose track of their spending, leading to impulsive habits and significant financial strain. Consequently, many find themselves trapped in a cycle of chasing losses and accumulating debt by using funds meant for essentials or emergencies. While global studies highlight these risks, there remains a critical lack of data on how these technologies specifically influence students within the local community. This study aims to fill that gap by examining the unique gambling behaviors and financial impacts on students of HEIs in Calapan City.

1.4. Theoretical Framework

This study is grounded in Prospect Theory, the Technology Acceptance Model (TAM), and Social Cognitive Theory, which together explain how psychological decision-making biases, technological convenience, and learned behaviors influence online gambling participation and financial well-being among college students. These theories provide an integrated lens for understanding why students continue gambling despite financial losses, how mobile money platforms facilitate frequent betting, and how repeated exposure reinforces risky financial behavior.

1.4.1. Prospect Theory

Based on Kahneman and Tversky's (1979) Prospect Theory, this framework explains how loss aversion distorts students' financial decision-making under gambling-related risk. Students tend to perceive losses more intensely than gains, which increases their emotional response to financial setbacks. As a result, they are more likely to engage in risk-seeking behaviors, such as chasing losses, to recover previously lost money. Rather than evaluating outcomes rationally, students compare results to a personal financial reference point, such as their allowance or prior winnings. This distorted evaluation disrupts budgeting practices, depletes savings, worsens debt management, and ultimately compromises financial stability and overall well-being. For students of HEIs, the emotional distress of losing ₱500 is equal to a week's worth of meals or transportation and significantly more intense than the satisfaction of winning the same amount. This creates a risk-seeking tendency in losses, where a student loses money through online gambling, they are psychologically driven to chase those losses with even riskier bets to return to their original financial status, directly affecting their overall financial well-being.

1.4.2. The Technology Acceptance Model (TAM)

The Technology Acceptance Model proposed by Davis (1989) explains how Perceived Ease of Use and Perceived Usefulness influence students' adoption of mobile money payment systems in gambling activities. The ease of use of mobile wallets, including fast transfers and cashless betting, reduces transaction effort and makes gambling highly accessible. The integration of mobile money systems in online gambling creates a significant psychological buffer that alters how students in Calapan City manage their finances. The anonymity and privacy offered by these digital platforms lower the social and psychological hurdles of betting, effectively normalizing it as a routine activity. Because the technology is designed to be effortless and user-friendly, it fosters a digital disconnect where the nature of the interface hides the actual weight of financial risk. As the pain of paying is minimized through seamless digital transactions, students often lose sight of their total spending. This repeated, low-friction behavior erodes financial self-control, resulting in chronic overspending and increased financial vulnerability for the student population.

1.2.2 Social Cognitive Theory

Bandura's (1986) Social Cognitive Theory explains online gambling behavior through reciprocal determinism, wherein personal cognition, observed behavior, and environmental influences interact continuously. Within student social environments, frequent exposure to peer gambling encourages observational learning. Students begin to view gambling as a common recreational activity rather than a financially risky behavior. Social reinforcement, such as shared winnings and peer approval, further weakens individual financial self-regulation. The continuous exposure to these activities heightens gambling involvement and encourages the use of mobile payment systems, ultimately eroding the financial health of college students. As digital wagering becomes a normalized habit within their peer groups, students' internal sense of risk is altered, lowering their resistance to adopting such technologies. This social validation establishes a powerful feedback loop where the surrounding environment reinforces the behavior, transforming gambling from a risky activity into a perceived standard of the modern college lifestyle.

1.5. Conceptual Framework

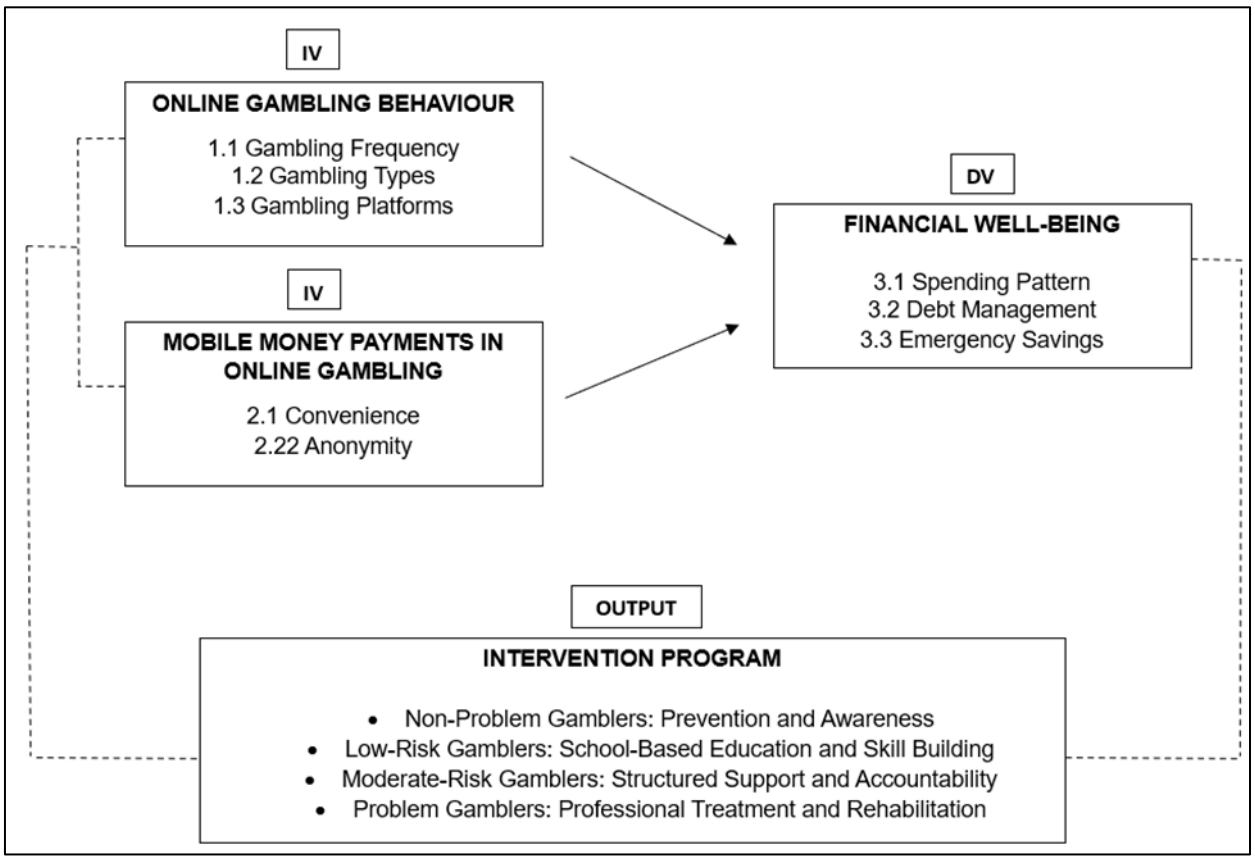

Figure 1 Conceptual Framework

The conceptual framework examines the relationships between online gambling behavior, mobile money usage, and the financial well-being of college students in the selected higher education institutions in Calapan City. Following the study by Abolaji (2023), the independent variables include gambling frequency, types, and platforms, alongside the perceived convenience and anonymity of mobile money payments. These factors are hypothesized to influence the dependent variable of financial well-being, which is measured through spending patterns, debt management, and emergency savings. By analyzing these connections, the study seeks to determine how digital gambling and payment habits impact a student's fiscal health. Ultimately, the framework proposes a tailored intervention program as a practical outcome to address negative financial impacts based on different gambling risk levels.

1.6. Statement of the Problem

This study aims to identify the relationship between online gambling behavior and mobile money payment, and financial well-being among college students in the selected higher education institutions in Calapan City.

Specifically, this study seeks to answer the following questions:

- What is the extent of online gambling behavior among the students in terms of:
    - Gambling frequency;
    - Gambling types; and
    - Gambling platforms?
- How can the use of mobile money payments be described in terms of:
    - Perceived convenience; and
    - Perceived anonymity?

- What is the level of students' financial well-being in terms of:
    - Spending patterns;
    - Debt management; and
    - Emergency savings?

- Is there a relationship between online gambling behavior and financial well-being among college students in the selected higher education institutions in Calapan City?
- Is there a relationship between the use of mobile money payment in online gambling and financial well-being among college students in the selected higher education institutions in Calapan City?
- Based on the findings of the study, what intervention program for students may be proposed?

1.7. Hypotheses

- Ho: There is no relationship between online gambling behavior and financial well-being among college students in the selected higher education institutions in Calapan City.
- H1: There is no relationship between mobile money payment and financial well-being among college students in the selected higher education institutions in Calapan City.

2. Methodology

2.1. Research Design

This study utilizes a descriptive-correlational research design to investigate the relationship between online gambling behavior, mobile money payment usage, and the financial well-being of college students in the selected higher education institutions in Calapan City. The descriptive component characterizes the frequency and patterns of these behaviors, while the correlational aspect evaluates the significance of the associations between the identified variables. By observing naturally occurring financial practices without experimental manipulation, this design effectively identifies behavioral trends and potential risk factors for financial distress. Following the framework of Apuke (2017), this approach is highly effective for understanding the nature and strength of relationships within social and behavioral sciences. Ultimately, the study aims to provide evidence-based insights to support the development of responsible gambling initiatives and financial education programs tailored for vulnerable student populations.

2.2. Subject and Sampling

This study focuses on college students from the selected higher education institutions in Calapan City.: Divine Word College of Calapan (DWCC), Mindoro State University – Calapan Campus (MinSU Calapan), and City College of Calapan (CCC), which have a combined total population of 11,656 students. These institutions were selected based on their population size. The target respondents are students who engage in any form of online gambling at least once a week. To identify qualified participants, a screening question was included at the beginning of the questionnaire. Only those who answered affirmatively proceeded to complete the rest of the survey. A purposive sampling method was employed, as it is most suitable for studies that aim to gather data from a specific subgroup—in this case, college students who regularly engage in online gambling. This method ensures that the collected data directly supports the objectives of the study. According to Etikan et al. (2016), purposive sampling is appropriate when the researcher intends to obtain focused information from the subgroup most relevant to the research purpose.

To determine the minimum required sample size, the researchers used the Raosoft Sample Size Calculator with standard parameters: a 95% confidence level, a 5% margin of error, and a 50% response distribution. The calculation applied the Finite Population Correction (FPC) using the Raosoft Calculator. After the computation, the results showed the minimum sample size required for the study was approximately 372 qualified respondents. These respondents were then proportionally distributed across the three higher education institutions based on their respective population sizes, resulting in 74 qualified respondents from CCC, 138 from DWCC, and 160 from MinSU. The table below shows how the respondents were allocated proportionally:

Table 1 Proportional Allocation of Respondents

Higher Education Institution	Population	Proportion	No. of Respondents
City of College of Calapan	2,348	20%	74
Divine Word College of Calapan	4,324	37%	138
Mindoro State University- Calapan Campus.	4,984	43%	160
Total	11,656	100%	372

This proportional distribution ensures that each institution is adequately represented based on its share of the total student population.

2.3. Data Gathering Procedures and Instrumentation

To collect the necessary data, the researchers administered a structured questionnaire designed to assess participants' problem gambling severity, online gambling behavior, their use of mobile money payments for online gambling, and their financial well-being. A screening question was placed at the beginning of the survey to determine whether respondents engaged in any form of online gambling at least once a week. Only those who met this criterion were allowed to proceed with the full questionnaire. The survey targeted students from the selected higher education institutions in Calapan City: Divine Word College of Calapan (DWCC), Mindoro State University – Calapan Campus (MinSU Calapan), and City College of Calapan (CCC). Data collection was conducted in person to ensure clarity of instructions, reduce misunderstandings, and encourage honest responses. Participation was voluntary and anonymous, and all information gathered was used solely for academic purposes. The data-gathering period lasted for two weeks.

The survey instrument primarily employed a quantitative approach, consisting of structured, closed-ended questions and categorical items. It was divided into the following components:

- **Online Gambling Behavior:** Questions on gambling type, gambling frequency, and gambling platforms were included.
- **Mobile Money Usage:** Questions addressed convenience and anonymity.
- **Financial Well-Being**, assessed across three dimensions:

Spending Patterns: Frequency and type of discretionary or impulsive expenses were measured to reveal financial habits and priorities.

Debt Management: The ability to repay or manage borrowed money responsibly was assessed to reflect the capacity to handle financial obligations.

Emergency Savings: The presence of a dedicated pool of money for unexpected financial emergencies was determined to gauge the financial safety net.

Problem Gambling Severity Index: Questions that classify individuals as non-problem, low-risk, moderate-risk, or problem gamblers for the output (intervention program).

Categorical items were used to measure gambling frequency, types, and platforms. A Likert scale was utilized for questions related to mobile money usage and financial well-being. The use of a Likert scale was recognized for its simplicity, clarity, and effectiveness in capturing subjective attitudes and behaviors in survey-based research (Joshi et al., 2015).

To quantify and interpret the responses, a scale was used to calculate the mean scores for each dimension, assessing the level of mobile money payments usage in terms of perceived convenience and perceived anonymity, as well as the level of financial well-being in terms of spending patterns, debt management, and emergency savings.

Table 2 below shows that the four-point Likert scale employs an inverse scoring method where lower mean scores between 1.00 and 2.50 indicate a high to very high level of positive interpretation. In contrast, higher scores ranging from 2.51 to 4.00 represent a low to very low result, suggesting a lack of agreement or alignment with the criteria being measured.

Table 2 Likert Scale Description and Interpretation

Likert Scale	Range	Description	Interpretation
Strongly Disagree	1.00-1.50	Strongly Agree	Very High
Disagree	1.51-2.50	Disagree	High
Agree	2.51-3.50	Agree	Low
Disagree	3.51-4.00	Strongly Agree	Very Low

2.4. Reliability

To ensure the reliability of the questionnaire, the internal consistency of the multi-item scales was assessed using Cronbach's alpha, as shown in Table 3 below. Following established social science research standards (Taber, 2018), a Cronbach's alpha coefficient of 0.70 or higher was considered indicative of acceptable reliability.

It was evaluated by administering the questionnaire to 10 students who have been regularly engaged in online gambling. The stability of responses over time was determined by calculating the Pearson correlation coefficient, with strong positive correlations indicating high temporal reliability. The results of the internal consistency analyses were reported to demonstrate the measurement tool's consistency, reliability, and overall quality.

Table 3 Reliability Result

ITEMS	CHRONBACH ALPHA VALUE	RELIABILITY
	IV: MOBILE MONEY PAYMENT USAGE IN ONLINE GAMBLING	
Perceived Convenience	0.92	Excellent
Perceived Anonymity	0.87	Good
	DV: FINANCIAL WELL-BEING	
Spending Pattern	0.89	Good
Debt Management	0.94	Excellent
Emergency Savings	0.90	Excellent

2.5. Data Analysis

To summarize the students' responses, the researchers applied frequency, percentage, and mean to identify patterns in online gambling behavior, mobile money payment usage, and financial well-being. This included analyzing how zfrequently students gambled, the types of gambling they engaged in, the platforms and mobile payment methods they used, and their behaviors related to financial management, spending, and debt handling. To explore the relationships among the key variables, the researchers used Pearson's correlation coefficient. This analysis determined whether significant associations existed between gambling severity, mobile money usage, and the various dimensions of financial well-being. A significance level of 0.05 was used to determine whether the observed relationships were statistically meaningful or occurred by chance.

2.6. Ethical Consideration

This study strictly adhered to ethical research standards and the provisions of Republic Act No. 10173, also known as the Data Privacy Act of 2012, to ensure the full protection of participants' rights and confidentiality. Before answering the survey, students were informed about the purpose of the study and were asked to give their full consent to participate. They were reminded that participation was voluntary and that they could withdraw at any time without any negative consequences. No names or personal identifying information were collected to ensure confidentiality and anonymity. All data were used solely for academic purposes. The researchers also sought approval from the proper authorities at Divine Word College of Calapan (DWCC), Mindoro State University – Calapan Campus (MinSU Calapan), and City College of Calapan (CCC) before conducting the survey.

3. Results and discussion

3.1. What is the extent of online gambling behavior among the students in terms of

3.1.1. Gambling Frequency

Table 4 Online Gambling Behavior of the Students in Terms of Gambling Frequency

Online Gambling Behavior			
Variable	**Categories**	**Frequency**	**Percentage**
Gambling Frequency	Everyday	28	7.53%
	Six times a week	18	4.84%
	Five times a week	13	3.49%
	Four times a week	7	1.88%
	Thrice a week	30	8.06%
	Twice a week	52	14.17%
	Once a week	224	60.22%

Table 4 highlights the Online Gambling Behaviour of the Students in terms of gambling frequency as an aspect of their Online Gambling Behavior. The data reveal that the vast majority of respondents engage in online gambling at least once a week (60.22%). *"Minsan lang ako mag-online gambling, pag niyayaya lang ako ng kaibigan ko na mag cash in,"* a respondent implied that they gamble only when friends ask them to, suggesting peer influence is a primary factor in their infrequent participation. This aligns with the observations in other studies, such as the one by Abolaji et al. (2023), where once-a-week participation suggested a prevalent gambling culture among students, possibly driven by easy platform access and peer influence. Further, data shows that students also frequently engage in online gambling twice a week (14.17%), thrice a week (8.06%), four times a week (1.88%), five times a week (3.49%), six times a week (4.84%), and every day (7.53%).

3.1.2. Gambling Types

Table 5 Online Gambling Behaviour of the Respondents in Terms of Gambling Types

Online Gambling Behavior			
Variable	**Categories**	**Frequency**	**Percentage**
Gambling Types	Online Casino	241	65.67%
	Sports Betting	108	29.43%
	E-sabong	40	10.90%
	Online Poker	31	8.45%
	Online Bingo	74	20.16%

The data presented in Table 5 indicates that online casinos (65.67%) are the most frequent type of online gambling that the students use. A respondent stated, "Sa *mga online casino lang naman ako nawiwili, katulad ng poker, slots, at baccarat pati mas mabilis makita ang results kung nanalo o natalo, na lagi ko ring nlilalaro dati,"* where it noted that the rapid result is characteristic of the modern adaptation of the casino experience. This finding aligns with observations by Brijesh (2025), who suggests that online casinos are highly popular because they offer virtual adaptations of traditional casino games, allowing players to enjoy their preferred activities from the convenience of their homes. Online casinos typically include a diverse array of games such as baccarat, roulette, blackjack, and slots. This suggests that online casino games are the most prominent and widely recognized form of online gambling behavior. The next most prevalent category is Sports Betting (29.43%). Following this is Online Bingo (20.16%), which received a moderate level of recognition. The least commonly perceived types of online gambling are E-sabong (online cockfighting) (10.90%) and

Online Poker (8.45%). The substantial gap between the leading category (Online Casino) and the rest suggests a strong concentration of perception toward online casino activities.

3.1.3. Gambling Platforms

Table 6 Level of Online Gambling Behavior in Terms of Gambling Platforms

Online Gambling Behavior			
Variable	**Categories**	**Frequency**	**Percentage**
Gambling Platforms	747 Live	87	23.71%
	BingoPlus	170	46.32%
	Arena Plus	81	22.07%
	OKBet	52	14.17%
	JILIBET	132	35.97%
	Other: PhilSlot	11	3.00%

Table 6 results indicate online gambling platform usage among college students. BingoPlus is the most frequently used platform, accounting for 46.32% of the reported usage. When asked about their preferred platforms, *"Ang nalabas kasi lagi sa facebook feed ko ay BingoPlus na pinopormote ng influencer at mga artista, kaya napapaclick din ako, pati madaming laro na nandon. May scatter o slots, tsaka poker, yung mga gusto ko,"* where this statement implied that high-frequency promotion of the platforms, specifically BingoPlus, is a major factor in users' engagement, and it highlights the platform's appeal through its wide variety of games. As noted by Bastasa et al. (2024), BingoPlus offers a diverse range of online gambling games—including poker, blackjack, and slots—that provide an experience similar to traditional casinos. The study by Bastasa et al. (2024) marks the rise of digital platforms, such as BingoPlus, as a significant transformation in gambling practices. This is followed by JILIBET at 35.97% (132 responses), establishing it as the second most utilized platform, 747 Live (23.71%), and Arena Plus (22.07%). The usage was then followed by the remaining categories, with OKBet (14.17%), and the other platform the respondents added, PhilSlot (3%), constituting the smallest used. This data suggests that while the market has several competitors, most of the reported online gambling activity is concentrated among a few key platforms, particularly BingoPlus and JILIBET.

3.2. How can the use of mobile money payments be described in terms of

3.2.1. Perceived Convenience

Table 7 Level of Mobile Money Payments Usage in Terms of Perceived Convenience

Mobile Money Payments in Online Gambling					
	Perceived Convenience	**Mean**	**Rank**	**Description**	**Interpretation**
1.	I find it easy to deposit using mobile money into my online gambling account	3.03	1	Agree	High Level
2.	It makes my participation in online gambling quick and time-saving through the use of mobile money	2.90	5	Agree	High Level
3.	I can easily access gambling funds anytime through the use of mobile money	2.92	4	Agree	High Level
4.	My participation in online gambling through mobile money is hassle-free	2.97	3	Agree	High Level
5.	I receive fast and reliable online gambling payments when using mobile money	3.01	2	Agree	High Level
	Overall Mean	2.97		Agree	High Level

Table 7 highlights the mobile money payments in terms of perceived convenience. Item 1 recorded the highest mean score of 3.03, which indicates that students perceive the process of funding their online gambling accounts as highly effortless and straightforward. The ease of transaction is further supported by a lower, yet still high, mean score of 2.90 for Item 2, which addresses the quick and time-saving nature of using mobile money payments. The overall mean of 2.97 suggested that mobile money successfully enables and engages students in high engagement in online gambling.

Item 1, stating, "*I find it easy to deposit using mobile money into my online gambling account,"* achieved the highest mean score of 3.03, categorizing this perception as a high level of convenience. One respondent stated, *"Agree, kapag gusto ko -scatter, madali lang magcash in kasi may mga ewallet na," w*hich indicates that students experience minimal difficulty when funding their online gambling accounts via mobile money payments. This ease aligns with the study by Hing et al. (2022), which established that the convenience of smartphone betting—facilitated by instant deposits, quick navigation, and rapid access—contributes significantly to more frequent and impulsive gambling among young adults.

Item 2, which scored the lowest mean yet still indicated a high level of agreement, states, *"It makes my participation in online gambling quick and time-saving through the use of mobile money."* This item highlights the ease of access and convenience enabled by mobile money, a point directly supported by one respondent who shared, "*Agree, isang click mo lang sa Gcash through agent, okay na agad eh, minsan sa QR Code pa.*" This underscores how the speed and seamlessness of mobile money significantly facilitate quick and easy deposit behaviors for online gambling participation. This finding aligns with the study of Wardana et al. (2022), factors such as transaction speed, expected performance, and cultural influences significantly drive the adoption of mobile payments.

The overall mean, 2.97, implies a high level that using mobile money makes it easier for the students to engage in online gambling. Mobile money is an instrument that they use to regularly engage in online gambling. This is attested by the study of Wijaya et al. (2022), which found that mobile payment methods enhance convenience, which in turn increases consumers' willingness to pay. Due to their perceived ease and speed, mobile money payment apps were the preferred method for gambling transactions. This convenience is implicated in promoting riskier behaviors, such as longer betting sessions, higher expenditures, and loss-chasing. This clearly establishes convenience as a key driver in the use of mobile money for gambling, which has significant implications for users' financial well-being.

3.2.2. Perceived Anonymity

Table 8 highlights the mobile money payments in terms of perceived anonymity. Item 3, with the strongest agreement among students, with a mean of 2.85, confirms the belief that utilizing mobile money in this context maintains a high level of confidentiality for their transactions. Although Item 5 also shows a high level of agreement, the lowest mean of 2.69 relates to the perception that mobile money payments effectively avoid tracking of these specific payment transactions. Meanwhile, the overall mean of 2.77 suggests that students perceive a high level of anonymity when using mobile money for payment.

Table 8 Level of Mobile Money Payments Usage in Terms of Perceived Anonymity

	Mobile Money Payments in Online Gambling				
	Perceived Anonymity	**Mean**	**Rank**	**Description**	**Interpretation**
1.	I feel more secure betting anonymously in online gambling through the use of mobile payment	2.76	4	Agree	High Level
2.	Using mobile money payments maintains my identity hidden from others	2.78	3	Agree	High Level
3.	Using mobile money payments maintains the confidentiality of the transaction by using my mobile money account	2.85	1	Agree	High Level
4.	I find that using mobile money payment provides me with a sense of privacy	2.79	2	Agree	High Level
5.	Using mobile money payments avoids tracking of payment transactions	2.69	5	Agree	High Level
	Overall Mean	2.77		Agree	High Level

Item 3, which states, "Using mobile money payments maintains confidentiality of transactions by using my mobile money account," garnered the highest mean score of 2.85. This strongly indicates that students prioritize and perceive mobile money as a tool that safeguards their transaction details. This is proven by the statement of one respondent, *"Agree, kasi gumagamit ako palagi ng sarili kong account, mapa-QR code man, kaya tago."* This perceived anonymity and cwonfidentiality align with the findings of Ghelfi et al. (2024), who suggest that the privacy afforded by online platforms makes gambling attractive, even to groups who typically avoid physical casinos.

Item 3, which states, "Using mobile money payments avoids tracking of payment transactions," revealed the lowest mean score (2.69), suggesting that while a high level of agreement still exists, a notable portion of respondents disagreed with the statement. This disagreement is strongly supported by a respondent's feedback, who shared, *"Disagree, may group chat kami na kung saan nandon yung iba't ibang tao na gustong magsugal, at nandon yung agents namin na sila ang nagcacash in sa gambling account namin. Kitang-kita don kung magkano ang cinash in mo, or kung nanalo ka, kitang -kita ang cash out mo. Gumagamit din kami ng Gcash para magsend sa agent, kaya kita din ang number ko, pati buong pangalan,"* directly indicating that the use of mobile money (like GCash) in the context of an agent-mediated system does not protect their financial transactions from being tracked or seen. This finding is consistent with the literature (Klein, 2025), which notes that even as gambling systems evolve, agents maintain their financial mediator role by having players manually use services like GCash or Maya to transfer funds to a platform's bank account or a third-party intermediary, thereby keeping the transaction process visible and trackable within the agent's network.

The overall mean of 2.77 for the anonymity of mobile money payment indicates a high level of perceived anonymity, suggesting that using mobile money for online gambling provides users with a strong sense of private identity. This finding is consistent with existing literature, which posits that the anonymity provided by online gambling platforms can alleviate feelings of guilt and embarrassment. Furthermore, it supports the notion that the discretion offered by mobile platforms is highly valued, as it allows students to conceal their betting activities from family and peers, ultimately facilitating more frequent and secretive gambling behavior (Hing et al., 2015).

3.3. What is the level of students' financial well-being in terms of

3.3.1. Spending Patterns

Table 9 Level of Financial Well-being in terms of Spending Patterns

Financial Well-Being					
	Spending Pattern	**Mean**	**Rank**	**Description**	**Interpretation**
1.	I prepare a budget for my expenses/spending, either written or electronic	2.42	3	Disagree	Low Level
2.	I commit to the budget plan for my school expenses (e.g., school supplies, school project, fare)	2.44	2	Disagree	Low Level
3.	I spend less than Php 500 a month on entertainment and leisure	2.46	1	Disagree	Low Level
4.	I prioritize maximizing the value of every money I spend on school expenses	2.33	5	Disagree	Low Level
5.	I am satisfied with my current spending habits	2.38	4	Disagree	Low Level
	Overall Mean	2.41		Disagree	Low Level

Table 9 highlights the financial well-being of the students in terms of spending patterns. Item 3, which had the highest mean of 2.46, indicates that students disagree with the statement that they spend less than Php 500.00 on leisure and entertainment. Meanwhile, Item 4 recorded the lowest mean of 2.33, showing that students disagree with the idea that they prioritize maximizing the value of the money they spend. This suggests that students do not actively prioritize value maximization in their purchases. Finally, the overall mean of 2.41 suggests that students generally exhibit a low level of healthy spending patterns because they are willing to spend more on non-essentials and tend to prioritize wants over careful budgeting.

Item 3, which states, "I spend less than Php 500 a month on entertainment and leisure," garnered the highest mean score of 2.46, representing a low level of agreement. This result indicates that students generally disagree with spending

such a minimal amount, with a tendency toward higher leisure expenditures. This trend is confirmed by one student's remark, "Disagree, *kulang pa ang 500 sa aking mga luho at sa mga wants ko*," suggesting that their spending habits have become difficult to regulate. This finding aligns with the study by Fiedler (2019), who posits that high-demand consumption is often driven by excessive spending habits and a struggle to control financial behavior.

Item 4, which states, "I prioritize maximizing the value of every money I spend on school expenses," received the lowest mean score of 2.33, indicating a low level of agreement. This suggests that students often do not prioritize school-related costs in their financial decision-making, a sentiment by one respondent who remarked, "Disagree, *hihingi na lang ako ng pambayad sa magulang ko kung may bayarin at yung extra money ko ay ipapambili ko na lang ng iba kong gusto, minsan ipapang-scatter ko na lang baka dumami*." Such responses imply that students may prioritize entertainment and gambling over essential educational or living expenses, demonstrating a lack of financial discipline and a willingness to sacrifice basic needs for leisure. These findings are supported by the study of Boland (2025), which revealed that students' weekly gambling expenditures often equal their grocery budgets, with 10% of students even reducing their food intake to fund their bets.

Meanwhile, the overall mean of 2.41 indicates a low level of agreement, showing that students generally have poor spending patterns. This finding aligns with the study of Bona (2022), who found a significant link between a lack of financial management skills and poor spending behavior among students. The research highlights that without proper financial education, students often struggle to prioritize essential expenses, leading to increased financial stress and a tendency to spend impulsively on non-essential items

3.3.2. Debt Management

Table 10 Level of Financial Well-being in terms of Debt Management

Financial Well-being					
	Debt Management	**Mean**	**Rank**	**Description**	**Interpretation**
1.	I have less borrowing than I expected to have at this point	2.85	4	Agree	High Level
2..	I am confident that I will be able to pay off the debts I acquired while I am a student	2.89	1	Agree	High Level
3.	I feel in complete control of my borrowing and repayment decisions	2.87	3	Agree	High Level
4.	I can pay the minimum required amount on my debts (e.g., Spay later, Tiktokpay Later, Gloans) on or before the due date	2.88	2	Agree	High Level
5.	I track all my debt balances (e.g., installments) on a regular basis (e.g., monthly)	2.82	5	Agree	High Level
	Overall Mean	2.86		Agree	High Level

Table 10 highlights the financial well-being of the students in terms of debt management. Item 2 recorded the highest mean of 2.89, showing the students' perception that they can pay off their debts even while they are still in school. In contrast, Item 5 received the lowest mean of 2.82, indicating that they track their debt balances on a regular basis. Overall, the total mean of 2.86 suggests a high level of confidence among students that they can immediately pay off their debts, even while managing their status as students.

Item 2, which states, "I am confident that I will be able to pay off debts I acquired while I am a student," garnered the highest mean score of 2.89, signifying that students possess a high level of confidence in their debt management. This is supported by qualitative feedback from a respondent who remarked, "Agree, *hindi naman ako nangungutang kasi sapat naman ang baon, pati kung mangungutang man maliliit lang, kunwari kulang lang ang pamasahe ko at naiibalik ko naman agad kinabukasan*." This suggests that many students avoid significant debt because their allowances are sufficient for their daily needs. This finding aligns with the study of Nwiado and Wordu (2023), who found that students with adequate financial support and a positive attitude toward debt are more likely to manage their obligations effectively and avoid long-term financial burdens.

Item 5, "I track all my debt balances (e.g., installments) on a regular basis (e.g., monthly)," yielded the lowest mean score of 2.82, revealing a significant trend of negligence toward formal debt monitoring among students. This behavior is exemplified by one respondent who shared, "*Hindi ko naman masyadong natatrack ang utang ko, hindi naman ganon*

kalakakihan, o kaya naman ShopeePay lang pinakamalaki kong utang," suggesting that students often perceive small-scale or digital platform debts as manageable without reviewing them. Such findings are attested by the study of Garman and Flick (2024), who observed that individuals frequently engage in "mental accounting" rather than formal tracking forn smaller liabilities. This indicates that when debt is perceived as low-stakes—such as small installments or revolving credit—debtors are less likely to maintain detailed records.

With an overall mean of 2.86, the findings indicate a high level of effective debt management practices among students. This score suggests that students are not merely passive borrowers but are actively engaged in monitoring and regulating their financial obligations. This result supports the assertions of Nowacki (2025), who noted that debt management requires a structured, intentional approach and that individuals can maintain financial independence through consistent discipline.

3.3.3. Emergency Savings

Table 11 Level of Financial Well-being in terms of Emergency Savings

Financial Well-being					
	Emergency Savings	**Mean**	**Rank**	**Description**	**Interpretation**
1.	I have set a clear, specific goal (e.g., Php 500.00) for how much money I want to save.	2.81	2	Agree	High Level
2.	Having an emergency fund gives me a greater capacity to meet my basic needs (e.g., food, rent)	2.80	3	Agree	High Level
3.	Having emergency savings makes me feel financially capable of accommodating unplanned but necessary purchases (e.g., replacing a broken phone, tuition fee)	2.86	1	Agree	High Level
4.	I keep my emergency savings separate from my regular spending money (e.g., in a different account)	2.74	4	Agree	High Level
5.	I regularly set aside a portion of my income (e.g., allowance, part-time job) specifically for savings	2.48	5	Disagree	Low Level
	Overall Mean	2.74		Agree	High Level

Table 11 presents the students' level of financial well-being regarding their emergency savings. Item 3 garnered the highest mean score of 2.86, suggesting that students feel financially capable of handling unplanned but essential expenses, such as tuition or device repairs. Conversely, Item 5 garnered the lowest mean score of 2.48, highlighting a common difficulty among students in consistently setting aside a dedicated portion of their allowance specifically for savings. The overall mean of 2.47 indicates a high level of perceived financial readiness among students concerning emergency savings.

Item 3 earned the highest mean score of 2.86, states with a high level, and agrees that "Having emergency savings makes me feel financially capable of accommodating unplanned but necessary purchases (e.g., replacing a broken phone, tuition fee)." This is reinforced by feedback from a respondent who shared, *"Matipid talaga akong tao. Galing sa allowance tapos nagkataon din na galing sa minsang nanalo ako sa pustahan sa NBA basketball, inipon ko kaya nang masira ang cellphone ko, nakabili ako,"* illustrating a high level of confidence in managing financial shocks through disciplined saving and management and how online betting helps them. This observation is further supported by Wicker (2015), who found that financial gain is one of the most frequently reported perceived benefits of gambling among surveyed college students, suggesting that some students view these winnings as a viable means of supplementing their emergency reserves.

Item 4 yielded the lowest mean score of 2.48, indicating that students generally disagree with the statement: "I regularly set aside a portion of my income (e.g., allowance, part-time job) specifically for savings." This suggests that most of the surveyed students struggle to prioritize or maintain consistent saving habits. A feedback reinforces this; one respondent noted, *"Mahirap din mag-ipon kasi ang mahal ng bilihin, sakto lang ang allowance ko sa gastusin sa school, paano pa ang mga luho ko?"* This highlights a reality where rising costs of goods and services consume the entirety of a student's budget, leaving no surplus for financial security. This struggle is further complicated by the desire for leisure, which students often prioritize as a form of stress relief or social participation. According to Bona (2022), social involvement and lifestyle choices significantly influence student spending, often at the expense of savings.

The overall mean (2.74) demonstrated a high level of emergency savings among students. This indicates that, despite their leisure and involvement in online gambling, many maintain essential financial behaviors that support financial stability. This is consistent with the findings of Khiatani et al. (2025), which showed that individuals classified as non-problem gamblers are more capable of sustaining savings due to their stronger perceived financial knowledge, better financial decision-making, and healthier financial attitudes compared to those with problem gambling tendencies

3.4. Is there a relationship between online gambling behavior and financial well-being among college students in the selected higher education institutions in Calapan City?

Table 12 Relationship of Online Gambling Behavior and Financial Well-being

IV: ONLINE GAMBLING BEHAVIOR	DV: FINANCIAL WELL-BEING								
	Spending Pattern			Debt Management			Emergency Savings		
	R value	Level of Significance	Interpretation	R value	Level of Significance	Interpretation	R value	Level of Significance	Interpretation
Gambling Frequency	0.042	No Correlation	Not Significant	0.072	No Correlation	Not Significant	-0.074	No Correlation	Not Significant
Gambling Types	-0.002	No Correlation	Not Significant	0.155	Very low Correlation	Significant	0.023	No Correlation	Not Significant
Gambling Platforms	0.032	No Correlation	Not Significant	0.109	Very Low Correlation	Significant	-0.020	No Correlation	Not Significant

Critical r value = 0.102 Level of significance = 95% df = 370

Table 12 shows the relationship between online gambling behavior and the financial well-being of the students. A very low relationship exists between gambling types and debt management (r=0.155), while a very low relationship exists between platforms and debt management (r=0.110). The rest of the variables have no relationship, indicated by the computed negative r-values.

This finding implies that online gambling does not entirely affect the financial well-being of the students. One respondent noted, *"Nag-oonline gambling lang naman ako para malibang, wala rin namang malaking pera para tumaya nang tumaya,"* illustrating that gambling is often viewed as a leisure activity rather than a financial strategy. This is because students have limited financial capacity since their main source of funds is from their parents, and they occasionally engage in online gambling and make it their habit. This financial constraint is supported by Lostutter, T. W. et al (2020), who observed that retention-time attitudes were not significantly associated with gambling behaviors and may not be directly relevant to college students, given their often-limited fiscal circumstances. Furthermore, financial gain is often not the primary driver for this demographic; as noted in another study, fun and enjoyment were the modal motivations in students scoring as non-problem gambling and low-risk gambling on the PGSI, respectively (Zolkwer, M. B et al., 2022).

3.5. Is there a relationship between the use of mobile money payment in online gambling and financial well-being among college students in the selected higher education institutions in Calapan City?

Table 13 Relationship of Mobile Money Payments and Financial Well-being

IV: MOBILE MONEY PAYMENTS	DV: FINANCIAL WELL-BEING								
	Spending Pattern			Debt Management			Emergency Savings		
	R value	Level of Significance	Interpretation	R value	Level of Significance	Interpretation	R value	Level of Significance	Interpretation
Perceived Convenience	0.161	Very Low Correlation	Significant	0.393	Low Correlation	Significant	0.216	Low Correlation	Significant
Perceived Anonymity	0.167	Very Low Correlation	Significant	0.413	Moderate Correlation	Significant	0.190	Very Low Correlation	Significant

Critical r value = 0.102 Level of significance = 95% df = 370

Table 13 shows the relationship between mobile money payments and the financial well-being of the students. A moderate relationship exists between perceived anonymity and debt management (r=0.413), while a low relationship exists between perceived convenience and debt management (r=0.393) and between perceived convenience and emergency savings (r=0.216). The rest of the variables have a very low relationship, indicated by the computed r-value.

This finding implies that students utilize mobile money primarily as a channel for paying small financial obligations and engaging in low-value transactions. One respondent highlighted this trend, noting *"Hindi din naman ganon kalaki ang allowance ko, mostly ginagamit ko lang ang mga ewallet sa load, at simpleng transaction, kunwari pangbayad sa pagkain,"* which suggests that for students, mobile wallets serve as a practical tool for micro-transactions rather than large-scale financial management. This observation aligns with the research of Liu and Wu (2020), who noted that students exhibit random consumption behaviors that are further stimulated by the accessibility of non-cash payment systems. This stimulation is largely driven by the short-term convenience that mobile wallets provide. In this regard, Panganiban et al. (2022) emphasize the transformative role of mobile money applications, noting that they effectively decrease or eliminate the need for users to carry payment methods like cash and credit cards. By integrating payment capabilities into a device that students already use daily on their smartphones, the process becomes 'easier and more convenient than ever before,' thereby streamlining the consumption behavior of business students.

3.6. Based on the findings of the study, what intervention program for students may be proposed?

Table 14 Problem Gambling Severity Index (PGSI) of students

Level of Severity	Population	Rate
Non-Problem Gambler	165	44.35%
Low-Risk Gambler	113	30.38%
Moderate-Risk Gambler	56	15.05%
Problem Gambler	38	10.22%

Table 14 presents the levels of students' problem gambling severity based on the Problem Gambling Severity Index (PGSI). The majority of respondents were classified as non-problem gamblers (44.53%), while the smallest group consisted of problem gamblers (10.22%). These results are consistent with the gambling frequency data, indicating that most students gamble only once to twice per week (74.39%). This supports Delfabbro et al. (2020), who found that higher online gambling frequency is associated with higher PGSI scores.

Given these findings, intervention programs aimed at promoting students' financial well-being should be tailored according to their PGSI classification.

Table 15 Non-Problem Gamblers: Prevention and Awareness

Action Item	Responsible Parties	Timeline	Key Resources/Deliverables	Success Metric
A. Develop Digital Learning Modules	Financial Organizations (Lead), IT/E-Learning Team	2 Months	2 online modules covering: Budgeting Basics, Financial Management, Gaming vs. Gambling, Student Loan Management	50% completion rate by non-problem gamblers within 2 months.
B. Production and Dissemination of Educational Video	Financial Organizations, Apostolic Vicariate of Calapan (AVC), Psychological Institutions (Lead), and Higher Education Institutions (HEI)	1 month	A 10-minute video addressing: Illusion of Control, Randomness/Probability, Actual Chances of Winning	Reach at least 500,000 combined views and engagements in social media platforms within 1 month. Reach 90% of the parishes in AVC within 1 month.

For non-problem gamblers, the intervention focuses on prevention and awareness to reduce the likelihood of future gambling-related harm. Financial organizations may develop and publish online learning modules on budgeting,

responsible financial management, distinguishing gaming from gambling, and managing student loans to help students gain better control over their money. In collaboration with the Apostolic Vicariate of Calapan, financial organizations, and psychological institutions, a 10-minute educational video may also be developed and disseminated to address common gambling misconceptions and cognitive errors. The video shall cover key topics identified by AvanceCare (2024), such as the illusion of control, randomness, and actual chances of winning, to help students develop a more realistic understanding of gambling outcomes.

Table 16 Low-Risk Gamblers: School-Based Education and Skill Building

Action Item	Responsible Parties	Timeline	Key Resources/Deliverables	Success Metric
A. Program Development & Materials Prep	Higher Education Institutions (HEI) Lead, Psychology Organizations, and Financial Management Organizations	2 Months	Curriculum for a one-day program, presentation slides, and exercise worksheets for mobile transaction tracking.	Finalized curriculum and materials reviewed and approved by all stakeholders.
B. Morning Session: Cognitive Correction	Educational Facilitators (Trained Teachers/Staff)	4 hours	Delivery of content correcting: Distorted Economic Perceptions and Superstitious Thinking	Post-session survey showing 80% of participants reported a better understanding of risk.
C. Afternoon Session: Practical Skill Building	Financial Counselors/Coaches	4 hours	Practical exercises: Transaction Tracking and Spending Pattern Identification, Setting Transaction Limits and Weekly Caps (simulated or real).	70% of attendees successfully establish a simulated spending limit/cap during the session.
D. Post-Program Follow-up	Higher Education Institutions (HEI), Research Office, and Student Affairs Office	3 Months post-program	Short-term assessment of gambling behavior change and financial awareness.	Reduction in self-reported gambling frequency and expenditure at 3-month follow-up.

For low-risk gamblers, the proposed intervention adopts a school-based educational approach through a one-day educational program in higher education institutions in Calapan. The morning session shall focus on topics suggested by AvanceCare (2024), including correcting distorted economic perceptions of gambling and addressing superstitious thinking related to betting behaviors. The afternoon session shall engage students in exercises such as tracking mobile payment transactions, identifying spending patterns, and establishing transaction limits and weekly spending caps. These combined approaches ensure that students not only understand the risks associated with gambling but also acquire practical financial management skills to prevent escalation to higher risk levels.

Table 17 Moderate-Risk Gamblers: Structured Support and Accountability

Action Item	Responsible Parties	Timeline	Key Resources/Deliverables	Success Metric
A. Promote 24/7 Helpline	Higher Education Institutions (HEI), Psychology Organizations, and Financial Management Organizations	Ongoing	Prominently display Kaya Rehab Helpline information on campus and digital platforms.	Increased calls/inquiries reported by Kaya Rehab from the target population.
B. Develop & Staff Group	Counseling Office (Lead), Financial Coach, Licensed Counselor	2 Months	Curriculum and schedule for 6 to 8-session group therapy, secure a facilitator team.	Recruitment of 2-3 cohorts of

Therapy Program				participants within the first 6 months.
C. Implement Zero-Based Budgeting (ZBB)	Financial Coach, Counselor	During Group Sessions	Workbook and tools for monitoring gambling expenditures and implementing ZBB.	75% of participants consistently track their gambling expenses and achieve ZBB implementation by the final session.
D. Assess Accountability & Discipline	Counselor/Facilitator	End of Program	Post-intervention assessment of financial discipline and reduction in harmful behaviors.	50% reduction in self-reported gambling-related expenditures during the program period.

For moderate-risk gamblers, more targeted and supportive interventions are required. The study proposes the promotion of Kaya Rehab, a Philippine-based 24/7 helpline that provides access to professional assistance, enabling students to gain a deeper understanding of the psychology of gambling, gambling-related harms, early indicators of problematic behavior, and available intervention services. Furthermore, a 6- to 8-session structured group therapy program facilitated by a financial coach and a counselor is proposed. During these sessions, participants will monitor their gambling-related expenditures and work toward implementing a zero-based budgeting system. This structured intervention aims to promote accountability, improve financial discipline, and reduce harmful gambling behaviors through guided reflection and professional support.

Table 18 Problem Gamblers: Professional Treatment and Rehabilitation

Action Item	**Responsible Parties**	**Timeline**	**Key Resources/Deliverables**	**Success Metric**
A. Establish Partnerships	Municipality of Calapan (Lead), Higher Education Institutions (HEI), Local Government Unit (LGU)	6 Months	Signed Memoranda of Agreement (MOA) with Gamblers Anonymous (GA) and KAYA Addiction Treatment Center.	Formalized partnership providing clear referral pathways and discounted/subsidized services (if applicable).
B. Develop Referral System	Counseling Office, Partner Organizations	1 Month post-MOA	Clear, confidential, and accessible referral protocol for students needing comprehensive treatment.	100% of identified students are offered direct, timely referral to professional treatment.
C. Utilize Unified Treatment Model	KAYA Treatment Center, GA	Ongoing	Comprehensive treatment incorporating CBT, Twelve-Step Facilitation, Schema Therapy, etc.	Successful admission and retention rates in the professional treatment programs.
D. Create Aftercare Linkage	Counseling Office, GA	Ongoing	Link students who complete treatment with ongoing peer support (e.g., local GA meetings).	75% of students completing treatment are linked to aftercare support.

For problem gamblers, the intervention prioritizes professional treatment and rehabilitation. The study proposes collaboration with the Municipality of Calapan to establish partnerships with Gambling Anonymous and the KAYA Addiction Treatment Center. These organizations offer comprehensive treatment programs using a Unified Treatment Model, which integrates Cognitive Behavioral Therapy (CBT), Twelve-Step Facilitation, Schema Therapy, and other evidence-based modalities tailored to individual needs.

4. Conclusions

Online gambling has become increasingly prevalent among the majority of students, with virtual casinos—specifically the Bingoplus platform—ranking as the most frequently used medium for betting. The causes of this finding are the sense of curiosity and the intense psychological excitement that these digital games provide. Despite the high engagement, many participants remain unaware of the potential risks. They often view the activity as a simple hobby rather than a high-stakes financial hazard.

At a high level, students perceive mobile payment as a convenient and highly anonymous method for conducting financial transactions. This perception directly influences its use in online gambling, as mobile money payments offer unmatched convenience and speed, allowing transactions to be completed in seconds, anytime and anywhere. Furthermore, mobile money provides easy access for quickly depositing and withdrawing gambling funds.

Students do not have a good spending pattern. However, they agreed that they demonstrate good debt management practices and adequate emergency savings. Online gambling typically affects the students' spending patterns because they divert their money away from necessary expenses and spend it on leisure activities, such as online gambling. This shows a real conflict: students are good at handling big, important things like paying off debts and saving for emergencies, but they struggle with day-to-day spending choices, especially when fun or risky activities like online gambling tempt them.

Based on the findings, the null hypothesis is rejected, indicating a significant relationship between online gambling behavior and financial well-being. However, a deeper analysis reveals that only the types of gambling pursued and the gambling platforms used have a significant impact on one financial well-being variable, which is debt management. Therefore, online gambling affects the financial well-being of students in a way that some gambling types and platforms require continuous cash-ins that encourage debt accumulation, but not in a way that it affects the spending pattern and emergency savings because of their financial dependency on their parents.

Based on the findings, the null hypothesis is rejected, indicating a significant relationship between mobile money payments and financial well-being. While the convenience and anonymity of these digital payments do contribute to student engagement in online gambling, this specific correlation is only low-to-moderate in strength. Therefore, the overall conclusion is that mobile money is a powerful tool influencing student finances, both positively through its ease of use and negatively by enabling low-to-moderate levels of anonymous online gambling. In response to the second most frequent answer on the PGSI (Problem Gambling Severity Index).

To prevent harmful effects caused by online gambling and mobile money payments usage on the financial well-being, education and awareness initiatives that promote healthy financial habits will be given to non-problem gamblers, while school-based education and skill building shall be reinforced to low-risk gamblers.

Structured support and accountability programs, including a 24/7 helpline and multi-session group therapy for professional assistance and improved financial discipline, shall be organized for moderate-problem gamblers. Immediate, professional treatment and rehabilitation programs from gambling-help organizations shall be given to problem gamblers.

Recommendations

It is recommended that prevention strategies be implemented to educate the public about the potential harms of gambling. This is in response to the findings of this study that individuals engage in gambling out of curiosity and with the belief that online gambling is merely a leisure activity, while overlooking the risks associated with it. This prevention strategy may be carried out through the publication of an educational module that distinguishes gaming from gambling, as well as the presentation of a 10-minute informational video discussing common gambling misconceptions to be viewed by the students.

Transaction tracking, spending limits, and weekly caps can be implemented to reduce gambling-related risks. This is recommended because the convenience and anonymity of mobile money payment systems enable quick and frequent gambling transactions, which may lead to poor financial control among students. These measures may be implemented through financial literacy sessions and workshops conducted by financial counselors.

It is recommended that student gamblers learn to identify their spending patterns and monitor their gambling expenditures to help them improve handling of day-to-day spending choices. This is based on the study’s findings that

students tend to spend money when exposed to online gambling temptations. The implementation of this recommendation may be achieved through a four-hour guided session for students led by financial coaches, along with the distribution of workbooks and practical tools designed for expense tracking and monitoring.

For future researchers, it is recommended to explore additional variables in the analysis of online gambling behavior. This recommendation is based on the limitation that variables such as gambling frequency, gambling types, and gambling platforms may not fully capture online gambling behavior when measured using Likert-scale questions. Specifically, future studies may incorporate quantitative measures such as gambling expenditure, level of financial involvement, and chasing losses to gain deeper and more accurate insights into online gambling behavior.

Methodologically, replacing random sampling with Stratified Purposive Sampling is advised to ensure both proportional representation across schools and the accurate identification of students who regularly engage in online gambling.

Compliance with ethical standards

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Disclosure of conflict of interest

The authors declare no conflicts of interest.

Statement of ethical approval

This study was approved by the relevant institutional review boards, ensuring the protection of participants' rights and welfare throughout the data collection process.

Statement of informed consent

All participants provided informed consent prior to enrollment. Participation was voluntary, and the anonymity of all respondents has been maintained.

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