

DETERMINANTS OF YOUTHS' AWARENESS OF INVESTMENT SCAM THREATS IN MALAYSIA

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ABSTRACT

The study investigates the factors associated with youths' awareness of investment scam threats in Malaysia, namely financial literacy, digital literacy, awareness campaigns, and peer influence. With the growing adoption of online investment platforms and digital financial services, youths are increasingly exposed to investment scam risks that may result in financial losses and victimisation. A quantitative cross-sectional research design was employed in this study. Data were collected from 162 youths aged 18 to 25 years using an online questionnaire distributed through digital platforms. The collected data were analysed using SPSS version 31. Descriptive analysis, reliability analysis, Pearson correlation analysis, and multiple regression analysis were conducted to examine the relationships between financial literacy, digital literacy, awareness campaigns, peer influence, and awareness of investment scam threats. The findings revealed that digital literacy was the strongest predictor of youths' awareness of investment scam threats, followed by financial literacy and awareness campaigns. The results suggest that youths with higher levels of digital and financial literacy are more capable of identifying fraudulent investment schemes, verifying online investment information, and recognising common scam tactics. Awareness campaigns also contributed positively to scam awareness. However, peer influence was not found to have a significant relationship with awareness of investment scam threats. Overall, the findings highlight the importance of strengthening digital literacy, financial literacy, and awareness initiatives to enhance youths' resilience against investment scams and promote safer financial decision-making in the digital environment.

Keywords: Investment, Scam, Financial Literacy, Digital Literacy, Awareness

1.0 INTRODUCTION

With the fast-paced development of digital technology and the growth of the internet, the participation of individual citizens in financial and investment activities has undergone a significant change. Youths have turned to online investment applications, cryptocurrency trading platforms, and social media platforms in recent years to seek investment that generate financial returns. At the same time, the proliferation of digital financial services has also created a greater opportunity for financial fraud and investment scams online. Investment scams are predatory schemes that promise guaranteed profits in a remarkably short time to trick consumers into investing in an insecure investment platform. The rising

number of investment scam cases contributes to the growing internet usage of university students and young adults, as reported by Umar and Dalimunthe (2024).

Investment scams have been a growing problem in Malaysia. Malaysia recorded 35,368 online financial scam cases in 2024, with total losses amounting to RM1.58 billion (Ministry of Digital Malaysia, 2025). Furthermore, the Royal Malaysia Police (PDRM) said the number of investment scam cases jumped significantly from 6,337 in 2024 to 9,603 in 2025, resulting in losses exceeding RM1.47 billion (National Scam Response Center, 2025). In addition, the Securities Commission Malaysia released a report saying that complaints and inquiries in relation to scams hit the 3,600 mark in 2024, as losses also surpassed RM1.6 billion (Securities Commission Malaysia, 2025). As can be seen from the figures, the activities of investment scams are gradually rising and are about to pose a serious threat to the financial security of Malaysia.

Furthermore, young people, as a vulnerable group, are among those most affected by the threats of investment scams, as they are active in the online space and relatively inexperienced in investment. Berita Harian reported that the age group of 20 to 39 years old had the most cases of scams in Malaysia because they are the most active users of online platforms and social media (Talib, 2020). Likewise, Pitchan et al. (2025) highlighted the importance of low financial literacy, low digital literacy, and scam awareness to scam victimisation among youth.

Despite the increasing number of scam cases involving youths, empirical studies examining the factors influencing youths' awareness of investment scam threats remain limited, particularly in the Malaysian context. Therefore, this study seeks to address this research gap by examining the influence of financial literacy, digital literacy, awareness campaigns, and peer influence on youths' awareness of investment scam threats. The findings are expected to contribute to the development of more effective educational and preventive strategies to protect youths from becoming victims of investment scams.

1.1 Research problem

Online investment scams have emerged and become more alarming in Malaysia, as there are growing numbers of victims and financial losses reported every year. The government and financial institutions have tried to create awareness on various types of financial scams; however, there are still some people, in particular the youngsters, who are victims of fraudulent investment schemes. The Royal Malaysia Police (PDRM) has said that one of the most common commercial crimes in Malaysia is investment fraud. Some common strategies employed by scammers are promising high returns, posing as reputable companies, and using social media to target their victims. One of the most vulnerable groups is young adults, who are extremely active with digital technology and online investing. Umar and Dalimunthe (2024) conducted a study that revealed that young adults in Malaysia are vulnerable to online scams due to their extensive usage of social media and other digital platforms. Similarly, Pitchan et al. (2025) emphasised the importance of the role of youth and digitally active people as a significant portion of the online financial scams' target audience.

Furthermore, the financial literacy of Malaysian youths is also a serious matter. Many young people still do not have good knowledge about the risks of investment, financial management, and the characteristics of illegal investment schemes. In these situations, they are likely to take high-yield investment opportunities without acknowledging the risk involved. A low level of financial literacy has been associated with greater vulnerability to investment fraud victimisation (Nursanti & Trinugroho, 2024). Individuals with low digital financial literacy are less capable of identifying and avoiding digital fraud and online financial scams (Choung et al., 2023).

Apart from that, past research on awareness of investment scam threats is still limited, particularly in the Malaysian youth context. While there was extensive research on financial fraud, there was little attempt to explore the effects of other factors, such as financial literacy, awareness campaigns, peer influences, and digital literacy, on awareness of investment scams in-depth. For instance, Jensen et al. (2025) revealed that the impact of awareness campaigns in combating financial fraud is not always consistent and needs to be studied further. This means that there is a huge gap in scholarly work when it comes to the key determinants of youth awareness of threats from investment scams. The results of this study are expected to help design better financial education strategies to prevent youth from falling victim to investment scams and to create awareness among them. As a result, considering the number of investment scam cases involving youth and the lack of research on the factors that affect scam awareness, the aim of this study is to investigate the factors that affect youths' awareness of the threats of investment scams.

1.2 Research objective

More specifically, it examines the association between financial awareness, digital literacy, awareness campaigns, and peer influence on youths' awareness of the potential threat of investment scams. Based on this, the research objective of this study is as follows:

- a) To investigate the relationship between financial literacy and awareness of investment scam threats among youths.
- b) To investigate the relationship between digital literacy and awareness of investment scam threats among youths.
- c) To investigate the relationship between awareness campaigns and awareness of investment scam threats among youths.
- d) To investigate the relationship between peer influence and awareness of investment scam threats among youths.

2.0 LITERATURE REVIEW

2.1 Investment Scam Threats in the Youth Community

In recent times, with the surge of digital financial platforms and social media usage, investment scams have grown more prevalent and entrenched, targeting the younger generation (Nizzoli et al., 2020; Suet Ching et al., 2025). Many young people start choosing investment opportunities that offer high returns in a short time, but they are not aware of the risks. Fake ads on digital platforms, false pretences as a legitimate financial institution, and the imbuing of a lavish lifestyle have been the common methods used by scammers to trick their potential victims (Wani & Jabin, 2017). Youths are regarded as one of the most susceptible groups as they are active Internet users and are more likely to be exposed to online investment opportunities on social media platforms (Aji et al., 2020).

Youths' vulnerability to investment scams has also risen due to the rise in ubiquitous use of social media and other digital communication platforms (Isa et al., 2023). Many young adults depend on suggestions from influencers, peers, and online communities for financial decisions without taking any sort of verification (Donny & Adnan, 2022). This allows scam syndicates the opportunity to induce victims through false endorsements, deceptive advertisements, and peer-pressure-influencing methods. Because of this, young people with low financial literacy and limited digital knowledge become exposed to fraudulent investment products promoted via social media like Instagram, Telegram, TikTok, Facebook, and WhatsApp.

In addition to the financial impact, investment scams can also cause emotional and psychological harm to those who have fallen victim to them (Balcombe, 2025). Although the

relevant authorities have taken efforts and awareness-raising initiatives, online investment scams actually keep increasing year after year in Malaysia. When deceptive investment schemes lead to substantial losses, it can cause many victims to feel stressed, embarrassed, and distrustful of the financial systems (Osman et al., 2024). The situation demonstrates that the awareness of the investment scam issue among the youth is still not sufficient, and the level of research and policy-making in terms of educational and preventive works to combat investment scams is yet to be advanced.

2.2 Underpinning theory

Albert Bandura's Social Learning Theory (SLT) is one of the most widely recognised theories for explaining how individuals acquire knowledge, develop perceptions, and form awareness through observation, interaction, and exposure to information within their social environment (Lubis & Sazali, 2023; Ott, 2024). The theory proposes that learning occurs through observing the behaviours, experiences, and consequences encountered by others. Bandura identified four key processes involved in observational learning, namely attention, retention, reproduction, and motivation. In the contemporary digital environment, individuals are continuously exposed to information through social media, online communities, digital platforms, and various communication channels, making SLT particularly relevant for understanding how awareness is developed in response to financial and investment-related information (Goyal et al., 2023).

In the context of investment scam threats, youths are frequently exposed to investment-related content through social media platforms such as TikTok, Instagram, Facebook, Telegram, and WhatsApp (Permata Dewi, 2023). Through these platforms, individuals encounter investment advertisements, success stories, financial influencers, testimonials, and discussions shared by peers and online communities. Continuous exposure to such content may shape perceptions regarding investment opportunities and financial risks. According to SLT, individuals learn not only from their own experiences but also from observing the experiences and outcomes of others. Consequently, awareness of investment scam threats can be developed through exposure to information, observation of scam-related incidents, and learning from the experiences of victims and other individuals within the digital environment.

Furthermore, SLT is particularly relevant to the present study because all variables examined operate through learning mechanisms. Financial literacy and digital literacy are acquired through education, training, and continuous information exposure. Peer influence reflects learning through social interaction, observation, and discussion with family members, friends, and peers (Liu & Levy, 2026). Similarly, awareness campaigns function as learning platforms that expose youths to scam prevention messages, victim testimonials, educational materials, and real-life scam cases (Roy et al., 2025). Through repeated exposure to such information, individuals observe the consequences of fraudulent activities and develop greater awareness of potential risks. Therefore, awareness campaigns are conceptualised as observational learning mechanisms rather than merely institutional communication tools.

The application of SLT is considered appropriate for this study because the primary objective is to examine the development of awareness rather than behavioural intention or actual behaviour. As all four independent variables contribute to awareness formation through learning, observation, information exposure, and social interaction, SLT provides a comprehensive theoretical foundation for explaining youths' awareness of investment scam threats within a digital financial environment.

2.3 Empirical Review

2.3.1 Awareness of Investment Scam Threats

A number of studies have indicated that awareness of the threats associated with investment scams is a crucial factor in reducing the incidence of investment scam victims (Button et al., 2014; Cross, 2015). More than likely, people with higher awareness are better equipped to detect fraudulent investment schemes, comprehend scam tactics, and prevent engaging in risky financial choices (Suet Ching et al., 2025). With the swift development of digital financial technology and social media platforms, investment scams have become more common in recent years. Several scam syndicates make deceptive online schemes, offer unrealistic payouts, fake reviews, and highlight extravagant lifestyles to entice potential scam victims (Saha et al., 2024). Youth are regarded as one of the most vulnerable groups due to their high exposure to online investment opportunities and the promotion of online investment through social media (Aji et al., 2020).

A few researchers noted that low awareness among youth is one of the key factors leading to the growing number of victims of investment scams (Suet et al., 2025). Young people are easily persuaded to act on investment recommendations that come from influencers, online communities, and social media ads without verifying the content first (Oak & Shafiq, 2025). Moreover, many youths are not practitioners and are not aware of the actual risks to their finances in investing in suspicious investment offers. Additionally, previous studies have revealed that a low financial awareness is associated with an inadequate understanding of financial scam warning signs and online manipulation tactics, making the individual more vulnerable to being a victim of a financial scam (Cross, 2015). Thus, awareness about the threats of investment scams is still a matter of concern and needs to be further highlighted among youth.

2.3.2 Financial Literacy

Financial literacy is defined as a person's knowledge and understanding of financial risk assessment, budgeting, saving, and the concept of investing money (Lusardi & Mitchell, 2014). The findings of previous studies showed that there is a strong correlation between financial literacy and individuals' potential in making financial decisions and avoiding fraudulent investment schemes. One of the characteristics that a financially literate person possesses is the ability to make a critical assessment of a variety of investment options and recognize false promises of investors. Conversely, people with low financial literacy are more likely to make high-risk investment decisions and fall prey to investment fraud (Suet et al., 2025).

Moreover, earlier studies showed that there is relatively poor financial literacy among youth, especially in investment risk management and financial planning (Bannier & Neubert, 2016). There are a number of investment schemes that offer high income with little regard for the potential risk, to which many young people are drawn. Further research showed that those with greater financial literacy were less likely to be targeted for investment fraud due to improved financial literacy or because they had a clearer understanding of finances and analytical skills. Financial literacy also enhances the awareness of the need for checks and balances on the legitimacy of the investment before undertaking a financial activity (Ahmad, 2025). Hence, financial literacy is one of the most significant factors that affect youths' awareness about the threats of investment scams.

2.3.3 Digital Literacy

Digital literacy is the capacity to access, evaluate, understand, and use digital information effectively and responsibly (Ng, 2015). It encompasses things like how to spot false

information, how to check information sources on the internet, how to keep personal data secure, and how to identify suspicious online activity. Past research has reported a significant relationship between digital literacy and individuals' ability to recognise and avoid online scams and cyber fraud (Lutz, 2019). Individuals with higher levels of digital literacy tend to be more capable of identifying fake websites, fake advertisements, and online deception techniques (Hooley, 2024).

Many investment scams today are done via online platforms like Facebook, TikTok, Telegram, Instagram, and WhatsApp (Nizzoli et al., 2020). Youth with low digital literacy were more likely to fall for online financial scams, as they tend to take content on the internet at face value. In addition, scams often trick investors through technological loopholes, such as by creating trustworthy-seeming investment apps, misleading social media posts, and impersonation methods. Research also found that young people with high digital competencies are more inclined to check online information on investments prior to making investment decisions (Lutz, 2019). Thus, digital literacy is one of the factors that is significant to raise awareness of the threats of investment scams to youth (Ng, 2015).

2.3.4 Awareness Campaigns

Awareness campaigns are organized educational campaigns by governments, financial institutions, and related agencies to boost the awareness and knowledge of the public about financial scams and how to prevent them (Mohd Padil et al., 2022). Seminars, workshops, social media advertisements, educational videos, and public awareness campaigns are among these campaigns. Previous research indicated that awareness-raising campaigns can have an impact on the knowledge of the public about scam tactics, investment risks, and financial safety practices (Van Asbroeck et al., 2021). Moreover, awareness campaigns can also educate people on how to spot potential signs of fraudulent investment schemes and promote safer financial practices.

Some researchers discussed the effectiveness of awareness campaigns when carried out via digital media platforms, as young people spend a considerable amount of time online (Barman & Dakua, 2024; Masri-zada et al., 2025). Some researchers have argued that awareness-raising campaigns do not always achieve consistent success because awareness alone does not necessarily translate into participation. Limited engagement opportunities, weak motivational factors, and insufficient audience involvement may reduce the effectiveness of educational initiatives, particularly among younger populations (Tayo, 2026). From the perspective of SLT, awareness campaigns enhance scam awareness by exposing youths to educational content, victim experiences, and preventive information. Through observation and repeated exposure, youths become more familiar with scam tactics and warning signs, thereby increasing their awareness of investment scam threats (Bandura, 1977). However, awareness-raising is still significant in enhancing awareness of the threats of investment scams and minimizing financial fraud victimization among youth. Hence, constant and effective awareness drives are essential to enhance scam awareness in youth.

2.3.5 Peer Influence

Peer influence encompasses the impact of friends, groups, peers, and online communities on attitudes, perceptions, and decision-making processes of a person. Past research revealed that peer pressure has a major impact on the financial behaviours and decisions of young people (Shah, 2024; Tricoche et al., 2020). A lot of youngsters make use of the recommendations of peers, influencers, and social media groups when considering investment opportunities. Peer influence is especially strong on youth, who are often looking for social acceptance and are learning about investment trends from what is popular online. The study further showed that peer influence can have a positive or negative impact on awareness of the risk of investment scams (Yusrianti et al., 2023). Positive peer influence

can motivate people to confirm financial information, acquire investment knowledge, and act responsibly financially. Negative peer influence, however, can lead to susceptibility to investment scams among those who blindly follow investment trends in their networks without investigating them (Shah, 2024). Research also showed that FOMO (fear of missing out) and peer pressure may encourage youths to participate in fraudulent investment schemes. Hence, peer influence is an important factor that needs to be taken into consideration regarding youths' awareness of investment scam threats.

From this empirical review, as mentioned in the last section, it can be determined that financial literacy and digital literacy, awareness campaigns, and peer influence are important factors that may affect the awareness of youths regarding the threat of investment scams. Past studies consistently identified these as important factors of financial understanding, Internet information verification behaviour, and decision-making processes in the context of investment activities. Based on SLT, youths develop awareness through observation, information exposure, and social interaction. Financial literacy, digital literacy, awareness campaigns, and peer influence provide learning opportunities that enhance youths' understanding of investment scam risks and strengthen their awareness of investment scam threats. Hence, the following hypotheses are proposed to investigate whether there is any relationship between the independent variables and youth awareness of scam threats in investment.

- H₁: There is a significant relationship between financial literacy and youths' awareness of investment scam threats.
- H₂: There is a significant relationship between digital literacy and youths' awareness of investment scam threats.
- H₃: There is a significant relationship between awareness campaigns and youths' awareness of investment scam threats.
- H₄: There is a significant relationship between peer influence and youths' awareness of investment scam threats.

Based on the proposed hypotheses and findings from the empirical review, a conceptual framework is proposed to depict the relationship between financial literacy, digital literacy, awareness campaigns, and peer influence and the youths' awareness of investment scam threats (see **Fig.1**).

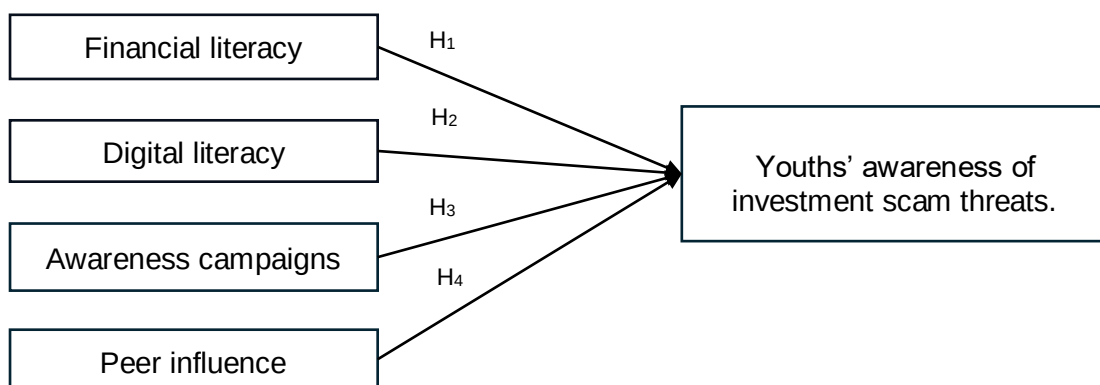


Fig. 1 Proposed conceptual framework for Youths' awareness of investment scam threats.

3.0 RESEARCH METHODOLOGY

A quantitative research design with a cross-sectional survey was used in this study to investigate the factors that are associated with youths' awareness of the investment scam

threats (Creswell, 2003). A quantitative approach was deemed suitable for the research as it aimed to explore the relationships between financial literacy, digital literacy, peer influence, awareness campaigns, and investment scam threats among youth. The cross-sectional research design allowed the researcher to gather data from the respondents at one point in time in order to get information on respondents' current perception, level of awareness, and experience in investment scams (Sekaran & Bougie, 2016). Structured questionnaires were the major instrument in gathering the data, as they have the ability to gather information systematically and efficiently, thus providing numerical data, which is suitable for numerical analysis (Hair et al., 2019).

The target population of this study consisted of youths aged 18–25 years who actively engage with digital platforms and online financial information (Suet Ching et al., 2025). Youths were selected as the focus of this study because they are among the groups most exposed to online investment opportunities and scam-related risks due to their high usage of social media and digital financial platforms (Nizzoli et al., 2020). The sampling technique used in this study was convenience sampling, whereby respondents who met the study criteria voluntarily participated in the online questionnaire distributed through Google Forms (Sekaran & Bougie, 2016). This approach was considered appropriate due to its practicality in reaching youth respondents through digital platforms (Creswell, 2014).

The sample size for this study consisted of 162 respondents. The determination of the sample size was based on the recommendation by Hair et al. (2019), who suggested that quantitative studies using multivariate analysis require a minimum sample size ranging between 5 and 10 respondents for each measurement item. Since this study contained approximately 16 to 20 questionnaire items, the minimum required sample size ranged between 80 and 200 respondents. Therefore, the final sample size of 162 respondents was considered adequate and met the recommended requirement for conducting the statistical analyses in this study.

Data were collected through an online questionnaire distributed via Google Forms and analysed using the Statistical Package for the Social Sciences (SPSS) version 31. Descriptive analysis was conducted to summarise respondents' demographic information, while reliability analysis using Cronbach's Alpha was used to evaluate the internal consistency of the questionnaire items (Nunnally & Bernstein, 1994). In addition, Pearson Correlation Analysis was performed to examine the relationships between the independent variables and awareness regarding investment scam threats, whereas multiple linear regression analysis was conducted to investigate the most influential factors affecting youths' awareness of investment scam threats (Hair et al., 2019).

Finally, ethical considerations were observed throughout the study. Participation was voluntary, and respondents were informed about the purpose of the research prior to completing the questionnaire. Their confidentiality and anonymity were assured, and no personally identifiable information was collected. All responses were used solely for academic research purposes.

4.0 RESULT AND DISCUSSION

4.1 Result

4.1.1 Demographic Analysis

Table 1 presents the number of respondents who participated in the study, which was 162. To ensure relevance of the data to the research framework, it was determined that only a particular population of the youth would be subjected to data collection.

Table 1. Demographic Profile (n = 162)

Demographic		Frequency	Percent %
Gender	Male	51	31.5
	Female	111	68.5
Age	18-21 years old	63	38.9
	22-25 years old	99	61.1
	26-30 years old	0	0
	More than 30 years old	0	0
Education level	SPM/ STPM/ Matriculation	5	3.1
	Diploma	5	3.1
	Bachelor's Degree	152	93.8

More females than males took part in the survey. Out of the 162 respondents, 111 (68.5%) were female, while 51 (31.5%) were male. This gender distribution indicates that the study was able to achieve a wide gender view, albeit with a high male ratio. All respondents were within the age range of 18–25, reflecting the age group which is the focus of the study. Participants were mostly aged between 22 and 25 years (61.1%, n = 99) in total. The remaining 38.9% (n = 63) were between 18 and 21 years old. More specifically, all participants were under the age of 26, meaning that those aged 26 and older were not included in the analysis, which is a focus on the early-to-mid youth transition period. In terms of educational qualifications, the majority of the respondents were well educated. 152 respondents (93.8%) had or were pursuing a bachelor's degree. Others consisted of an equal number of those holding Diplomas (3.1%, n = 5) and SPM/STPM/Matriculation (3.1%, n = 5). The high percentage of respondents at the degree level is consistent with the theme of high awareness of educated young people about the risks of investment scams.

4.1.2 Reliability Analysis

To determine the internal consistency of the instrument used in the study, Cronbach's alpha (α) was used as a reliability test. This analysis examines how well the items of a survey instrument measure a single latent parameter. Generally, a value of 0.70 or higher is considered good reliability (Nunnally & Bernstein, 1994).

Table 2. Reliability Statistics

Variables	Number of items	Cronbach Alpha (α)
Financial literacy	6	0.673
Digital literacy	6	0.849
Awareness campaigns	6	0.717
Peer influence	6	0.762
Awareness of investment scam threats	6	0.820

Table 2 reports the reliability results, with Cronbach's alpha values ranging from 0.673 to 0.849. Although the alpha coefficient for Financial Literacy ($\alpha = 0.673$) falls slightly below the preferred threshold of 0.70 recommended by Nunnally and Bernstein (1994), a detailed item-level analysis was conducted to assess the internal consistency of the construct. The corrected item-total correlations for all six items were well above the acceptable threshold of 0.30, indicating that all items contributed consistently to the construct. Furthermore, analysis of 'Cronbach's Alpha if Item Deleted' revealed that removing any single item would not significantly increase the alpha coefficient above the 0.70 threshold but would instead compromise the content validity and breadth of the financial literacy scale. Given that a range of 0.60 to 0.70 is considered acceptable for exploratory social science research (Hair et al., 2019), the 6-item scale was retained for subsequent analysis.

4.1.3 Correlation Analysis

Pearson correlation analysis was conducted to examine the associations between the independent variables, namely financial literacy, digital literacy, awareness campaigns, and peer influence, and the dependent variable, awareness of investment scam threats. As shown in Table 3, the strength and direction of each relationship were interpreted based on the correlation coefficient, with values closer to one (1) indicating a stronger positive correlation.

Table 3: Correlation Analysis

Variables	1	2	3	4	5
1. Awareness of investment scam threats	1.000				
2. Financial literacy	0.691**	1.000			
3. Digital literacy	0.719**	0.645**	1.000		
4. Awareness campaigns	0.576**	0.511**	0.564**	1.000	
5. Peer influence	0.140	0.219**	0.239**	0.264**	1.000

** shows correlation is significant at the 0.01 level, two-tailed.

Pearson's correlation analysis indicated that awareness of investment scam threats among youth was positively and significantly correlated with digital literacy ($r = 0.719$, $p < 0.001$) and financial literacy ($r = 0.691$, $p < 0.001$). Digital literacy showed the strongest correlation, followed by financial literacy. These findings suggest that higher levels of digital and financial literacy are correlated with greater awareness of, and alertness to, investment scam risks. Awareness campaigns also demonstrated a moderate positive and statistically significant correlation with scam awareness ($r = 0.576$, $p < 0.001$), indicating that greater exposure to educational initiatives by relevant authorities is correlated with higher awareness levels. In contrast, peer influence was not significantly correlated with scam awareness ($r = 0.140$, $p = 0.076$). Since the p-value exceeds the 0.01 significance threshold, the result suggests that peer influence does not have a statistically significant correlation with awareness of investment scams among the respondents. Overall, the findings indicate that individual knowledge-related factors, particularly digital literacy and financial literacy, are more strongly correlated with scam awareness than social influence.

4.1.4 Regression Analysis

Multiple linear regression analysis was conducted to assess the level of prediction of the independent variables on awareness of investment scam threats. Each factor was assessed individually as it contributes to the overall analysis, with the other factors controlled for. The results of the coefficients are shown in Table 4.

Table 4: Multiple Linear Regression Coefficients

Model	Coefficients				Sig.	Variance Inflation Factor (VIF)
	Unstandardized Coefficients		Standardized Coefficients	t		
	B	Std. Error	Beta			
(Constant)	0.948	0.274		3.454	< 0.001	
Financial Literacy	0.350	0.065	0.350	5.366	< 0.001	1.815
Digital Literacy	0.350	0.059	0.406	5.976	< 0.001	1.973
Awareness Campaigns	0.201	0.064	0.190	3.121	0.002	1.585
Peer Influence	-0.066	0.040	-0.084	-1.662	0.099	1.092

Note: Dependent Variable = Awareness of Investment Scam Threats.

Model Summary: $R = 0.795$, $R^2 = 0.632$, Adjusted $R^2 = 0.623$; $F(4, 157) = 67.41$, $p < 0.001$.

To determine the extent to which the independent variables predict the Awareness of Investment Scam Threats, a multiple regression analysis was performed. Prior to interpreting the results, a Variance Inflation Factor (VIF) test was used to evaluate multicollinearity. All VIF values fell between 1.092 and 1.973, which are well below the conventional threshold of 10.0 recommended by Hair et al. (2019). This indicates the complete absence of multicollinearity, confirming that the independent variables do not overlap dangerously and the model remains stable. The regression model explains 63.2% of the total variance in youth scam awareness ($R^2 = 0.632$, $F(4, 157) = 67.41$, $p < 0.001$). Holding all other variables constant, a one-unit increase in Digital Literacy ($B = 0.350$, $\beta = 0.406$, $p < 0.001$) or Financial Literacy ($B = 0.350$, $\beta = 0.350$, $p < 0.001$) corresponds to a 0.350-unit increase in threat awareness, though digital literacy carries slightly more standardized weight. Similarly, a one-unit increase in Awareness Campaigns ($B = 0.201$, $\beta = 0.190$, $p = 0.002$) yields a 0.201-unit increase. Peer Influence was non-significant ($B = -0.066$, $\beta = -0.084$, $p = 0.099$), confirming that social circles do not alter capability; actual scam recognition depends entirely on personal literacy and exposure to official information.

4.2 Discussion

This section interprets the statistical results obtained in the regression analysis, contextualizing them within the broader framework of youth financial behaviour and digital literacy. By synthesizing these findings, we explore how individual competencies and external influences shape the awareness of investment scam threats among the surveyed youth. The discussion is organized thematically to address the roles of personal cognitive resources, the effectiveness of regulatory interventions, and the impact of social dynamics on threat detection and prevention.

4.2.1 Individual Competencies as Primary Defense

Consistent with the conceptual framework's emphasis on cognitive agency, this study confirms that individual literacy metrics are the primary determinants of scam threat awareness. Digital literacy emerged as the most significant predictor ($\beta = 0.406$), suggesting that the technical ability to navigate online spaces is the first line of defense against modern, technology-driven fraud. As investment scams shift toward social media and encrypted messaging platforms, the ability to identify technical "red flags" supersedes social influence. This aligns with Lee et al. (2023), who identified digital proficiency as a critical barrier against cyber deception. Similarly, the significant role of financial literacy ($\beta = 0.350$) confirms that an understanding of risk-return trade-offs acts as an inoculation against the "guaranteed high return" promises characteristic of fraudulent schemes. The high educational level of our respondents likely enhances this protective effect, providing the analytical tools required to deconstruct complex investment opportunities.

4.2.2 The Role of External Interventions vs. Personal Agency

While the conceptual framework posits that regulatory awareness campaigns function as a necessary baseline for information exposure, our findings refine this expectation by identifying the limits of external intervention compared to personal skill internalization. The results indicate that efforts by the Central Bank and Securities Commission are effective in establishing a cautionary baseline for youth ($\beta = 0.190$, $p = 0.002$). However, the comparatively lower beta value suggests that while these campaigns are vital for broad information dissemination, they cannot replace the deeper internalization of knowledge gained through direct personal skill development.

4.2.3 Challenging the 'Peer Influence' Paradigm

Finally, contrary to the social pressure components often included in behavioral frameworks, our results indicate that Peer Influence does not significantly alter threat detection capabilities ($p = 0.099$). While prevailing literature emphasizes "herd mentality" and FOMO in youth investment behavior, our study suggests a clear boundary when it comes to scam awareness; while peers may dictate *investment attitudes*, they appear to have a minimal role in *threat detection*. Scam awareness is revealed to be a function of individual critical thinking and literacy rather than social pressure, supporting findings by Camins et al. (2021) and DeLiema et al. (2021) that underscore personal financial capability as the ultimate protective factor.

5.0 CONCLUSION

This study examined the factors associated with youths' awareness of investment scam threats, namely financial literacy, digital literacy, awareness campaigns, and peer influence. The findings revealed that digital literacy was the strongest predictor of scam awareness, followed by financial literacy and awareness campaigns. In contrast, peer influence was not significantly associated with youths' awareness of investment scam threats. These findings suggest that awareness is primarily developed through learning, information exposure, and digital competency rather than social influence.

From a theoretical perspective, this study contributes to the application of Social Learning Theory by demonstrating that awareness of investment scam threats can be developed through learning mechanisms such as financial literacy, digital literacy, and awareness campaigns. The findings provide empirical support for the relevance of Social Learning Theory in explaining how youths acquire awareness through observation, information exposure, and learning experiences within a digital environment.

Practically, the findings highlight the importance of strengthening digital literacy, financial literacy, and awareness programmes to enhance youths' resilience against investment scams. Educational institutions, financial regulators, and policymakers should collaborate to provide continuous educational initiatives that equip youths with the knowledge and skills required to identify and avoid fraudulent investment schemes. However, this study has several limitations. The use of convenience sampling and a sample consisting only of youths aged 18–25 years may limit the generalisability of the findings. Future studies should consider larger and more diverse samples and explore additional factors, such as risk perception, financial behaviour, and trust in online information sources, to provide a broader understanding of investment scam awareness.

6.0 RECOMMENDATIONS

Several recommendations are proposed to enhance youths' awareness of investment scam threats. Educational institutions should strengthen both digital literacy and financial literacy education by incorporating investment risk awareness, financial management, and scam prevention topics into their curricula. Particular emphasis should be placed on digital literacy, as it emerged as the strongest predictor of scam awareness. Such initiatives should equip youths with the ability to verify online investment information, identify fraudulent investment platforms, recognise scam tactics, and critically evaluate digital financial content before making investment decisions.

Government agencies, financial institutions, and regulatory bodies such as Bank Negara Malaysia and the Securities Commission Malaysia should continue enhancing awareness initiatives through interactive and youth-oriented digital platforms, including social media

campaigns, webinars, and educational videos. As awareness campaigns were found to positively contribute to scam awareness, these initiatives should complement broader digital and financial literacy programmes rather than function as stand-alone interventions. Given that digital literacy demonstrated the strongest association with scam awareness, followed by financial literacy and awareness campaigns, policymakers should prioritise resources accordingly to maximise the effectiveness of scam prevention efforts among youths.

Future research should employ larger and more diverse samples to improve the generalisability of the findings. Additional factors such as cybersecurity awareness, psychological vulnerability, online behaviour, and trust in online information sources may also be explored to provide a more comprehensive understanding of investment scam awareness. Furthermore, continuous development of digital and financial competencies remains essential, as youths should be encouraged to verify investment information, exercise critical thinking, and make informed financial decisions to reduce their susceptibility to fraudulent investment schemes.

CO-AUTHOR CONTRIBUTION

The authors declare no conflict of interest. NA conceptualized the study, conducted the literature review, collected and analysed the data, and prepared the manuscript. NN contributed to the study framework and manuscript review. MH assisted with data interpretation, results discussion, and manuscript review. SAM contributed to editing, proofreading, and critical review. All authors reviewed and approved the final manuscript.

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DECLARATION OF GENERATIVE AI AND AI-ASSISTED TECHNOLOGIES IN THE WRITING PROCESS

AI-assisted tools were used for language editing and readability enhancement only. The authors take full responsibility for the content and conclusions of this manuscript.

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