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Article

IMPORTANCE OF FINANCIAL LITERACY IN IDENTIFICATION AND PREVENTION OF FINANCIAL FRAUD

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Abstract

Financial crime is committed in a variety of ways like identity theft, investment fraud, mortgage lending fraud, mass marketing fraud, etc. Financial awareness can help to protect people from becoming a victim of financial crimes. This paper describes the role of financial literacy and investment awareness in the identification and prevention of financial fraud through a primary survey conducted among 426 working professionals in Delhi NCR and available secondary data. The percentage method and correlation matrix are used for analysis of the data. The study reveals a significant role of financial awareness in the prevention of fraud. A negative correlation is observed between the incidence of financial fraud and financial knowledge in the survey conducted among teaching professionals in higher education. Data related to financial literacy rates and the incidence of financial crimes in different states of India in the last few years is used to understand the significance of financial literacy in prevention of fraud. The relevance of such awareness is highly significant in current times of pandemic due to shift of resources, altered business models, increased digital activities and transactions.

Key words: *COVID-19, Economic offense, Cybercrime, Financial awareness, financial fraud, financial literacy.*

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Introduction

Financial literacy is defined as the 'ability of an individual to make informed judgments and to take effective decisions regarding the use and management of money (ASIC 2003; Noctor, et al., 1992). Financially literate people are aware of financial choices and alternatives available for establishing and executing financial goals (Criddle, 2006). Organization for Economic Cooperation and Development (OECD) has described financial literacy as a combination of knowledge of concepts, awareness, skill, attitude, and the behavior which is necessary to make effective financial decisions and eventually achieve individual financial health and wellbeing (Atkinson, & Messy, 2012).

The financial world today is much different from what it used to be a few decades back. Technological improvement and innovation in financial markets have revolutionized the financial world (Frost et al., 2019). Money management is no more restricted to simple banking and managing deposits. Today a wide variety of financial products and services are available for customers to make choices according to their customized needs. Decision-making has become more complex and people need to be more informed while making decisions. While digitalization and technological innovation in information broadcasting on one side leads to ease of financial transactions but on another side, it also exposes customers to financial frauds. The probability of cybercrime incidents is highly correlated to the extent of digitization (Kshetri, 2016). Availability of easy payment options like credit cards, debit cards online wallets mobile banking net banking, etc., has eased payments and financial transactions but has also elevated the degree of financial risk and the menace of falling prey to financial crimes like money theft identity theft investment fraud, etc.

The Digital India program has revolutionized the banking operations and payment mechanism. As per the Reserve Bank of India (RBI) report cited by Shailla Draboo, the Compound Annual Growth Rate (CAGR) of digital transactions in India was reported to be increased by 30% from 1,142 million in April 2015 to 1,928 million in April 2017, with mobile banking transactions showing more than five times growth, from 19.75 million in April 2015 to 106.18 million in April 2017. The e-wallet transactions grew from 11.96 million transactions in April 2015 to 387.6 million transactions worth Rs 15,408 crore in January 2020 (Draboo, 2021). The introduction of the Unified Payment Interface (UPI) by RBI has made digital payments more secure. Mobile banking facilities, e-wallets, and many new payment gateways further supported fast and easy digital transfers. Anyone holding a valid bank account and id proof could make use of such easier and quicker payment methods using a mobile phone. Unstructured Supplementary Service Data (USSD) made it even easier to use banking services using a basic mobile handset without the need for internet. Aadhar enabled bank account (AEBA) can be easily used through micro-ATMs even in remote areas. The transformed digital ecosystem in India has facilitated financial inclusion but has also increased concern for digital frauds among Indian customers. Around 71% of customers expressed concern for digital frauds owing to the increased usage of Digital methods while 49% of consumers fear fake UPI payment links that ask for money transfers via email or text and around 30% are concerned about their data being leaked due to data breaches (Bhalla, 2021). RBI has been issuing standing instructions to commercial banks regarding the storage of customers' card details.

As per the directive of the European Parliament 'Fraud is considered an act of deception committed intentionally for personal interests or to produce a loss to another party (Directive, 2017). Financial fraud is committed when people are deprived of their money by misleading, illegal, and deceptive practices. There is an urgent need for people to get more aware of the identification and prevention of financial crimes. Cyber experts claim lack of awareness to be the main reason for the surge in financial crimes. Financial knowledge is the first step towards the detection of financial fraud and the prevention of such crime. Fraudsters target people with money including everyone, from those near to retirement to the younger generation who may even have some financial knowledge. Housewives, young teenagers, and older people are easier targets, however. Financial crime is committed in a variety of ways like identity theft, investment fraud, mortgage lending fraud, mass marketing fraud, etc. Identity theft happens when someone snips personal financial information like bank account details credit and debit card details, e-wallet details, etc.

Investment Fraud includes selling securities with false and misleading information. The scam may include false promises, hiding facts, and investor vestments insider trading tips, Ponzi-schemes investments that promise relatively high rates of returns for fixed-term investments. Pyramid investment schemes where a chain is created and every investor is paid with some amount when a new investor joins but eventually all investors are at loss. These Schemes promise consumers or investors large profits for recruiting others to join the scheme without making any real investment or sales of some products. Mortgage and Lending Fraud involves scams of selling mortgage or loans with deceptive practices, and pressure sales tactics or they sometimes open a loan by using someone's personal information and identity. (Button, et al., 2014) Fraudsters run share scams run from 'Boiler rooms' from where they cold-call investors offering them worthless, overpriced, or even non-existent shares, promising high returns. Phishing is a fraud that targets Internet Banking clients for stealing money from bank accounts of users. The tricky e-mails ask users to give account login, password, and personal details to a cloned website of their legitimate bank. In June 2018, the FBI's Internet Crime Complaints Centre (IC3) published that business e-mail compromised crime amounts to US$12 billion. Another common fraud is card fraud executed through card theft as the lost or stolen cards remain usable for some time till the owner blocks the card. Another way is skimming the card information during a legitimate transaction by cloning the card using a skimming device. The cloned cards are used to make payments. These counterfeit cards are even sold and the original owner rarely knows about it while still possessing the real card. Advance fees, lotteries, fund transfers, coupons, fake prizes, inheritance messages, etc. are some of the other very common frauds and are easily executed committed through, phone calls SMS, and e-mails, and innocent people easily get scammed. Technology plays a paradox, as on one side it protects and encrypts all transactions using passwords, OTP, etc. at the same time it also exposes consumers to a higher degree of risk at the hands of swindlers and hackers. The Global Tech Support Scam Research conducted by Microsoft across 16 countries revealed that 7 out of 10 people in India encountered tech support scams (Gohain, 2021).

There is however always a risk is involved in financial transactions done both digitally and manually but the risk can be minimized by being aware. The criminals make use of the ignorance of people to commit these frauds, so financial awareness is the key to reducing the risk of financial frauds or getting scammed. As per the 2019 Global Banking Fraud survey conducted by KPMG International, there has been a trending increase in financial frauds globally since 2015. The survey suggests that consumer awareness is the key to detecting and preventing fraud at the onset (KPMG, 2019). The relevance of financial awareness becomes more important in current times of pandemic due to shift of resources, altered business models, increased digital activities and transactions.

Financial Frauds during COVID-19

The coronavirus pandemic has caused a devastating social and economic disruption leaving millions jobless and falling into extreme poverty. This has also surged the chances of fraud over the next few years. The war against the coronavirus has also brought a battle with cyber frauds and financial crimes as the line between the real and digital world is getting thinner. It can be well said that if fraud was a virus, then almost everyone is infected. The Indian GDP had a slower growth of 3.1% in the Jan-March quarter of 2020 as compared to 6.1% in FY 2019 (Kishore, 2020). The unemployment rate in India increased to 26 % in April 2020. The GVA decreased more than 9% due to falling out of commercial activities during lockdowns.

The Indian household faced an income fall out of 46% (Money Control, 2020). Delhi provides a high percentage of employment and contributes 86% GVA from nonfarm and non-government activities (Kishore, 2020). As per the PTI, (2021) report the unemployment rate in Delhi rose to 28.5 percent in October-November 2020 as compared to 11.1 percent in January-February. As per the PTI, (2020) report cybercrime incidence surged in the year 2020 in Delhi with 62% of the cybercrimes reported included financial frauds including 16% being that of data theft. The rapid acceleration in digital activities during the pandemic paved an opportunity for fraudsters and frauds surged globally during the pandemic time. There is a 47% increase in digital transactions and customers are concerned for their financial safety and data breach. Digital wallets and UPI transactions rose by 29% during the pandemic with 37% of consumers using these digital wallets and UPI payments at least once per day. While first-time users of digital gateways are easy targets for fraudsters but this does not limit them to not cheating those familiar with digital payments (Bhalla, 2021). The shift from cash transactions to digital payments is one of the most significant reasons for the surge in cyber-crimes during the pandemic. As per the FIS survey, 34% of Indians reported financial fraud over the last year and the most common frauds included phishing, QR code, and UPI scams apart from skimming and card scams (Ghosh, 2021). Out of the total cyber financial frauds reported globally 28% increase in suspected attempts to cyber frauds was reported from India with Mumbai being on the top list followed by Delhi and Chennai. The suspected attempts of fraud from India are reported to increase by 224% in the telecom sector and by 89.49% in financial services (PTI, 2021). The unprecedented event of the COVID-19 pandemic and resulting global economic shutdown to contain the spread of the virus disrupted the supply chains and further created major disruptions in aggregate demand and organizational capital. The unemployment increased and the income levels fell which also constituted the rise in financial fraud. During such times of financial volatility at the macro level, the individual shall be extra thoughtful while making any financial decision. At these times financial knowledge is important to maintain financial health and build financial immunity. Individuals shall make informed choices and consult sophisticated financial advisors than relying on informal sources. Being financially literate also helps to understand financial advice well and manage finances for risk-free returns (Agarwal, & Arora, 2020).

Discussion from literary studies

Financial fraud is not a modern innovation. It exists throughout the world since time immemorial. History is full of financial frauds and scams that have emptied people's pockets and even destroyed economies. The earliest fraud in ancient history was reported fraud involved selling of the Roman Empire in 193AD. More recently in 20th, the major fraud scheme was the original Ponzi scheme started in the U.S. by Charles Ponzi in 1920. The Insider trading scam started in 1986 with Ivan Boesky building up a huge fortune of more than $200 million by duping many small investors (James, 2016). The savings and Loan scandal in 1989 in the U.S., The Great Wall Street Rip-off that involved consisted of selling fraudulent mortgage-backed securities, and the bank securities scam in India in 1992 are some of the other big scams. The recent top financial frauds in India that duped investors millions include; The Sahara Chit Fund scam, The Speak Asia scam, NSEL scam, Shraddha Chit Fund scam, Satyam scandal, etc., (iknowledge, 2019). Recently SEBI fined Yes Bank in India for misspelling its ATI bonds disguised as Super FDs. These were no fixed deposits as they carried the same risk as the equity holders.

Financial fraud can be detected in the early stages by understanding major fraud indicators like investments with unreasonably high returns, immediate investment offers with false urgency, investments with no clear explanation of the ownership of the business, the structure of management, address of the companies, fund management and risk involved. People of all ages are prone to financial scams. There is a direct correlation between financial literacy and the ability to spot investment scams, while age and education had no significant influence (Chariri, et al., 2018). There is a strong influence of financial literacy in the identification and prevention of financial fraud. There is 3% points increase in fraud detection with one standard deviation increase in financial knowledge (Engels, et al., 2020). There is a lesser influence of high usage of financial products and cautious money management behavior on detection of fraud as the fraudulent tactics are sometimes complex which can be detected early with financial knowledge. Financial loss due to fraud creates a loss of overall well-being of people There is a strong negative association between consumer fraud victimization and individuals' financial well-being. Individuals face dual loss of wellbeing due to reduction of net worth and increase in psychological stress and feel less confident about future investment and money management which in turn again impacts their income and financial well-being (Brenner, et al., 2020). According to the Organization for Economic Co-operation and Development (OECD), financial literacy is important to achieve individual financial wellbeing (Atkinson, & Messy, 2012). Financial decisions are complex and financial wellbeing depends on sound and well-informed cautious financial decisions. Financial literacy directly influences financial decision-making and thus the overall financial well-being (Taft, et al., 2013).

The multidimensional financial inclusion index across 95 countries from International Monetary Fund Financial Access Survey indicates an overall increase in the access and use of financial services during 2014-15 (Sha'ban, et al., 2020). Modern Information and communication technology has played a game-changer to facilitate extensive usage of financial services. Financial technology (FinTech) developments have improved financial capability, but the absence of financial awareness may trigger impulsive and risky consumer behavior exposing them to digital financial crimes. Cryptocurrencies are unregulated currencies and involve a greater risk of fraud. There is a negative association between financial literacy and cryptocurrency ownership which means financially literate people understand the risks associated with unregulated cryptocurrency and thus prefer alternative financial assets with a lesser trade-off between reward and risk (Panos, & Wilson, 2020).

The financial crime has become a serious threat to economies and since the outburst of information technology and online transactions, the consumers are exposed to cyber crime at an increasing rate. In this context an attempt is made to understand the relevance and importance of financial literacy is an important tool to identify and prevent the financial fraud.

Objective

1. To understand the role of financial literacy in protection from financial frauds.
2. To understand the importance of investment awareness in protection from financial frauds.
3. To find the correlation between financial knowledge, investment awareness, and incidence of financial fraud among working professionals.

Research Methodology

Tool

The tool used for the present study is used to present an overview of the role and importance of financial knowledge and investment awareness in the identification and detection of financial fraud. The survey was conducted online using google forms. The closed ended inquiry form for the study is based on the OECD financial literacy questionnaire (OECD, 2011). The survey is designed by consulting the experts from SEBI, academicians, and professionals in the field of financial management. The questionnaire had 16 items, out of which five explained the demographic details, eight items reflected the financial knowledge and rest were used to find investment awareness and incidence of frauds. The face validity and the language validity are was tested by the experts. The Cronbach's Alpha reliability score is $\alpha = 0.837$. The percentage method and correlation matrix are used to understand and analyze the primary data collected through the survey. The pilot study was conducted for the designed tool to remove all the pitfalls of the questionnaire. The respondents were interviewed face to face and the form was also sent to the respondents through various online sources such as e-mails, WhatsApp message, LinkedIn, and other social media sites.

Sample

The data is collected through google forms using convenience sampling. Table 1 contains description of the sample used to conduct the study. 426 working professionals in Delhi-NCR participated in the survey. The sample had 46% of the respondents in age group between 24-35 years of age, 35% in the age group of 36-45 years of age, 17% in the age group 46-55 years, and 2% above 56 years of age. Most respondents (39%) in the present study were in the income group of Rs. 5 lakhs to 10 lakhs per annum (170) followed by 37% in the income below Rs. 5 lakhs group (153) and 24 percent earned more than Rs. 10 lakhs annually (105 respondents). Most women in the survey are married (74%), and 23% are single including those who are separated or divorced and less than 1%% are widows. Majority of the respondents (74%) in the study work in private or self-financed colleges, 26% work in government or government aided colleges.

Data Analysis and Results:

The respondents were asked 12 questions related to financial knowledge, investment awareness, sources of information for investment decisions, financial product purchase decisions and incidence of fraud or any other financial scam. The questions were multiple response questions and were scored through binary level scoring.

Table 2, displays the summary of survey variables used to study the financial knowledge and awareness among respondents. The survey reveals that most of the respondents have knowledge of financial concepts like rate of return, tax rates, risk, time horizon etc., are financially well aware. The respondents were asked eight questions related to their knowledge and awareness about various financial concepts such as rate of return, inflation, tax rate etc.

From Table 3, the responses summary for the criteria that the respondents use to choose the investment in equity shares is displayed. The choices of equity selection criteria given by researcher are necessary. A smart investor has to see some or all the criteria, asked by the researcher. The highlights of this survey question is that a substantial percentage i.e. 42.3% looks for past performance of the firm and 40.4% looks for expected return on the investments, which should be the obvious choice in equities. This shows that the respondents are financially well aware investors.

While discussing about investor awareness and cautiousness, it is important to know what are the sources of information that the women faculty members rely on for making investments. In the era of information technology boom with so many different sources of information available online and offline. There are many sites and web pages that give investor tips which are not always trustworthy and investors may end up losing money or making wrong investments. Phishing is dangerous online attack to trick investors. An aware investor relies on trusted sources of information. The survey revealed that women teachers relied on different sources of information while many of them trusted the advice of friends and relatives. They however displayed a cautious behavior as only 10.10% of the respondents say that their financial decision was influenced by unsolicited e-mails, SMS, posts, social media. Rest of the respondents chose the options, which can be considered as rational for financial decision making. Table 4, shows the results for the information sources that influence the financial decisions of the women teaching professionals in the survey.

Table 5, shows the responses to the question asking if they have ever made a financial product purchase, how they made their most recent choices? Being aware while making investments and displaying a rational consumer behavior while making financial product purchase decision is important to build risk proof finances. 65% respondents made rational choice by considering various options from different companies while purchasing some financial product. This is important because there have been many instances of financial products mis-selling, fraud investment schemes, such as multi-level marketing (MLM) schemes, Ponzi schemes etc. The respondents in the research are found to be rational decision makers displaying financial market and investment awareness.

The Table 6 shows the statistics related to the incidences of financial frauds and scams. Frauds are big threats and can damage assets and reduce wealth. Identification and protection from any financial scam and fraud is vital to financial awareness. It is important that investors are cautious while putting their money in any scheme or business. The respondents in the survey are cautious investors as the majority of them have not invested in Ponzi schemes or faced any financial scam or fraud. 19% of the respondents in the survey confirmed that they were scammed to invest in pyramid schemes. 7.5% faced online frauds and 8.5% made formal complaint against financial frauds or irregularity. Though the numbers of exposure to financial frauds is low in our survey but still there is need to spread financial awareness and investor's 'Do's & Don'ts' among women teachers.

Table 7, displays the summary of survey variables used to study the incidence of financial fraud among respondents in the study. 58% of college teachers in Delhi-NCR have not faced any financial fraud recently. They display a cautious and rational financial behavior as 66% considered numerous options from different companies while making a financial purchase. They trusted the advice of friends and relatives most (48%) and ignored any unsolicited information related to financial products or schemes received online or offline. Their second most reliable source is financial advisors and company-specific brochures. They are aware of redressal forums to approach in case of any financial discrepancy or fraud. They are cautious investors and relied on analysis and market reports of stocks. Out of total respondents, 85% have made some investments in the capital market and 42% of them considered the past performance of the company in terms of profit and 40% considered the expected rate of return while making investment decisions. These are a few indicators that the respondents are cautious against financial frauds and scams.

The researcher surveyed college teachers in Delhi-NCR to study the correlation between financial awareness and the incidence of financial fraud. Financial awareness plays a critical role in the prevention of fraud. A negative correlation is observed between the incidence of financial fraud and financial knowledge in the survey conducted among teaching professionals in higher education. The correlation matrix in table 8 shows a high correlation between financial knowledge and stock market investments. Financial market investments need a cautious approach to maximize returns.

Financial literacy and fraud prevention

The data regarding the financial literacy and incidence of frauds is also collected from secondary sources including previous studies, news articles, press releases, etc. The descriptive research describes financial literacy attributes and financially aware behavior as an important aspect to avoid any kind of financial loss at the hands of financial criminals. The researcher has tried to establish a correlation between financial literacy rates and the incidence of financial crimes in different states of India in the last few years.

Financial Literacy and Inclusion Surveys conducted by National Centre for Financial Education (NCFE) in the year 2013-14, and 2018-19 revealed that financial literacy statistics in India have improved since the year 2013 when only 15 % of the population was financially literate as compared to the 24% in the year 2019 (RBI, 2021). The crime in India data by National Crime Records Bureau (NCRB) cited by Sachdev reveals a decline in economic crime rate after 2013. The economic crime growth rate which was reported to be 13% in 2013 declined steadily and was reported to fall to -4% in the year 2016. However, it increased to 5% in 2018. The number of economic offenses cases reported in 2018 was 156,268, showing an increase of 4.9% from 2017 (Sachdev 2020). The increase in financial offenses could also be an aftereffect of demonetization in 2016 and the implementation of the Goods and Services Tax in 2017. India is a non – tax-compliant society. The number of taxpayers has been low over the past years.

The tax to GDP ratio in India is low at 18 percent which is nearly half of the same ratio in advanced countries. But after demonetization, the number of income tax returns filed increased to 24.7 percent in August 2017. Personal income tax under Self-Assessment Tax increased to 34.25 percent and Advance tax collections of Personal Income tax was reported to increase by 41.79 percent past demonetization (Singh, 2018). Since tax evasion cases also come under economic offense along with financial fraud so this was a strong reason for the increased growth rate of financial crimes after 2016 (Sachdev, 2020). Demonetization also led to an increase in electronic transactions which is also a reason for increased cybercrimes and financial frauds. The surge in reported cases of fraud can also be an outcome of increased awareness about cyber safety and the availability of public platforms and grievance redressal forums.

In the survey, the highest increase in financial literacy from 2013-2019 has been observed in the Northeast zone. Financial literacy increased more than double from 15% – 33% (RBI, 2021) during the same period. Another interesting finding is that the lowest numbers of frauds in India were reported from the Northeast zone in 2019. The second-highest increase in financial literacy is observed in the North zone. From these instances, a reduction in the incidence rate of financial crime is observed with an increase in the growth rate of financial literacy. The evidence supports a strong relationship between financial literacy and the identification and prevention of financial fraud. It can be said that financial literacy plays a vital role in the detection of fraud and ensuring financial safety.

Conclusion

The primary data finding from this research and the secondary data sources both confirm the importance of financial literacy in the identification and prevention of financial fraud. The primary survey among teaching professionals reveals a strong negative correlation between financial knowledge and frequency of financial crime which means financially aware people are cautious and can identify prevent fraud financial scams and frauds. The same correlation is also observed through published literature and data related to financial literacy and the occurrence of financial crimes in India last few years. It is hence concluded that financial literacy is critical for the identification and prevention of financial fraud.

Discussion

There is an overall increase in the trend of financial frauds globally in past few years. The fraud volume and value both are reported to have increased. The Global Banking Fraud Survey by KPMG revealed that Identity theft is the highest type of financial crime committed globally followed by account takeover, cyber-attacks, and push payment scams. While companies use high technology and artificial intelligence, payment gateways, OTP and password protection, third party encryption, two or multi-factor authentication, physical biometrics like voice, fingerprint and facial recognition, machine learning, etc. there is still a surge in financial fraud. 51% times global respondents reported false positives which question the efficiency of technology in fraud detection. The survey suggested that customers are the key to preventing fraud and more shall be done to educate them towards prevention and detection of fraudulent activity on their accounts, particularly to reduce scam losses. More than 50% of the survey participants recovered 25% of their losses which indicated awareness is the key to preventing financial loss (KPMG, 2019). The fraudsters are shifting focus from account takeovers to scams like identity theft where customers can be exploited as a weak link. In such cases, consumer awareness is the foremost needed. Financial awareness and knowledge help in identifying the scams and fraudulent schemes as the aware person understands the returns and risk tradeoffs. The knowledge of financial concepts enables a person to understand the financial terms used by fraudsters. This enables a person to identify vague terms used by fraudsters to counter them on the same and safeguard themselves from any further communication from such parties. Financially literate people understand the rate of interest, returns on investment, and risks involved in various types of investments and so can avoid falling prey to high return guaranteed fraudulent schemes. Financially aware people avoid unsolicited information coming from spam callers, text messages, SMS links, e-mails, social media propaganda, etc., and rely on reliable and acknowledged sources for information. Financial literacy also enables people to locate reliable channels and agencies to verify certain information related to money management and investment and identify financial frauds at an early age. Financially literate people may invest in risky ventures for higher returns in the financial market but avoid the unsolicited and unrecognized agents which lure with easy, quick, and high returns.

Banks and other financial agencies use high-end technology as they have recognized the need to ensure maximum user safety from financial frauds during the consumption of their services. In the event of falling to any financial fraud, if the crime is notified at the earliest to the agency, the losses may be recovered fully or partially. Sometimes people fall prey to certain transactions or investment that includes fraudulent charges. These transactions need to be canceled with immediate effect to prevent financial loss. Financial knowledge enables people to discover such disputed and fraudulent payments

Identification of financial fraud is one step towards the prevention of financial fraud. It is also important that these financial frauds are reported to appropriate agencies within the stipulated time irrespective of the type of financial theft or crime so that the action can be taken with law enforcement for recovery of funds and reversal of fraudulent transactions of any nature. The criminal justice system in India is already slow and less capable of dealing with economic offenses. The number of economic offense cases remaining pending is 54.6% as compared to that of 29.3% in the case of other offenses filed under IPC remaining pending (Sachdev, 2020). One of the main reasons for the low rate of conviction of fraud cases in India is less awareness among the law execution community. (Kshetri, 2016).

Financially aware people are generally found to follow good practices to keep their financial transactions, receipts, tax records, and other financial records well documented and filed (Mendell, & Klein, 2009). Such financial behavior protects from financial frauds and in any fateful event of financial crime, proves very beneficial throughout the reporting process.

India is a fast-growing industrialized economy with an expected growth rate of 9.7% in 2021 to further increase to 10.1% in 2022. The Digital India initiative of the Government of India is an ambitious project whereby government aims to ensure financial inclusion of all classes and sectors by providing the services electronically. While India has a legitimate IT sector with strong cybersecurity technology still on a macro level the digital infrastructure is still growing. There are numerous tailbacks and weak links in cybersecurity technology that pose a major cybercrime concern to organizations, individuals, and government agencies. The faster economic growth but weak and less secure cyberinfrastructure, lesser controls, weak laws, and low conviction rates of economic offenses make India a hotspot for cybercriminals. The high rate of employment, low-income levels, and high-income inequality in India also contribute to the vulnerability of the Indian masses towards economic crimes. As rightly said that prevention is better than cure, so while strengthening a more secure cyber network is essential to prevent fraud, it is highly reasonable to increase awareness among individuals and institutions. Financial awareness makes people understand risk and returns better (Widdowson, & Hailwood, 2007). Financially literate people can sense and identify any malicious online financial activities and secure themselves from falling prey to fraud.

The younger generation is the most vulnerable group for online cybercrime. As per a survey by FIS, from the total reported cases of fraud in last year, 41% were reported from people in the age group between 25-29 years (Ghosh, 2021). The younger generation is the highest consumer of mobile wallets with 94% of them using mobile wallets and payment apps. India is a developing economy and the dependence on technology is increasing with time. Technology is becoming our way of life and with incremental usage of cyberspace; we are becoming more vulnerable to fraud. The agencies are working hard to make the cyber world more secure and rapid technological development is taking place, but at the same time variations in frauds are also emerging.

Cyber-fraud is however not just a technological issue but an economic problem too. It impacts economic growth, and it even threatens national security. Over the past twenty years, the cases of fraud have by 56% and the total amount of financial frauds reported at the international level has been evaluated at GBP 3.89 trillion (USD 5.127 trillion). The global average rate of losses derived from fraud for the last two decades represents 6.05% of gross domestic product (GDP) (Ahmed, 2021). It is one of the biggest challenges that economies will face in the next 20 years.

The developing economies are already facing some fundamental issues of stagnation, inflation, unemployment, income inequality, and poverty, etc., and economic frauds both online and offline have aggravated these issues. The states and regulating agencies have realized the severity of the issue but still have underplayed the resolution of the problem. Technology however plays the most important role but it is alone not sufficient to protect from online frauds. The economies are spending huge funds to build a secure online space but the crime costs outperform the investment as the fraudsters are finding new ways to use the technology to steal money from people and thereby harming their financial wellbeing. Fraud is a sign of dishonesty and puts people in doubt. It reduces the consumer's confidence and ability to take the risk. The micro-level frauds cumulatively cause the economic downfall of countries and reduce faith in a country's financial system. Technology will make the cyber world secure only when people understand the risk of fraud and can identify it. Consumer awareness and financial literacy are strong weapons against frauds as it is the human mind that fraudsters play with, to contrivance their deceptive plans.

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Table 1: Sample Descriptive Statistics

Variable	Categories	Number	Percentage
Age	24-35 Years	196	45.7%
	36-45 Years	149	35%
	46-55 Years	73	17%
	Above 56 Years of age	11	2.3%
Income (p.a.)	Below Rs. 5 lakhs	170	39%
	Rs. 5 lakhs to Rs. 10 lakhs	153	37%
	Above Rs. 10 lakhs	105	24%
Marital Status	Married	315	73.5%
	Single/Separated/ divorced	110	25.7%
	Widow	3	0.8%
Type of Institute	Private/Self-Financed	318	74%
	Government/Aided	110	26%

Table 2: Descriptive Statistics: Financial Knowledge and Awareness

		Correct		Incorrect	
	True or False	N	Percentage	N	Percentage
1	The rate of return should ideally exceed the inflation rate by a reasonable margin	345	80.6	83	19.4
2	An investor should also consider the tax rates on the return, while choosing the investments	393	91.8	35	8.2
3	The right age group for retirement planning is when an individual is in his/her 40s	262	61.2	166	38.8
4	For FY 2020-21 no income tax is to be paid for annual income upto 5.5 Lac	159	37.1	269	62.9
5	A company's high share price means that the company is also big in terms of assets, profits etc.	182	42.5	246	57.5
6	Term Insurance is a good investment option for individuals	287	67.1	141	32.9
7	An investment with a high risk is most like likely to give a high rate of return	167	39	261	61
8	The logical way of investing in stocks/shares should be on the fundamentals of the company as well as having a long-term horizon	367	85.7	61	14.3

Table 3: Descriptive Statistics: What are the various criteria for you to choose the appropriate equity shares?

Variable	N	Percentage
Past performance of the firm (in terms of profit and return to investors)	180	42.30%
Expected return on investment	172	40.40%
Reputation of the Company	121	28.40%
Current economic indicators	120	28.20%
Recent price movements in a firm's stock/NAV	95	22.30%
Information from Newspapers/ Business News Channels	56	13.10%
Advise of relatives and friends	55	12.90%
Tips given by brokers	48	11.30%
Not Applicable	159	37.30%

Table 4: Descriptive statistics: Which sources of information, do you feel most influences your financial decision

Variable	N	Percentage
Unsolicited information received through e-mail/SMS/ Post/ Social Media	43	10.10%
Information picked up in a branch	88	20.70%
Information found on internet	110	25.80%
Information from Company Tele-Callers	22	5.20%
Information found in Print/ Electronic Media	107	25.10%
Company/ Scheme specific brochures	108	25.40%
Recommendation from independent financial adviser or broker	110	25.80%
Advice of friends/relatives	205	48.10%
Not applicable	73	17.10%

Table 5: Descriptive Statistics: If you have ever made a financial product purchase, how you made your most recent choices?

Variable	N	Percentage
I considered various options from different companies before making my decision	279	65.50%
I considered various options from one company only	39	9.20%
I did not consider any options at all.	32	7.50%
I looked around but there were no other options to consider	21	4.90%
Not applicable	94	22.10%

Table 6: Descriptive statistics: Have you experienced any of the following issues related financial products and services in general, in the past few years.

Variable	N	Percentage
Accepted advice to invest in a financial product that you later found to be a scam, such as a 'pyramid scheme'?	82	19.20%
Any financial fraud (online/offline)	32	7.50%
Made a formal complaint to service provider about their financial misappropriation/fraud/irregularity	35	8.20%
Approached the consumer forum/ombudsman/ regulator for any financial injustice	36	8.50%
Not faced any financial fraud recently	250	58.40%

Table 7: Descriptive Statistics: Financial Fraud and Investment Awareness

Variable	N	Percentage
Not faced any financial fraud	284	66.70%
If they consider options from different companies before purchasing a financial product	279	65.50%
Advice of friends/relatives influences my financial decision most.	205	57.10%
Information found on internet influences my financial decision most.	110	30.60%
Recommendation of financial adviser or broker influences my financial decision most.	110	30.60%
Company/ Scheme specific brochures influences my financial decision most.	108	30.10%
Information found in Print/ Electronic Media influences my financial decision most.	107	29.80%
Information picked up in a branch influences my financial decision most.	88	24.50%
If they invested in a financial product that was later found to be a scam, such as a 'pyramid scheme'	82	19.20%
Unsolicited information received through e-mail/SMS/ Post/ social media influences my financial decision most.	43	12.00%
If considered different options from one company only before purchasing a financial product	39	9.20%
Approached the consumer forum/ombudsman/ regulator for any financial injustice	36	8.50%
Lodged formal complaint to service provider about their financial misappropriation/fraud/irregularity	35	8.20%
Did not consider any options at all while buying a financial product.	32	7.50%
Any financial fraud (online/offline)	32	7.50%
Information from Company Tele-Callers influences my financial decision most.	22	6.10%
Past performance of the firm (in terms of profit and return to investors) is the criteria for buying financial products	180	42.30%
Expected return on investment is the criteria for buying financial products	172	40.40%
Reputation of the Company is the criteria for buying financial products	121	28.40%
Current economic indicators is the criteria for buying financial products	120	28.20%
Recent price movements in a firm's stock/NAV are the criteria for buying financial products	95	22.30%

Table 8: Correlation Analysis

Variables	Financial Knowledge	Criteria for stock investments	Source of financial information	Incidence of financial fraud or scam	Financial product purchase decision
Financial Knowledge	1	**0.180****	-0.023	**-0.108***	-0.028
Criteria for stock investments	**0.180****	1	**0.122***	0.019	0.054
Source of financial information	-0.023	0.122*	1	**0.194****	**0.296****
Incidence of financial fraud or scam	**-0.108***	0.019	**0.194****	1	0.052
Financial product purchase decision	-0.028	0.054	**0.296****	0.052	1

** Correlation is significant at the 0.01 level (2-tailed).
*Correlation is significant at the 0.05 level (2-tailed).