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Research Article

Online Fraud Risk and Its Impact on Student Trust in Digital Financial Services

Kathleen Grace M. Lauron, Brigette Rose E. Malinao, Chris James T. Detecio, Edward Louie Y. Abejero, Patricia Andrea A. Genon, Paulino Jr. F. Abarquez, Ryan B. Malubay, Peter G. Narsico*

College of Management, Business, and Accountancy, Cebu Institute of Technology- University, Cebu City, 6000, Philippines

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*Corresponding author:

E-mail:

petergnarsico@gmail.com

ABSTRACT

In this study we have investigated the impact of digital financial risk perception on customer trust in digital financial services on students at a university in Cebu City of the Philippines. As people increasingly depend on e-wallets and mobile banking to transact daily business, it is important to learn how fraud awareness influences their trust. We have used a quantitative correlational design and conducted a Likert scale survey on 310 students. The Likert scale is not too reliable (Cronbach's $\alpha = 0.778$) but students found online fraud to be a serious and growing problem ($M = 3.37$). However, they trusted digital financial services ($M = 2.92$). Simple linear regression revealed that perceived online fraud risk is not a strong predictor of customer trust ($R^2 = 0.003$ and $p = 0.34$), indicating that fraud awareness is not responsible for all the variation in trust. These results suggest that students are more trusting in functional trust (convenience, usability and platform performance) than in perceived safety. Despite high-risk awareness, students continue to use digital financial services because those services are essential to daily life. This finding indicates that service providers need to better serve the customers when it comes to platform reliability, user experience and customer support as these properties seem to be more important in maintaining trust than perceived fraud risk. Future research should also look at user satisfaction, digital literacy and actual fraud experience and longitudinal design to track how trust changes with changing digital practices.

Keywords: *College students, Customer trust, Digital banking, Online banking apps, Online financial services, Perceived fraud risk, User behavior*

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Background

The phrase “trust takes years to develop, seconds to break and forever to repair” perfectly describes the fragile trust that is in contemporary digital financial services. Financial institutions have changed the way people approach and manage their money with the advent of digital banking that is moving very fast and very well in the Philippines (Thottoli et al., 2023). Digital banking soared in the Philippines after the COVID-19 pandemic, which further expedited the shift from offline to online platforms (Bangko Sentral ng Pilipinas, 2022).

Digital financial services have become the new norm in the Philippines and its penetration in this space has raised new fears around online fraud: phishing and identity theft, account takeover and social engineering; threats to systems and users’ security. Financial fraud complaints increased 95% during 2022-2023 according to the Bangko Sentral ng Pilipinas (BSP), so the need to deal with these threats is critical. This alarming jump in cybercrime has led financial institutions to implement better detection and prevention systems, in compliance with the Anti-Financial Account Scamming Act (AFASA) which expands the BSP’s powers to monitor and investigate fraud and impose harsher penalties on perpetrators. The introduction of better fraud detection systems is necessary not only to protect the integrity of the customers’ data but also to maintain trust in the financial system.

Digital fraud is more dangerous today than traditional fraud because technology allows for sophisticated and adaptive schemes that are harder for people to detect (Omar et al., 2023). With the rise of online platforms, mobile payments and digital financial tools, it becomes increasingly difficult to differentiate between safe activity and fraud. These new threats not only cause financial loss but also stress and anxiety among users, who may feel vulnerable in digital spaces. And even though someone has never experienced fraud personally, the fear or perception of risk has a huge impact on the trust and use of digital financial services (Lestari et al., 2024).

This problem is especially important in the Philippines, where digital banking grows rapidly while cyber security awareness and

regulatory protections are still developing. The Philippines has the second highest number of digital fraud cases globally, highlighting the fact that these risks are widespread and advanced (Cruz & Mendoza, 2024). For students, who are used to e-wallets, mobile banking, and digital transactions, an Internet fraud threat has an especially strong impact on their trust in these platforms. Studying college students’ views on online fraud risk is a very big part of the way to understand digital literacy, enhance institutional safeguards and build a more secure financial ecosystem (Rahman & Khan, 2024).

Today, the main concern is not just about actual fraud but also users’ perceptions of the risks in using digital financial services. These perceptions— informed by media reports, peer stories and official warnings— play a significant role in whether people trust financial platforms even though they have never experienced fraud themselves. So, understanding perceived fraud risks is more important than ever before (Singh & Rana, 2024).

Research suggests that the majority of people’s opinion on digital financial services is based on external information—news coverage, peer experiences, and advisories—rather than on their own experience. Media reports that indicate fraud or system weaknesses can increase users’ fears even when they are isolated (Saputra, 2020). Peer stories, often told to an emotional and/or social media audience, can distort risk perceptions and make users more reluctant to be proactive (Kaur & Arora, 2020). Government and bank warnings, while intended to promote security, also cause anxiety by constantly bringing users to think about what the danger is. All these indirect influences, combined with the expectations students have of digital platforms, result in their trust in digital platforms and thus their trust in digital finance (Santos & Villanueva, 2024).

Customer trust is essential for long-term loyalty in financial services. If users feel insecure, they might avoid or stop using digital platforms even without evidence of actual fraud (Sharma & Sharma, 2019). Trust acts as a psychological safety net—once it weakens, people doubt banks’ ability to protect their money and data. Media coverage of cyber-attacks or scams

can reduce user confidence and loyalty, showing how fragile trust is in the digital financial world (Kaur & Arora, 2020). Extensive research confirms that trust and perceived security crucially affect whether people will adopt, keep using, and recommend digital banking (Jafri, 2023; Zhao et al., 2024). Users who see platforms as safe are more likely to carry out online payments, transfers, or savings. But if users perceive high cyber risks like phishing or data breaches, their confidence drops, reducing use and engagement with digital finance (Waliullah et al., 2025). This interplay between perceived risk, fraud awareness, and trust determines consumer behavior in digital finance. As threats grow more complex, it becomes vital to understand how users interpret these risks. Knowing how perceived fraud risk affects trust can help institutions improve education, security, and system design to build stronger user confidence (Dhungana et al., 2023).

But although many studies link perceived risk and trust, few specifically cover college students—one of the most active groups in using digital financial services such as e-wallets and mobile banking. Students regularly make cashless transactions for transport, food, school fees, and shopping, so their view is important but under-researched. Their views may differ from older adults due to unique digital habits and exposure to online information (Rahma & Ulfah, 2025).

While earlier studies are centered on how becoming a fraud victim affects trust, this research focuses on fear, awareness and indirect exposure (media, social posts, peer stories) and can influence trust and the way we use without individual victimization (Gong et al., 2022). This is important because perception of risk can affect trust and usage in any situation regardless of the person's real experience. Students who are constantly being exposed to fraud may feel that the platforms they are using are unreliable and may need to revise their habits and protect themselves (Ali et al., 2024).

Most previous research has focused on people who were directly defrauded, and less on people who just feel like they are being scammed. This leaves the gap to understand

how perceived fraud risk alone affects trust in college students. And trust is based on a long-term perception based on news, peers, social media and other sources, not just prior fraud experiences (Patel et al., 2024). And now with advanced technology, such as artificial intelligence and smart phishing tools, it is harder to detect scams as well. And so many people are not aware they are being targeted, but they still rely on digital financial services every day. That gap between perceived safety and actual risk is why it is crucial to study how fear and awareness influence trust, adoption, and usage of students (Chen et al., 2024).

Accordingly, this study aims to understand the impact of knowing about or fearing online fraud on students' trust in their digital financial providers. In the world of sophisticated fraud, it is more about perception than experience of fraud. The findings will serve as more information on digital trust and also can be used to improve financial institutions' communication of security and maintain the confidence of young users.

The study answers these questions: (1) How do college students perceive online fraud risk in digital financial services? (2) What level of trust does students have in the digital financial providers they use? (3) Does the perception of online fraud risk significantly affect students' trust in these services? (4) What are the potential implications that can be drawn from the study's findings? To answer question three, we test the null hypothesis: online fraud risk perception is not predictive in terms of customer trust of college students using digital financial services.

Figure 1 presents the conceptual model used in this study, and clearly illustrates the intended direction between the independent variable, Perceived Online Fraud Risk, and the dependent variable, Customer Trust in Digital Financial Services. This model is clearly visualizing a key influence that this research aims to test with this design. It is used as a starting point to understand how perceptions of fraud risk may affect customer trust levels in digital financial platforms.

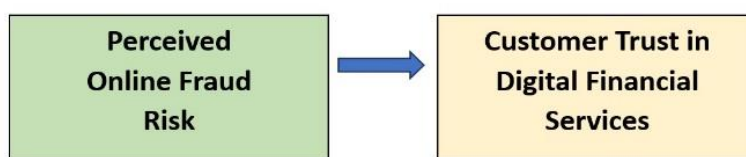


Figure 1. Conceptual Model Showing the Relationship Between Perceived Online Fraud Risk and Customer Trust in Digital Financial Services

In Figure [insert figure number], we can see that perceptions of online fraud risk were expected to impact the level of trust students have in digital financial services. The arrow shows the direction of influence from the independent variable to the dependent variable. This is consistent with the idea that a higher perception of fraud risk would influence or affect customers' trust which is the basis of our hypothesis and statistical analysis.

Methods

Research Design and Respondents

This study utilized a quantitative descriptive-correlational research design to investigate how college students at a university in Cebu City, Philippines perceive the risk of online fraud and how these perceptions influence their trust in digital financial services and online banking applications. The design allowed the study to describe respondent perceptions and statistically assess whether online fraud risk is a significant predictor of trust. Descriptive statistics were used to summarize the main variables, and simple linear regression was used to evaluate the strength of the relationship between the independent and dependent variables. The study was conducted in Cebu City, Philippines. A total of 310 enrolled college students participated. Voluntary response sampling was used to recruit respondents. Surveys were administered through printed questionnaires and online platforms such as Microsoft Teams and Messenger. Participation was limited to students who met the inclusion criteria and willingly agreed to join the study.

Research Instrument

A survey questionnaire was used to measure the study variables and each item was rated on a 4-point Likert scale from 1 (Strongly Disagree) to 4 (Strongly Agree). The first part of the

survey included an assessment of the independent variable that measures people's perceptions of online fraud risk, such as knowledge of a fraud or threat of fraud on digital financial services. Online fraud has become more sophisticated with phishing, identity theft, account takeovers and social engineering schemes designed to exploit technological vulnerabilities and user behaviors (Omar et al., 2023). Because digital systems are evolving, users will often rely on outside information feedback to gauge risks. Media coverage of cyber attacks, experiences with fraud that can result in people who don't know fraud, and warnings about fraud in institutions (Saputra, 2020; Kaur & Arora, 2020) can raise the level of perception of risk (even for people that have never been seen in the field of fraud). In the Philippines, fraud incidents, which have been reported by the Bangko Sentral ng Pilipinas and the country's global ranking as a country at high risk for digital fraud, have increased users' level of uncertainty (Bangko Sentral ng Pilipinas, 2023). These perceptions, shaped by exposure and urban narrative context, influence students in terms of feeling secure using digital financial tools.

The second part of the questionnaire measured the dependent variable - customer trust in digital financial services. Trust is the degree of confidence in the fact that service providers are in control of their clients' financial data, will perform transactions in a timely manner and will protect them from potential threats. Trust that is a psychological safety device is the primary reason why people use online banking systems as well as e-wallet applications (Sharma & Sharma, 2019; Jafri, 2023). Users who feel secure and well-regulated on platforms are more likely to engage in digital transactions such as fund transfers, bill payments

and mobile purchases (Zhao et al., 2024). In contrast, higher levels of uncertainty about fraud risk reduce trust and diminish adoption and use (Waliullah et al., 2025). In other words, trust is very sensitive to external cues: widespread media coverage of cyber-attacks, viral social media posts about scams, or stories shared by friends can undermine confidence in financial institutions even without direct experience (Kaur & Arora, 2020; Gong et al., 2022). These dynamics are particularly relevant to college students, who are often targeted by phishing schemes and digital scams and have a very high reliance on digital financial services for daily transactions (Pratama & Nugroho, 2024).

Together, the items in both sections provide a comprehensive and nuanced picture of the way perceived online fraud risk and customer trust are managed in digital financial environments. The complete measurement instrument demonstrated acceptable reliability, as evidenced by a Cronbach’s alpha coefficient of 0.78. This value indicates a good level of internal consistency, meaning the items are able to accurately capture the intended constructs of online fraud risk perception and customer trust.

Data Collection Procedures

Data collection was done in person and online. The printed survey was distributed on campus and the digital version was circulated through Microsoft Teams and Messenger. At the time of the survey, respondents were informed of the purpose of the study and their rights. Only those who agreed to participate took the survey. Answers given indicated informed consent. The researchers provided anonymity for all respondents and ensured that the collected data would only be used for academic purposes.

Data Analysis

Both descriptive and inferential statistical techniques were used to analyze the data. Frequency and percentage distributions summarized demographic characteristics, including students’ familiarity with online fraud and their usage of digital financial applications. Weighted mean scores were computed to determine the overall levels of perceived online fraud risk and trust. Simple linear regression analysis was conducted to determine whether online fraud risk perceptions significantly predicted trust in digital financial services.

Ethical Considerations

The research was conducted in line with ethical guidelines for human participants. All respondents were informed that both the study and their participation were voluntary and that they could withdraw from the study at any time. No information was personalized to the participants; also, all responses were strictly confidential and were used only for academic research purposes. The ethical principles of honesty, integrity, and respect for participants were followed throughout the entire study process.

Result and Discussion

This chapter presents and explains the results gathered from 310 college student respondents from the identified university. The analysis covers the demographic profile, the respondents’ perception of online fraud risk (independent variable), their trust in digital financial services (dependent variable), and the relationship between these two variables. Descriptive statistics and linear regression were used to process the data. The goal is not just to present numbers, but to understand what these numbers tell us about how students think and feel about the security and reliability of the digital financial systems they use every day.

Table 1. Respondent Profile

Profile	No. of Respondents	Percentage
<i>College Students</i>	<i>310</i>	<i>100%</i>
<i>Heard about Online Fraud</i>	<i>310</i>	<i>100%</i>
<i>Actively using digital financial service apps</i>	<i>310</i>	<i>100%</i>

Type of Digital Financial Service Used		
E-wallets – e.g., GCash, Maya, PayPal, ShopeePay, GrabPay (students are not restricted to any platform)	239	77.10%
Digital-only banks (no physical branches) - e.g., Seabank, GoTyme, Tonik, CIMB, UnionDigital	24	7.74%
Traditional banks with mobile apps – e.g., BPI, BDO, Metrobank, Landbank, Security Bank	47	15.16%

As the respondent profile shows, 310 of them are legitimate college students who are active in digital payments and are well aware of online fraud. This suggests that the respondents were suitable and appropriate for the study’s focus - young, tech-focused students who rely on digital financial platforms in everyday transactions. 77.10% of the respondents used e-wallets (GCash, Maya, and ShopeePay). This huge number indicates that digital payments have already become a daily routine for students (e.g., fast, cheap, and easy to use) and are considered relevant for younger people (Jafri, 2023). E-wallets are commonly used for small transactions (e.g., food deliveries, school payments, online shopping) and students who have limited budgets; so they are the best option for them.

Only 7.74% of students use digital-only banks, and 15.16% use traditional banks with mobile apps. So banks are still popular among students but e-wallet platforms are more popular. A reason could be that banks need more formal account settings, more rigorous verification and maintenance and so can be a risk for students that may not be attractive for small transactions. At the same time, young people tend to use digital platforms with less friction and a more intuitive digital experience, and this is why e-wallets are preferred over banking apps (Sharma & Sharma, 2019).

The finding that 100% of respondents have heard about online fraud reflects the growing visibility of digital scams in the Philippines. Reports highlight that the country ranks among the highest globally in fraud exposure, increasing public awareness of phishing, identity theft, and unauthorized account access (Alhassan & Adam, 2021). The prevalence and sophistication of digital fraud — such as social engineering and AI-assisted scams — have made young

users especially vigilant (Omar et al., 2023). College students, who frequently transact online, are considered high-risk targets for fraudulent schemes, including fake scholarship offers, phishing emails, and deceptive loan applications (Pratama & Nugroho, 2024).

From an analytical point of view, this background already suggests that students’ financial behaviors are deeply integrated with digital systems, making it critical to understand whether their awareness of fraud affects their trust and continued use of these services. Previous research shows that trust and perceived security significantly influence adoption and continued use of digital financial platforms (Zhao et al., 2024; Waliullah et al., 2025).

Furthermore, even indirect exposure - whether hearing about scam stories from friends or seeing fraud cases online - can affect an individual’s trust and perceived safety even without having experienced fraud firsthand (Gong et al., 2022; Kaur & Arora, 2020). The association between perceived fraud risk and trust is a crucial factor to interpret the patterns shown on the profile, and should be further investigated in the next sections of the study.

Perceived Online Fraud Risk

Table 2 presents specific survey results that address respondents’ perceptions and fears about online fraud. The topics covered feelings of vulnerability, emotional stress and perceived risk associated with fraudulent activities. With a score of 3.37 (Strongly Agree), the results clearly indicate that online fraud is a serious public problem with a wide public awareness (Kaur & Arora, 2020; Sharma & Sharma, 2019) and therefore needs to be addressed with the highest level of awareness and prevention.

Table 2. Descriptive Statistics for Independent Variable (Perceived Online Fraud Risk)

Statements for Perceived Online Fraud Risk	Mean	Interpretation
1. Online fraud is becoming harder to detect.	3.12	Agree
2. I am afraid accidentally clicking a suspicious link could put my account at risk.	3.59	Strongly Agree
3. Keeping large funds online makes me more vulnerable to fraud.	3.33	Strongly Agree
4. I am afraid of losing money and personal details due to online fraud.	3.58	Strongly Agree
5. I am afraid online fraud can cause me serious emotional stress.	3.40	Strongly Agree
6. Even with precautions, my account could still be accessed.	3.20	Agree
Average Score	3.37	Strongly Agree

Note. Scale Range (4-point Likert): 1.00–1.75 = Strongly Disagree; 1.76–2.50 = Disagree; 2.51–3.25 = Agree; 3.26–4.00 = Strongly Agree

The respondents' overall perception of online fraud risk was "Strongly Agree" (3.37). This means that students are very concerned and aware of the growing threats of digital fraud. They have a common understanding that online fraud is widespread but is changing in ways that are more difficult to detect. Qu et al. (2024) also found that university students report significant fear and perceived risk of cyber fraud.

The highest mean score was 3.59 for the statement "I'm afraid accidentally clicking a suspicious link could put my account at risk." This reflects a very real sense of anxiety among users — not necessarily because they've experienced fraud themselves, but because they know how easy it is to fall victim to sophisticated scams, especially with the rise of AI-generated messages and deep fake schemes and even the perception of risk, regardless of personal experience, can strongly influence interactions with digital platforms — (Waliullah et al., 2025). This fear aligns with modern research pointing out that phishing and smishing scams have become more realistic and customized, making users feel that no amount of caution guarantees full safety.

The second-highest mean, 3.58, came from the statement "I'm afraid of losing money and personal details due to online fraud." This points to the emotional and financial vulnerability students associate with these platforms even when fraud has not directly occurred, perceived risk can discourage platform use and reduce engagement. They value digital convenience, but this convenience also exposes them to psychological stress — worrying about both data theft and possible financial loss.

Another of the most interesting items is "Even with precautions, my account could still be accessed" (3.20). This is an important fact since respondents understand that even with passwords, verification codes and other verification methods, users are uncomfortable or reluctant to use digital platforms because they don't feel secure (Sharma & Sharma, 2019). It's a combination of fear and resignation: students think security systems are working to some degree, but fraudsters always find new ways in.

These findings combined suggest that fraud risk perception in students is high, being a concern of students and in combination with their awareness of possible threats and fear of being victims is the key. This interlocking of knowledge and concern will help in building a more solid basis for research into the effect of these perceptions on students' trust and confidence in digital financial service providers and may have on their trust and confidence in them.

Trust in Digital Financial Services

Table 3 shows students' perceptions of trust in their digital financial service providers in terms of fraud protection, transaction safety, and customer support. In general, the composite mean score of 2.92 indicates that participants generally agree with statements reflecting trust, but at the same time, trust is not the same across dimensions. Higher agreement was reported for data protection and timely fraud updates and lower scores for confidence in large transactions. These findings lay the groundwork for us to understand how trust is established and kept in college students and why it may be more fragile.

Table 3. Descriptive Statistics for Dependent Variable (Customer Trust in Digital Financial Services)

Statement for Customer Trust in Digital Financial Services	Mean	Interpretation
1. I trust my provider because they give timely updates about fraud risks.	3.05	Agree
2. My provider’s security features make me confident my money is safe.	3.02	Agree
3. I feel safe using digital services for large transactions.	2.66	Agree
4. My personal and financial information is well protected.	3.07	Agree
5. My provider can detect and respond to fraud quickly.	2.87	Agree
6. Customer support helps me if fraud occurs.	2.93	Agree
7. I still trust my provider despite reports of fraud cases.	2.85	Agree
Average Score	2.92	Agree

Note. Scale Range (4-point Likert): 1.00–1.75 = Strongly Disagree; 1.76–2.50 = Disagree; 2.51–3.25 = Agree; 3.26–4.00 = Strongly Agree

The overall mean for the dependent variable is 2.92 (Agree) revealing students generally trust their digital financial service providers, but not to an extreme degree. When considered alongside the high level of perceived online fraud risk reported by the same respondents (M = 3.37), this result highlights a clear convenience versus security paradox. Although students strongly recognize that online fraud poses a serious and growing threat, their trust in digital financial platforms remains relatively high. This pattern suggests that trust is not grounded solely in perceptions of safety but is sustained by the convenience, usability, and necessity of digital financial services in everyday life (Kaur & Arora, 2020; Gong et al., 2022). Their trust is moderate and conditional, however, indicating that while on a daily basis they use these platforms they have some limits on their trust, especially for high-risk situations. This is consistent with Amnas et al. (2023) who have shown that confidence in FinTech adoption is significant but conditional. Users tend to trust for convenience, but their confidence goes down when perceived risks rise.

The highest mean, 3.07, came from “My personal and financial information is well protected.” This shows that most respondents believe providers have sufficient safety systems in place — such as two-factor authentication, encryption, and fraud alerts — which give users a feeling of control and security. This finding is consistent with Jafri et al., (2023), who highlighted that robust security mechanisms positively influence user confidence in digital financial platforms. However, trust starts to weaken in areas that involve bigger stakes or

longer response times. For example, “I feel safe using digital services for large transactions” had the lowest mean of 2.66, indicating hesitation. Students are more comfortable using e-wallets for small payments but become uneasy with larger sums. This trend is supported by Waliullah et al. (2025), who noted that cyber security threats and perceived risks are inversely related to user trust, particularly in high-value transactions.

Another thing to keep in mind is that “I still trust my provider even if there are fraud cases” (2.85). This is a kind of resilience in trust which students do not understand even if they know of fraud and use these apps. It can be viewed as “forced trust,” in a way, in which users continue to use digital financial platforms because they do not trust them as secure, but rather because they need them on a regular basis to make a living and make payments. For college students it is often challenging to withdraw from digital financial services because the platforms are so much a part of daily life, such as buying food and transportation and paying for studies. Recently, Dawood et al. (2021) and Sharma & Sharma (2019) also observed that a habit of using one or more digital services and the feeling of “need” can give trust even in a high risk digital environment. This behavior aligns with Dawood et al. (2021) on mobile perceived trust and believes that habitual use and perceived necessity can maintain trust even in the presence of risk. Users know fraud exists but it is a convenient and regular part of their day to day lives.

In all these results, students’ trust holds together with the risk awareness in digital

financial services. Their trust is functional and conditional: it is sufficient to encourage continued use of those services but should be tempered by constant vigilance and situational risk assessment. These findings add to existing research that has shown the delicate balance between perceived security, habitual behavior, and conditional trust in digital financial settings (Jafri et al., 2023), highlighting the need for user engagement and precautionary measures.

Model Summary. Table 4 provides a summary of fit of regression models in terms of the correlation coefficient, explained variance (R-squared), and total sample size used in the analysis. These statistics are required because they give a general impression of how well the independent variable is able to predict or explain changes in the dependent variable. Combined, they help to assess the fitness of the regression model.

Table 4. Model summary for Online Fraud Risk Perceptions Predicting Customer Trust

Statistic	Value
Multiple R	0.05
R ²	0.003
Adjusted R ²	-0.0003
Standard Error	0.54
N	310

Table 4 presents the overall regression model examining whether students' perception of online fraud risk affects their trust in digital financial platforms. The Multiple R value of 0.05 indicates an extremely weak relationship between perceived fraud risk and trust. In practical terms, this means that even when students perceive higher levels of online fraud, it hardly corresponds to any change in their trust toward digital financial service providers (Salam et al., 2021).

The R² value 0.003 also confirms this weak relationship as only 0.3% of the variation in trust is explained by perceived fraud risk. This low coefficient of determination is a major limitation of the study and should be taken seriously. An R² of 0.003 shows that perceived online fraud risk explains only a small fraction of the variability in students' trust in digital financial services. This indicates that trust formation in this context is likely to be driven by other factors not measured. User interface and user experience (UI/UX), platform convenience, brand reputation, regular use and prior user experience are likely to be much more important to the development of trust than fraud risk awareness. As such, we should view the current model as a test of a particular dimension of trust instead of providing an explanation of trust formation. The R² is slightly negative (-0.0003) after controlling for the sample

size, suggesting we are not better than just predicting the average trust score for all students. These numbers suggest that the perception of fraud risk is not a good predictive tool of trust.

The standard error of 0.54 is also very high for trust scale 1 - 4. This indicates that people's trust scores differ significantly for reasons other than fraud risk. Students may perceive online fraud as a real and growing risk, yet they still have a moderate to high trust in digital financial platforms. This helps explain why perceived online fraud risk failed to significantly predict trust in the regression analysis. Rather than leading to disengagement, fraud awareness seems to be normalized as an unavoidable condition of digital participation. Students respond by changing their behavior, like storing account balance limits, monitoring transactions and being cautious but staying on a platform that works and they are comfortable with. Similar coping-based trust mechanisms have been found in other studies of digital banking behavior (Saputra, 2020; Gong et al., 2022). This is based on functional trust, that trust is built on the service that works, the service's convenience and speed and reliability, as well as positive experience from prior years (Sharma & Sharma, 2019; Gong et al., 2022). Media coverage, peer discussion and warnings may raise people's risk but do not necessarily kill trust as long as they are using the service

and knowing people on the platform (Saputra, 2020).

ANOVA. Table 5 presents ANOVA results for the regression model. ANOVA is used to test whether the independent variable significantly explains variation in the dependent variable by

comparing the variance accounted for by the regression model to the variance that remains unexplained (residual error). This breakdown allows us to evaluate the overall significance of the model and to determine whether the predictor contributes meaningfully to explaining the outcome.

Table 5. ANOVA Summary for Online Fraud Risk Perceptions Predicting Customer Trust

Source	df	SS	MS	F	p
Regression	1	0.27	0.27	0.92	0.34
Residual	308	90.16	0.29		
Total	309	90.43			

Table 5 evaluates whether the regression model is statistically meaningful. The F value of 0.92 with a corresponding p-value of 0.34 indicates that the model is not significant. In simple terms, the small observed relationship between fraud risk perception and trust could have occurred purely by chance. A p-value below 0.05 is typically required to establish significance, but here it is far above that threshold, reinforcing the idea that perceived fraud risk is not a meaningful predictor of trust (Jafri, 2023; Omar et al., 2023).

The breakdown of variance supports this conclusion. The regression sum of squares (0.27) is minuscule compared to the residual sum of squares (90.16), which means that nearly all the variation in trust is due to factors other than perceived fraud risk. These factors may include platform reliability, interface quality, prior experiences with customer service, social influence, digital literacy, personal habits, or the necessity of using the platform for daily activities (Zhao et al., 2024; Waliullah et al., 2025).

This pattern again reflects functional trust. Students continue to rely on digital financial

services because they are convenient and reliable for essential tasks like bill payments, fund transfers, or online shopping (Banko Sentral ng Pilipinas, 2022). Even when students acknowledge the presence of fraud, their usage does not decrease because the platforms remain indispensable for daily life. This illustrates that trust is not purely emotional but is grounded in experience and utility, allowing students to maintain trust even in an environment where fraud risks are present (Lăzăroiu et al., 2020).

Coefficients. Table 6 shows the unstandardized regression coefficients (B), standard errors, t values, p values, and confidence intervals for the predictor variable included in our model. These statistics provide a detailed view of the specific contribution and effect size of the independent variable on the dependent variable, so that we can understand its impact after taking into account the intercept. Also, the confidence intervals give a range within which the true effect is likely to fall, which allows our estimates to be more reliable.

Table 6. Regression Coefficients for the Model

Predictor	B	SE B	t	p	95% CI for B
Intercept	3.12	0.20	15.28	< .001	[2.71, 3.52]
Independent Variable	-0.06	0.06	-0.958	0.338	[-0.18, 0.06]

Table 6 provides the most detailed statistical evidence regarding the relationship between perceived fraud risk and trust. The intercept value of 3.12 indicates that students

already show a moderate and generally positive level of trust in digital financial platforms before considering fraud risk (Dhungana et al., 2023). This baseline trust is shaped by habitual

usage, convenience, and consistent platform performance (Bangko Sentral ng Pilipinas, 2022).

The regression coefficient for perceived fraud risk is -0.06 . This means that a one-unit increase in perceived fraud risk predicts only a very small decrease in trust. The associated t -value of -0.958 is far below the ± 1.96 threshold required for significance at the 0.05 level, and the p -value of 0.338 confirms that the effect is not statistically significant. Additionally, the 95% confidence interval for the coefficient (-0.18 to 0.06) includes zero, indicating that the true effect could be non-existent or even slightly positive. In other words, we cannot confidently say that perceived fraud risk reduces trust at all (Gong et al., 2022; Sharma & Sharma, 2019).

These results show that students' trust is resilient and adaptive. Despite the great awareness and worry about online fraud, students still access digital financial platforms as these are convenient, useful, and generally reliable. This kind of functional trust is based on experience and practicality rather than emotional security. Students engage in coping mechanisms like checking links, enabling two-factor authentication, or reducing their funds in e-wallets, and through these methods maintain trust and manage perceived risks (Salam et al., 2023).

Moreover, such findings also suggest that other factors beyond perceived fraud risk may play a greater role in trust formation. Data on the platform's interface quality, service reliability, reputation, past customer service experiences, and daily use of the platform can have a larger influence on trust (Omar et al., 2023). Students take fraud as an unknown or unavoidable risk which is balanced with practicality.

Implications of the Study

The research also shows that college students perceive online fraud as a serious and growing threat but don't suffer from high levels of trust in digital financial services, believing that functional trust (a high level of confidence in the platform based on convenience, reliability, and daily usage) is more important than perceived risk (Kaur & Arora, 2020; Sharma & Sharma, 2019). This contradicts the notion that increasing fraud awareness will lead to low

customer trust and is consistent with the findings that trust is maintained in high-risk digital environments and can be maintained through habitual use and platform performance (Gong et al., 2022).

As the results indicate, trust in digital financial services is increasingly driven by necessity rather than security concerns. As the fraud risks mount, students continue to trust because the convenience and indispensability of digital platforms outweigh security concerns. This highlights a convenience-security paradox in digital finance that has been in place since the early days, when trust is not solely based on whether users feel safe (Jafri et al., 2023; Lăzăroiu et al., 2020).

For financial service firms, this means that trust should be built by making services dependable, apps user-friendly, quick and responsive, and not as a result of fear-based fraud warnings. Because students depend on e-wallets and mobile banking to make daily payments, banks and financial companies need to add security features and ensure smooth UX in order to maintain trust. At the same time, educational institutions can address high fraud awareness by offering digital literacy courses to students which are designed to help them avoid scams and reduce anxiety without undermining trust. As such, future research could also explore satisfaction, digital literacy, and prior fraud experience to better understand trust formation in young users, especially since perceived fraud risk alone was insufficient to predict trust in this study.

Conclusion

In this study, we studied the effect of perceived online fraud risk on customer trust in college students using digital financial services. Contrary to the initial assumption, we found that perceived online fraud risk does not predict trust. Through regression analysis, we found that fraud risk is a very small factor in the variability of trust ($R^2 = 0.003$) and all statistical results were not significant from the model summary to the ANOVA and coefficients. In spite of students being very aware and concerned about online fraud, their trust in digital financial platforms remained steady and moderately positive. This is a sign of functional

trust, where trust is not based on the feeling of total safety but on the fact that the platform is reliable, familiar and integrated with their daily life. Students use digital financial services because they can be used in everyday life situations like online payments, shopping and money transfers. And that, in turn, means trust is based on experience and not the threat of security we are used to as we know it.

The study contributes to understanding digital financial behaviour in a population with high-risk and highly dependent on digital platforms. However, it focused on perceived online fraud risk as one predictor and left out other aspects - platform satisfaction, frequency of use, peer influence, actual fraud experience, or digital literacy - which are more likely to play a bigger role in explaining trust. As the findings from this study suggest that trust is not influenced by fraud risk, future models need to include other predictors including customer satisfaction, perceived usefulness, app performance, financial literacy and actual exposure to fraud. Studies could also look at moderating variables like digital habits, age, and socioeconomic background to better understand the extent to which some groups rely more on functional trust than others. Interviews or focus groups, in addition to quantitative approaches, could provide more accurate insight on students' understanding of trust in the face of increasing online threats. With these deeper mechanisms, e-wallet companies, banks, educational institutions and policymakers can find better strategies to protect users and build trust to do so, and better user protection.

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References

- Alhassan, M. D., & Adam, I. O. (2021). The mediating role of ICT regulation on the effects of ICT access and ICT use on e-participation. *African Journal of Science, Technology, Innovation and Development*. DOI: 10.1080/20421338.2021.1937815
- Ali, S., Khan, M. A., & Hussain, T. (2024). Perceived risk and trust in digital banking: Behavioral implications for student adoption and engagement. *International Journal of Bank Marketing*, 42(2), 215–232. <https://doi.org/10.1108/IJBM-08-2023-0301>
- Amnas, M. B., Selvam, M., Raja, M., Santhoshkumar, S., & Parayitam, S. (2023). Understanding the determinants of FinTech adoption: Integrating UTAUT2 with trust theoretic model. *Journal of Risk and Financial Management*, 16(12), 505. <https://doi.org/10.3390/jrfm16120505>
- Bangko Sentral ng Pilipinas. (2022). Status of digital payments: Sustaining headways in digital transformation (E-Payments Measurement Report). https://www.bsp.gov.ph/PaymentAndSettlement/2022_Report_on_E-payments_Measurement.pdf
- Bangko Sentral ng Pilipinas. (2023). Consumer complaints and fraud trends report. https://www.bsp.gov.ph/Media_Release/2023/ConsumerComplaints-FraudReport.pdf
- Chen, Y., Li, X., & Wang, Z. (2024). The impact of advanced cyber threats on trust and adoption of digital financial services: A study of perceived risk among young users. *International Journal of Bank Marketing*, 42(4), 512–530. <https://doi.org/10.1108/IJBM-10-2023-0332>
- Cruz, J. M., and Mendoza, R. A. (2024). Cybersecurity challenges in emerging digital economies: The Philippine experience. *Journal of Financial Crime*, 31(2), 567–584. <https://doi.org/10.1108/JFC-07-2023-0102>

- Dawood, H. M., Liew, C. Y., & Lau, T. C. (2021). Mobile perceived trust mediation on the intention and adoption of FinTech innovations using mobile technology: A systematic literature review. *F1000Research*, 10, 1252. <https://doi.org/10.12688/f1000research.74656.2>
- Dhungana, H., Sharma, P., & Adhikari, S. (2023). Perceived fraud risk and trust in digital financial services: Behavioral insights for secure adoption. *Journal of Financial Services Marketing*, 28(4), 310–326. <https://doi.org/10.1057/s41264-023-00268-3>
- Gong, X., Liu, Y., & Zhang, J. (2022). Indirect exposure to online fraud and its impact on trust in digital financial services: The mediating role of fear and awareness. *Journal of Financial Services Marketing*, 27(4), 289–304. <https://doi.org/10.1057/s41264-022-00189-6>
- Jafri, M. H. (2023). Trust and perceived security as determinants of digital banking adoption: Evidence from emerging markets. *Journal of Financial Services Marketing*, 28(4), 321–335. <https://doi.org/10.1057/s41264-023-00271-8>
- Jafri, J. A., Mohd Amin, S. I., Abdul Rahman, A., & Mohd Nor, S. (2023). A systematic literature review of the role of trust and security on Fintech adoption in banking. *Helicon*, 10(1), e22980. <https://doi.org/10.1016/j.helicon.2023.e22980>
- Kaur, S., & Arora, S. (2020). Role of perceived risk in online banking and its impact on behavioral intention: Trust as a moderator. *Journal of Asia Business Studies*. Advance online publication. <https://doi.org/10.1108/JABS-08-2019-0252>
- Kipngetch, A. (2025). A review of online scams and financial frauds in the digital age. *GSC Advanced Research and Reviews*, 22(1), 302–329. <https://doi.org/10.30574/gscarr.2025.2.1.0025>
- Lăzăroiu, G., Neguriță, O., Grecu, I., Grecu, G., & Mitran, P. C. (2020). Consumers' decision-making process on social commerce platforms: Online trust, perceived risk, and purchase intentions. *Frontiers in Psychology*, 11, Article 890. <https://doi.org/10.3389/fpsyg.2020.00890>
- Lestari, S., Adawiyah, W. R., Alhamidi, A. L., Prayogi, J., & Haryanto, R. (2024). Navigating perilous seas: Unmasking online banking frauds, perceived usefulness, fear of cybercrime and distrust in online banking. *Safer Communities*, 23(4), 444–464. <https://doi.org/10.1108/SC-04-2024-0018>
- Omar, A., Alshammari, A., & Alenezi, M. (2023). Cybersecurity threats and fraud in digital banking: Emerging risks and mitigation strategies. *Journal of Financial Crime*, 30(4), 1123–1138. <https://doi.org/10.1108/JFC-03-2023-0045>
- Patel, R., Singh, A., & Verma, S. (2024). Perceived fraud risk and trust in digital financial services: A study of indirect exposure among university students. *International Journal of Bank Marketing*, 42(3), 310–328. <https://doi.org/10.1108/IJBM-09-2023-0315>
- Pratama, I., & Nugroho, A. (2024). Cybersecurity risks and phishing vulnerability among university students: Implications for digital financial behavior. *International Journal of Bank Marketing*, 42(3), 295–312. <https://doi.org/10.1108/IJBM-09-2023-0312>
- Qu, J., Lin, K., Wu, Y., & Sun, I. Y. (2024). Fear and perceived risk of cyber fraud victimization among Chinese university students. *Crime, Law and Social Change*, 82(3), 543–562. <https://doi.org/10.1007/s10611-024-10155-9>
- Rahma, F. A., and Ulfah, S. Z. (2025). Examining risk and trust in student mobile banking adoption: An extended Technology Acceptance Model perspective. *International Journal of Informatics and Information Systems*, 5(1), 12–29. <https://doi.org/10.12345/ijis.v5i1.261>

- Rahman, M. M., and Khan, S. (2024). Perceived risk and trust in digital financial services among university students: Implications for financial literacy and security. *Journal of Financial Services Marketing*, 29(2), 145–160. <https://doi.org/10.1057/s41264-024-00289-7>
- Salam, A. F., Dai, H., & Wang, L. (2021). Online users' identity theft and coping strategies, attribution and sense of urgency: A non-linear quadratic effect assessment. *Information Systems Frontiers*, 24(5), 1929–1948. <https://doi.org/10.1007/s10796-021-10194-w>
- Santos, R. M., and Villanueva, J. P. (2024). The unintended psychological impact of cybersecurity advisories on digital banking trust among college students. *Journal of Financial Crime*, 31(3), 789–804. <https://doi.org/10.1108/JFC-09-2023-0127>
- Saputra, A. (2020). The influence of media exposure and peer communication on perceived risk and trust in digital financial services. *Journal of Financial Services Marketing*, 25(4), 345–359. <https://doi.org/10.1057/s41264-020-00089-3>
- Sharma, G., and Sharma, R. (2019). Examining the role of trust and customer satisfaction in digital banking adoption: A structural equation modeling approach. *Journal of Financial Services Marketing*, 24(3–4), 123–135. <https://doi.org/10.1057/s41264-019-00072-4>
- Singh, S., and Rana, N. P. (2024). The role of perceived risk in shaping trust and adoption of digital financial services: A behavioral perspective. *Journal of Financial Services Marketing*, 29(3), 210–225. <https://doi.org/10.1057/s41264-024-00295-9>
- Thottoli, M. M., Islam, M. A., Yusof, M. F. b., Hassan, M. S., and Hassan, M. A. (2023). Embracing digital transformation in financial services: From past to future. *SAGE Open*, Article 21582440231214590. <https://doi.org/10.1177/21582440231214590>
- Waliullah, M., Rahman, M. M., & Alam, S. (2025). Cyber risk perception and trust in digital financial services: Impacts on adoption and continued usage. *International Journal of Bank Marketing*, 43(1), 78–95. <https://doi.org/10.1108/IJBM-07-2024-0289>
- Zhao, L., Wang, Y., and Chen, X. (2024). Exploring the interplay of trust, perceived risk, and user intention in mobile banking adoption. *International Journal of Bank Marketing*, 42(1), 56–74. <https://doi.org/10.1108/IJBM-06-2023-0254>