Excessive Use of Social Networking Sites and Intention to Invest in Stock Market among Gen Z: A Parallel Mediation Model

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ABSTRACT

The use of social media sites is inevitable. It is one of the most influential means of communication nowadays, particularly among Generation Z, who are often referred as digital natives. The objective of this study is to examine the influence of excessive use of social networking sites (SNS) on investment intention in the stock market among Generation Z. The study further investigates the parallel mediating roles of financial attitude and perceived behavioral control (PBC). A cross-sectional self-administered questionnaire was conducted among Gen Z in India and responses were analyzed using variance-based structural equation modeling in SmartPLS 4 software. Additionally, the predictive relevance of investment intention was found out using PLSPredict. The results revealed that the excessive usage of social media positively influences the intention of this young generation to participate in the securities market. Further, the parallel mediation results establish the role of financial attitude and PBC between excessive use of SNS and investment intention. The predictive power of investment intention was reported to be high. These findings have significant practical implications for financial service providers, finance content creators on various social media platforms (finfluencers), and financial advisers.

Keywords: Financial attitude; Generation Z; Investment intention; Parallel mediation; Perceived behavioral control; Social networking sites.

1. Introduction

The advancement of technology has spurred the proliferation of various social media networks such as YouTube, Instagram, LinkedIn, Twitter, and others which play a substantial role in enabling the swift dissemination of information, encompassing both positive and negative. Digital encounters heavily consume our time, focus, and financial resources. As per a study by Nasdaq (2019), individuals are regularly impacted by the content they receive, and their decisions or actions tend to be connected to it. The growth of social media has created a faster and more effective means of disseminating data and information to impact individuals' decisions (Aggarwal, 2021). In this digitalized trading environment, people have a diverse range of online resources at their disposal to gather information for making investment choices. These resources include news outlets, autonomous social media sources, and

networks affiliated with investment companies, among other options. The emergence of the web and social media has significantly improved the process of acquiring information for retail investors through the use of mobile applications on social media platforms (Shiva & Singh, 2019). Investors are actively engaging in equity trading by embracing mobile technologies to make investment decisions and access investment-related information (Nair et al., 2022).

Social media platforms, which provide easily accessible and constantly updated information in real-time, are frequently utilized by individuals in shaping their financial decisions. Furthermore, online communities' behaviour appears to play an essential role in impacting investment intentions. Khatik et al., (2021) emphasized that SNS-based information significantly affects investment

intentions, specifically among individual investors.

In recent years, SNS has become a vital conduit for the younger generation to engage with financial markets and make financial decisions. For individuals aged 18-34, 20% believe SNS is the utmost essential information resource for dealing with their assets, compared to 4% for those aged 35-54 and 4% for those aged 55 and over (Wealthadvisor, 2021). Nowadays, every person with a smartphone is active on at least one social media site. The younger generation's interactions with digital technology are primarily different from those of the older generation. Compared to their millennial counterparts, Gen Z is more proficient in utilizing technology (Thangavel et al., 2021). The prevalence of smartphones and digital devices has shaped the younger generation's lives (OECD, 2020). They have never experienced a world without them. Consequently, their interactions, friendships, education, social integration, and approach to financial services are significantly influenced. This phenomenon gave rise to the term *'digital natives'* to describe these individuals. The word typically denotes a particular competence to use technology and equipment that young people easily adopt (OECD, 2020). There is a surge in studies examining SNS usage (She et al., 2023; Verduyn et al., 2022; (Pagani et al., 2011; Chen, 2013). Previous studies confirm that Gen Z utilizes SNS more frequently than Gen Y (Mude & Undale, 2023; Seemiller & Grace, 2017). Technological progress has enabled them to be the most interconnected and mobile generation to date. Owing to their tendency to conduct extensive research and comparisons prior to making a purchase, they are regarded as the most challenging consumer group to reach and influence (Thangavel et al., 2021). The majority of Generation Z individuals reside in developing economies such as India and China, and they include more than 27% of the world populace (Thangavel et al., 2021). Turner (2015) defines the Gen Z generational group as individuals who were born from 1993 to 2005. Therefore, the choice of the young generation i.e. Gen Z cohort seems reasonable for the current study.

Organizations strive to leverage SNS in diverse ways to generate value for their customers (Pagani et al., 2011). One of the strengths of networks is facilitating interactions between members of a virtual community. Consequently, the social web, which is the virtual environment where individuals convene to exchange ideas, feedback, and viewpoints, has witnessed tremendous growth. A significant portion of the value generated in a social network is derived from the interactions and transactions between customers themselves (Pagani et al., 2011). The financial services industry interacts by distributing information over the web, and ultimately over SNS (Mishra et al., 2022). Furthermore, many brokerage companies have also begun to provide tools that evaluate or collect data from social media sites to assist investors in making choices. In other words, social media, and finance influencers have a growing impact on individuals' financial behaviour and decision-making processes (Mishra et al., 2022; Ritchie & Nejal, 2022).

Individual investors differ from institutionalized investors in various aspects, including their investment amounts, available capital, research accessibility, and professional management. When making investment decisions, individuals are influenced by both logical and irrational aspects (Seth et al., 2020). Given the surge in studies on SNS usage, few investigations have taken place to understand its influence on investment intention (Shiva & Singh, 2019). Researchers have thus acknowledged that psychological aspects play an important part in influencing persons' financial behaviour and have emphasized the importance of conducting thorough research in this field (Strömbäck et al., 2017).

In relation to investment decisions, the study of financial attitude and perceived behavioural control (PBC) becomes particularly relevant. As individual investors navigate the complexities of the investment landscape, their financial attitude and perception of control over their investment choices can significantly impact their decision-making process. PBC plays a crucial role in influencing behaviour, whether the behaviour is perceived as easy or difficult (Ha et al., 2019). When individuals perceive the right motivation and ability, it enhances their intention to engage in a particular behaviour (Hsu et al., 2006). The decisions made by individuals regarding their ability to perform a specific task significantly

impacts their intentions and subsequent behaviour (Ajzen, 1991). Beliefs about the potential outcome based on hindsight significantly influence one's attitude, which shapes their intention to participate in a particular behaviour (Mishra et al., 2022). If one has a positive attitude towards a definite behaviour, they get inclined to involve in that particular behaviour (Ajzen, 1991; Mishra et al., 2022). The attitude becomes apparent through one's inclination or willingness to invest. (Sivaramakrishnan et al., 2017; G. Shim et al., 2008). Drawing from the above discussion, it is apparent that financial attitude and PBC play a crucial role in making decisions. Furthermore, considering the pervasive influence of technology, SNS is a significant influential factor when investors undergo investment decision making process (Shiva & Singh, 2019). The significance of information in guiding investors to make informed financial decisions is apparent.

This research investigates the influence of too much usage of SNS on the investment intentions of the younger generation by examining both cognitive and behavioural factors simultaneously. Our study is unique in the aspect that it extends the field of research on SNS usage and investment intention. Subsequently, it offers empirical evidence on how the association is linked with financial attitude and PBC. The outcomes of this study are valuable for various stakeholders. This study can provide valuable insights for financial service providers, brokers, and financial advisers. Policymakers can also use this study's empirical evidence to develop policies that address Gen Z's financial decision-making. Furthermore, the study's results provide valuable insights for practitioners to better understand and be more mindful of Gen Z's financial decisions.

In vein with the aforementioned discussion, this study posits two primary research questions:

(1) Does excessive use of SNS impact the intention to invest in the stock markets among Gen Z?
(2) Do PBC and financial attitude parallelly mediate the link between excessive SNS usage and investment intention in the stock market among Gen Z?

The manuscript is organized as follows: the second section provides a conceptual framework and literature review to support the development of hypotheses. The third section outlines the methodology, while the fourth section provides findings and analysis. The concluding section includes the discussion and practical implications.

2. Conceptual Framework and Hypotheses Development
Excessive use of SNS and investment intention
The stock market is essentially a network of human interactions (Hirshey & Nofsinger, 2008). When making investment decisions, individual investors often seek out advice and information from a variety of sources, including their neighbors, family members, friends, and colleagues, as well as professional advisors such as analysts, bankers, and financial planners. As a result, the decision-making process involved in investing can be quite complex, and it is influenced by both rational and irrational factors (Shanmugham & Ramya, 2012).

The usage of the internet and social media has led to an increase in people's participation in the securities market (Yang et al., 2021). Research has shown that both social interaction and social networking sites (SNS) have a positive influence on trading decisions (Yang et al., 2021). Specifically, amongst all the social factors, social interaction has the most significant impact on trading decisions (Shanmugham & Ramya, 2012). Wu et al., (2018) presented evidence that social interaction has a favorable influence on customers' inclination to invest.

Pahlevan Sharif & Yeoh (2018) found a noteworthy positive correlation between too much usage of SNS and compulsive buying behavior online. Additionally, their research indicated that the attitude towards money acted as a mediator in the association between excessive SNS usage and online compulsive buying. Zhou (2014) suggests that social networks may reduce the amount of money households save as a precautionary measure and encourage them to invest more. On the other hand, Karlan (2007) found that social networks can also help to alleviate information asymmetry and make it easier for households to access formal and informal lending.

Smartphones are crucial and essential to people's lives nowadays, making them a vital aspect for investment advisors, brokers, telecommunication companies, and corporations (Mishra et al., 2022). These devices enable the delivery of vast amounts of information that keeps investors engaged and leads to quality decision-making (Shiva et al., 2020). Additionally, smartphones can correct issues such as fear, anxiety, or irrational decisions by promoting information symmetries in financial markets (Shiva et al., 2020). This study draws on empirical evidence and discussions with other studies that have explored the link between the excessive usage of SNS and intention to invest. As a result, the research hypothesizes that:

> *H1: Excessive use of SNS significantly impacts the investment intention in the stock market among Gen Z.*

Mediating Role of Financial Attitude
Attitudes refer to a person's inclination towards a certain thing, which subsequently influences their positive or negative actions towards it. The concept of financial attitude is a manifestation of an individual's comprehension of financial matters and their ability for making decisions concerning financial affairs (Shim et al., 2009). As a result, examining a person's financial attitude can aid as a gauge of their financial knowledge and may be enhanced through their education. It's essential to analyze the financial attitude of individual investors as it partakes a significant impact on their financial decision-making (Grable & Lytton, 1998).

The importance of attitudes in influencing how individuals make financial decisions and behave has been extensively studied and documented (Boone et al., 1977). Several research studies have highlighted the significance of attitude in predicting future financial behavior, as demonstrated by research conducted by Greenberg & Hershfield (2018), Carpena et al., (2019), and Castro González et al., (2020). Financial attitude is an indication of an investor's financial apprehension and optimism, the extent of their financial stability, the profundity of their awareness of financial problems, and their requirement for precautionary funds (Talwar et al., 2021). An investor's attitude is shaped by their

knowledge and confidence when making investment decisions (Hong et al., 2004). Attitude has been identified as an important aspect impacting an investor's intention to invest and the stability of the equity market in various studies (Gopi & Ramayah, 2007; Alleyne & Broome 2011).

People's intentions are often linked to the positive opinions of others about a particular behavior. As a result, these views create positive attitudes toward the behavior in persons and are related to their ability to control that behavior (Palamida et al., 2016). A person's attitude and subjective norms towards a particular behaviour, along with their perceived behavioural control over it, greatly influence their intention to engage in that behaviour (Ajzen, 1991). Consequently, the sturdier the intention, the more possibility that the behavior will be implemented. The research infers that there is a strong relationship between trading behaviours and behavioral intentions. Overall, if someone has a positive attitude towards trading and feels in control of their actions, they are more likely to be involved in trading behaviours (Bock & Kim, 2002).

Individuals tend to seek guidance from their social circle, such as friends, social groups, and existing investors, before investing in the stock market (Akhtar & Das, 2019; Mishra et al., 2022). Similarly, Yadav & Pathak (2017) infer that individuals are expected more to invest in the securities market when they have a strong sense of subjective norms, which influences their personal inclination to invest. Ali et al., (2015) asserted that there is a strong correlation amid the PBC and investors' willingness to invest in Islamic unit trust funds. Individuals who have a strong intention to invest in these assets rely heavily on their perceived ability to control their investment behavior. This suggests that when individuals have a positive attitude, their investment intention is likely to be higher (Ali et al., 2015; Mishra et al., 2022). In vein with the above discussion, the study hypothesis that

> *H2: There is a positive association between excessive use of SNS and financial attitude.*
> *H4: There is a positive association between financial attitude and investment intention.*

H6a: Financial Attitude mediates the relationship between excessive use of SNS and investment intention in the stock market among Generation Z.

Mediating role of PBC

The concept of PBC involves how easy or hard a behavior is perceived to be, taking into account past experiences and potential barriers. Behavioural intention is inclined via both; an individual's attitude towards behavior and the subjective norms regarding it and is a significant predictor of actual behavior (Ali et al., 2015). In line with the social cognitive theory, individuals actively engage in their personal growth and drive societal transformation by taking intentional actions within interconnected networks of influence (Bussey & Bandura, 1999). Considering the aspects that influence individuals' in attaining and sustaining their behavior, while acknowledging the social environment in which they execute the behavior (Ma et al., 2020). In line with this theory, it has placed a significant emphasis on the role of PBC in predicting financial behavior (Bandura, 1989; She et al., 2023).

Adepoju & Babalola (2022) concluded that PBC has a significant positive influence on the investment intention. However, the findings exhibited that attitude had a greater impact on the investment intention in residential real estate property compared to perceived behavioral control among the constructs analyzed in the theory of planned behavior.

Further, Alleyne & Broome (2011) and (Mishra et al., 2022), pointed out that the attitudes of individuals towards investing and their social circle, including peers, family, and significant others, along with their beliefs about potential challenges and opportunities, were significant factors that determined their investment intentions. These results are constant with the research conducted by East (1993), which also showed that the influence of friends/relatives and easy access to capital played a significant role in predicting investment intentions among students.

The intentions of individuals to invest in stocks are strongly impacted by their personal beliefs about social norms, their attitudes toward investing, and their PBC over the investment decision. The analysis revealed that PBC emerged as a substantial predictor of

Investment Intention (Tanpoco et al., 2022). This study draws on empirical evidence and discussions with other studies that have explored the link between the excessive usage of SNS and the intention to invest, as well as the underlying mechanisms behind this relationship. As a result, the study hypothesizes:

H3: There is a positive association between SNS usage and PBC.
H5: There is a positive association between PBC and investment intention.
H6b: Perceived Behavioral Control mediates the association between excessive use of SNS and the investment intention in the stock market among Generation Z.

Figure-1 illustrates the conceptual design for the research. SNS is the predictor variable and Investment Intention is the endogenous variable.
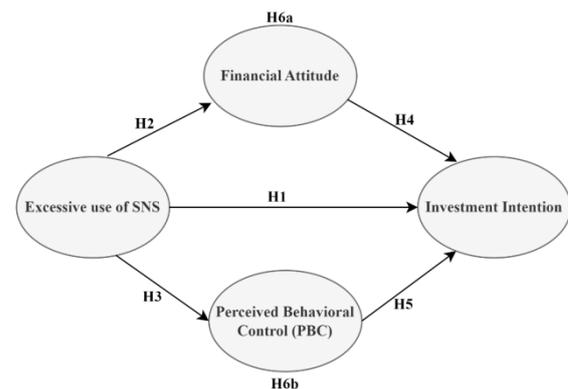
Figure 1: Proposed Research Model

3. Research Design and Approach
3.1 Study Design and Sample Size
The study employs a cross-section, self-administered structured questionnaire research design to collect responses from a young generation of Indian Gen Z. The impact of Gen Z's excessive use of SNS on their investment intention in the stock market has been investigated with the mediating role of PBC and financial attitude. We used a purposive sampling technique as guided by previous literature to gather information from 285 Gen Z. G* software has been utilized to assess the minimum sample size requirements for the research (Faul et al., 2009). The statistical power was kept at 0.80 (with 0.05 alpha) for 3 predictors, that generated a sample size of 159. With 285 participants, which is more than the minimum requirement

of 159, the study complies with sample size requirements. The survey consisted of multiple sections, with the initial portion focused on obtaining fundamental demographic information. The second section covered the dimensions of personal finance followed by the third section capturing the excessive use of social networking sites.

3.2 Descriptive statistics

An online survey form was circulated among Indian Gen Z using various platforms in North India. According to Turner (2015), Gen Z generational cohort is born between 1993 to 2005. The participant details are mentioned below (Table 1)

Table 1: Demographic details of respondents

Variable	No of respondents	%
Gender		
Male	95	33%
Female	190	67%
Education		
Higher Secondary	119	42%
Diploma	11	4%
Graduate	104	36%
Post graduate	42	15%
Professional	9	3%
Annual Income		
Less than Rs. 3 Lacs	235	82%
Rs. 3 - Rs. 5 Lacs	31	11%
Rs. 5 - Rs. 10 Lacs	13	5%
More than Rs. 10 Lacs	6	2%

3.3 Instrument development

All constructs in our proposed research model (Figure 1) are examined by several items (Annexure 1) in a reflective measurement model (Sarstedt et al., 2016). We designed our survey questionnaire form using pre-validated scales from previous relevant literature. All items were determined using a 7-point Likert scale. The use of five or seven-point scales generates the required variability for analyzing the connections between items and scales as well as establishing satisfactory

coefficient alpha, which measures internal consistency. (Lissitz and Green, 1975). The survey included a brief introduction to the research and assurances that respondents' identities and survey responses would be kept confidential. Table 2 explains the sources from where the scales were adopted.

Table 2: Questionnaire Development

Construct	No of items	Source
Excessive use of SNS	8-items	The current research adopted a refined version of the Pahlevan Sharif and Khanekharab (2017) scale which was originally established by Mueller et al., (2011).
Perceived Behavioral Control	3-items	We adopted a 3-item scale from Shim et al., (2009).
Financial Attitude	7-items	The study adopted She et al., (2023) scale originally used by Yang and Kahlor (2013) to capture financial attitude.
Investment Intention	3-items	This study adopted a refined version of Akhtar and Das's (2018) scale originally developed by Chen (2007).

3.4 Multivariate normality test and common method bias

Multi-variate normality of data was checked through the WebPower tools (Zhang and Yuan, 2018; Cain et al., 2017). The p-values of skewness and kurtosis were identified to be less than 0.05, indicating that the data does not demonstrate multivariate normality. The assessment confirmed that the distribution of data was not normal. Furthermore, it is usually seen that in the self-reported data set, the issue of common method bias (CMB) may arise. It may also occur when two or more constructs are measured using the same method. In order to address this vital issue, we performed a full collinearity measure. For this, the inner VIF measures must be less than 3.3 (Kock and Lynn, 2012; Kock, 2015). We

found that the VIF values were between 1.034 and 1.2 which are less than the threshold, therefore, the data is deemed to be free from common method variance and hence CMB is not an issue.

3.5 Statistical Method

Since the data was not normal, VB (Variance-based) SEM of partial least square, PLS-SEM (Lohmöller, 1989) has been used. The data analysis was performed with PLS-SEM in SmartPLS 4 (Ringle et al., 2022). PLS-SEM was preferred over covariance-based SEM as it has become an established method for analysing the complex inter-relationships between observed and latent variables in recent years (Hair et al., 2019) as well as in management research (Richter et al., 2016). PLS is a composite-based method for SEM that focuses on prediction while estimating relatively complex models with structures intended for providing causal justifications (Hair et al., 2019). Moreover, according to Hair (2021), PLS-SEM advocates the use of both, in-sample along with out of the sample prediction. A model that performs fine in terms of in-sample predictive power may not certainly possess a great level of out-of-sample prediction (Sarstedt and Danks, 2021), thus making this joint consideration essential. Furthermore, PLS-SEM is suitable for examining the mediating relationships (Cepeda-Carrión et al., 2017)

4. Results and analysis

4.1 Measurement Model Assessment

The assessment of the constructs' quality in the study is determined through an examination of the measurement model. To establish the quality criteria, the process begins by examining factor loadings, followed by determining the reliability and validity of all the constructs. In the present study, none of the items were observed to be having a factor loading of less than the critical value of 0.708 (Hair et al., 2019). Therefore, no item was removed (See Table 3). Further, reliability was assessed through Cronbach's Alpha, Composite Reliability, and Henseler's rhoA (Table 3), which were observed to be above 0.70. Hence, construct reliability is established. Further, we checked for convergent validity. The convergent validity was established through Average Variance Extracted (AVE). For all the constructs, the values of AVE were above 0.5 (Hair et al., 2022) i.e. at least 50% of the variance in the construct is elucidated by the designated indicators of the construct. Discriminant Validity was established using the Heterotrait-monotrait ratio (HTMT) – Matrix (Henseler et al., 2015) as demonstrated in Table 4. All the values were noted to be less than 0.80 as per the suggested guidelines in the existing literature (Voorhees, 2016; Henseler et al., 2015). Table 4 represent good discriminant validity. Hence, reliability and validity measures are deemed fit.

Table 3: Internal consistency and AVE measures

Construct	Coding	Outer Loadings	Cronbach's Alpha	Composite Reliability	rhoA	AVE
Excessive use of SNS	SNS1	0.811	0.912	0.929	0.926	0.621
	SNS2	0.849				
	SNS3	0.851				
	SNS4	0.881				
	SNS5	0.724				
	SNS6	0.729				
	SNS7	0.719				
	SNS8	0.717				
Perceived Behavioral Control	PBC1	0.829	0.713	0.840	0.724	0.637
	PBC2	0.713				
	PBC3	0.846				
Financial Attitude	FAtt1	0.858	0.948	0.957	0.949	0.761
	FAtt2	0.859				
	FAtt3	0.866				
	FAtt4	0.881				
	FAtt5	0.865				
	FAtt6	0.875				
	FAtt7	0.904				
Investment Intention	Intention1	0.909	0.891	0.932	0.894	0.821
	Intention2	0.939				
	Intention3	0.870				

Source: Authors' calculation

Table 4: Discriminant validity measures using HTMT ratios

	Financial Attitude	Investment Intention	Perceived Behavioral Control (PBC)	Excessive use of SNS
Financial Attitude				
Investment Intention	0.319			
PBC	0.403	0.475		
Excessive use of SNS	0.230	0.338	0.301	

Source: Authors' calculation

4.2 Structural Model Assessment

We performed the structural model evaluation as per the guidelines given by Hair et al., (2022). To begin with the assessment, we first checked for multicollinearity measures. As per Diamantopoulos and Siguaw (2006), too much intercorrelation between variables is the main cause of multicollinearity problems in any model. A common way to evaluate multicollinearity issues in any model is to evaluate the variance inflation factor values. VIF estimates of less than 3 indicate no multicollinearity issues (Diamantopoulos and Siguaw, 2006). Table 5 represents each VIF value below the critical value of 3. Hence, no multicollinearity issues were found.

Next, we proceeded with checking the proposed hypotheses for the research. Figure 2 represents the structural model assessment of the present study. Using the latest version of SmartPLS4, bootstrapping technique (parallel processing) with 10,000 sub-samples as suggested by Streukens & Leroi-Werelds (2016) was employed for hypothesis testing. As per Davcik (2014), bootstrapping technique; a resampling procedure, helps in ensuring the stability of estimates. As per the current study's hypotheses, excessive usage of SNS has a significant influence on the investment intention in the stock market of Indian Gen Z. It is further hypothesized that financial attitude and PBC accentuate the association of excessive SNS usage and investment intention. Bootstrapping results are depicted in Table 6. The results infer that excessive use of SNS has a significant and positive impact on the investment intention of GenZ (β=0.213, p<0.00; H1). Further, SNS usage has a significant impact on financial attitude (β=0.234, p<0.00; H2) and PBC (β=0.253, p<0.00; H3). Subsequently, financial attitude (β=0.149, p<0.006; H4) and PBC (β=0.274, p<0.00; H5) significantly influence the investment intention of Gen Z. Further, we assessed the explanatory power of the

proposed research model through R^2. The coefficient of determination (R^2) quantifies the amount of variance explained within each of the endogenous constructs, serving as an indicator of the model's explanatory strength (Shmueli & Koppius, 2011). Additionally, it is referred to as the in-sample predictive power (Rigdon, 2012). R^2 measure of the dependent variable, Investment Intention is 21.5%. According to Rasoolimanesh et al., (2017), any value of R^2 0.20 or more is regarded as high in the behavioural sciences. Further, the effect size was assessed using f^2 (Cohen, 1988). Effect size is the alteration in R^2 measure when an exogenous construct is removed from the research model. Effect size measures are reported in Table 6 which are found to be low.

Table 5: Variance Inflation Factor values

	Excessive use of SNS	Financial Attitude	Investment Intention	PBC
Excessive use of SNS		1	1.097	1
Financial Attitude			1.16	
Investment Intention				
PBC			1.172	

Source: Authors' calculation

Table 6: Structural Model Assessment

Relationship	Std. β	T-value	Confidence Interval	f^2	Hypothesis Supported
Path Coefficients					
Excessive use of SNS -> Investment Intention	0.213***	3.534	0.092, 0.329	0.053	Yes (H1)
Excessive use of SNS -> Financial Attitude	0.234***	4.371	0.122, 0.329	0.058	Yes (H2)
Excessive use of SNS -> Perceived Behavioural Control	0.253***	3.654	0.101, 0.375	0.068	Yes (H3)
Financial Attitude -> Investment Intention	0.149**	2.769	0.047, 0.258	0.024	Yes (H4)
Perceived Behavioural Control -> Investment Intention	0.274***	4	0.133, 0.402	0.082	Yes (H5)
Specific Indirect Effect					
Excessive use of SNS -> Financial Attitude -> Investment Intention	0.035*	2.16	0.009, 0.073		Yes (H6a)
Excessive use of SNS -> Perceived Behavioural Control -> Investment Intention	0.069**	2.73	0.027, 0.126		Yes (H6b)
Total Indirect Effect					
Excessive use of SNS -> Investment Intention	0.104***	3.547	0.052, 0.166		
Total Effect					
Excessive use of SNS -> Investment Intention	0.317***	5.147	0.192, 0.433		

Source: Authors' calculation

Note: *p<0.05, **p<0.01,***p<0.001; 95% Confidence Interval (Lower bound, Upper bound)
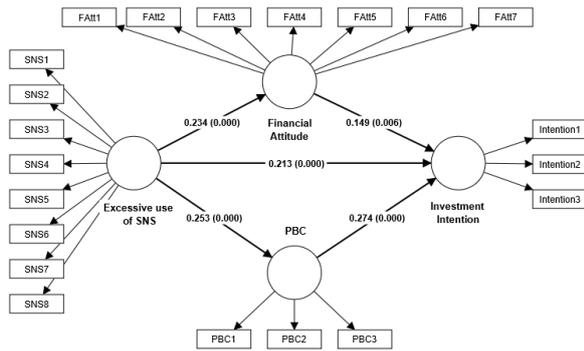
Note: PBC-Perceived Behavioral Control; SNS-Social Networking Sites

Figure 2: Structural Model Assessment

4.3 Mediation Analysis

Mediation Analysis was performed to evaluate the accentuating roles of financial attitude and PBC in the relationship between excessive use of SNS and investment intention. To assess the Mediation Analysis, we followed a two-step approach; Nitzl et al. (2016) and Zhao et al., (2010) decision-tree approach. First, using a bootstrapping technique we checked for the significance of indirect effects (see Table 6) i.e. Excessive SNS usage -> Financial Attitude -> Investment Intention ($\beta = 0.035$, p <0.031; H6a) and Excessive SNS usage -> Perceived Behavioural Control -> Investment Intention

we checked the joint effect to assess the parallel mediation ($\beta = 0.104$, p <0.001). Therefore, we conclude that financial attitude and PBC parallelly mediate the association between excessive SNS usage and investment intention.

4.4 Predictive relevance

Further, the PLSpredict procedure was applied to assess the out-of-sample prediction (Shmueli et al., 2019) for the dependent variable Investment Intention in the stock markets of Gen Z in India. Q^2 measures the predictive relevance of the endogenous construct. Table 7 represents that all the values of Q^2 are above zero. Root Mean Squared Error values and Mean Absolute Error values were calculated for theorized model (PLS-SEM) and were assessed against the Linear Model (LM). All $RMSE_{PLS}$ values and a majority of MAE_{PLS} values were observed to be less than the $RMSE_{LM}$ and MAE_{LM} benchmark values respectively. Thus, representing high predictive relevance of investment intention among Gen Z in India.

Furthermore, SRMR (standardized root mean square residual) was assessed to measure the goodness of fit (Hu and Bentler, 1999). In

Table 7: PLSpredict results

Construct	Indicators	PLS-SEM			LM		PLS-LM		Predictive Relevance
		Q²predict	RMSE	MAE	RMSE	MAE	RMSE	MAE	
Investment Intention	Intention1	0.064	1.993	1.653	2.032	1.692	-0.039	-0.039	High Predictive Power
	Intention2	0.069	1.897	1.540	1.922	1.565	-0.025	-0.025	
	Intention3	0.082	1.841	1.522	1.856	1.497	-0.015	0.025	
Source: Authors' calculation									
Note: PLS-Partial Least Square; LM-Linear Model; RMSE-Root Mean Squared Error; MAE-Mean Absolute Error									

($\beta = 0.069$, p <0.006; H6b). The indirect effect was significant for both relationships. Next, we checked for direct effect i.e. Excessive SNS usage -> Investment Intention ($\beta = 0.213$, p <0.00) which was also found significant. Hence, we determined that the relationship is partial mediation. Further, we assessed the sign of this association which was found positive. Therefore, we conclude that it is complementary partial mediation. As asserted by Baron and Kenny (1986), in a complementary partial mediation, direct as well as indirect effects are in the identical direction (positive or negative). Additionally,

2014, Henseler and colleagues proposed the SRMR as a goodness of fit metric to evaluate the adequacy of PLS-SEM models, enabling researchers to prevent model misspecification. In our study, the SRMR value was found to be 0.088 which is less than 0.10. Based on the findings of Hu and Bentler (1999), a value below 0.10 or 0.08 (using a more conservative approach) is regarded as indicative of a favorable fit.

5. Discussion and implications

Social Media plays a pivotal role in influencing the intention of its users,

especially the younger generation. It provides a quick and simple method to share ideas, thoughts, and other information. Excessive use of social media not only influences the financial attitude of individuals but also their intention to invest in the stock markets. The economic landscape is constantly evolving (Orthner et al., 2004). Owing to covid-19, social media platforms are flooded with finance content creators which directly or indirectly influence the decision-making of youth. In the current study, we identified two research questions to achieve our research objectives and tested four hypotheses for direct effects and two hypotheses for assessing the mediating effects. Subsequently, an attempt was made to investigate the influence of excessive SNS usage on the investment intention of Indian Gen Z with the mediating roles of financial attitude and PBC. The reliability and validity of the constructs were well established. We found support for all the proposed hypotheses. The results express a significant influence of SNS usage on investment intention. The results are in line with the previous studies (Yang et al., 2021; Khatik et al., 2021; Shanmugham & Ramya, 2012; Wu et al., 2018). Second, it explores the underlying mechanism of mediating roles of financial attitude and PBC on the association between SNS usage and investment intention. Adepoju & Babalola (2022) in their study also found similar results. The study also evaluated the out-of-sample predictive relevance which was found to be high. Our study conducted empirically on Indian Gen Z confirms that social media as a way of communication plays a critical role in influencing the financial decisions of its users. The proposed conceptual model may also add value to the existing literature as social media usage and investment intention are important constructs in interdisciplinary studies. Support for partial complementary mediation opens up prospects for testing other mediating variables such as financial behavior, financial literacy, financial socialization, and so on. Additionally, instead of taking financial attitude and PBC as parallel mediators, the same could be analyzed for serial mediation relationships. Future researchers can also examine the moderating effects of various demographic variables on the association of SNS usage and investment intention.

Practical Implications In today's fast-paced world, social media has become a primary source for staying up-to-date with the latest information. As a result, executives, companies, governments, and academicians are all interested in understanding how Gen Y and Gen Z utilize social media, as it influences their behavior in numerous industries (Mude & Undale, 2023). Multiple stakeholders can derive practical implications from the outcomes of this study. First, the financial service sector can benefit from the study's insights, as they can use the information to improve their services and products to cater to the investment needs of the younger generation. Financial institutions can leverage the insights gained from the study to develop targeted marketing and advertising strategies to attract and engage younger generations. Additionally, understanding the social media platforms, influencers, and content that resonate with Gen Z can help financial companies effectively promote their products and services. Second, brokers and financial advisers can also benefit from the study's findings by using the insights to tailor their services to meet the investment goals of Gen Z. Retail investors actively engage in analysing social-media posts, and views to gain insights into market sentiments (Mishra et al., 2022). Therefore, financial service providers and brokerage firms can design user-friendly platforms that incorporate social media elements, interactive features, and personalized investment recommendations to attract and retain younger investors. Third, policymakers and financial organizations can utilize the study's empirical evidence to develop targeted financial literacy programs and educational resources that effectively engage young generations. These programs can emphasize responsible financial decision-making, investment strategies, and risk management techniques within the context of social media usage. Last, the study's findings offer valuable insights for any practitioner looking to become more mindful of Gen Z's financial decisions, providing a better understanding of the cognitive and behavioural factors that influence their investment intentions. Based on the study's findings, financial institutions can explore partnerships and collaborations with popular social media influencers and content creators who have significant influence over younger generations. This collaboration can help raise

awareness about financial products and services, deliver educational content, and enhance trust and credibility among Gen Z investors.

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Construct	Statements
Excessive use of SNS	**SNS1:** I feel that my SNS use is out of control. **SNS2:** My SNS use has caused problems for me. **SNS3:** Others have objected to the amount of time I spend using SNS. **SNS4:** I spend more time than I planned to use SNS. **SNS5:** I have attempted to control or cut back on my SNS use. **SNS6:** I feel anxious when I am not able to access SNS. **SNS7:** I use the SNS to escape from problems in my life or to relieve unpleasant feelings. **SNS8:** I attempt to conceal my SNS use from my family, friends, or other people.
Financial attitude	**FAtt1:** I feel that knowing personal financial management is worthless/valuable. **FAtt2:** I feel that knowing personal financial management is bad/ good. **FAtt3:** I feel that knowing personal financial management is harmful/beneficial. **FAtt4:** I feel that knowing personal financial management is not helpful/helpful. **FAtt5:** I feel that knowing personal financial management is unproductive/productive. **FAtt6:** I feel that knowing personal financial management is foolish/wise. **FAtt7:** I feel that knowing personal financial management is not useful/useful
Perceived Behavioral Control	**PBC1:** It is easy to stay within my budget each month. **PBC2**: It is easy to pay with credit card balance in full each month. **PBC3:** It is easy to save money for the future each month.
Investment Intention	**Intention 1:** I will invest in stock market frequently. **Intention 2:** I will encourage my friend and family to invest in stock market. **Intention 3:** I will invest in stock market in near future.

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