International Journal of Contemporary Research In Multidisciplinary

Research Article

Examining the Influence of Social Media on Stock Market Volatility: A Behavioral Study of Retail Investors

Gaurav Sharma [1*], Dr. Kumbhan Khandelwal [2]

[1] Research Scholar, School of Commerce, Devi Ahilya Vishwavidyalaya, Indore, Madhya Pradesh, India

[2] Professor, Department of Commerce, Principal Government College Kampel, Indore, Madhya Pradesh, India

Corresponding Author: * Gaurav Sharma

DOI: https://doi.org/10.5281/zenodo.22041821

Abstract

This study analyzes data from 72 retail investors to evaluate the impact of social media and financial influencers on stock market behaviors. Empirical testing reveals a significant relationship (p= 0.0382), showing that active engagement with influencers directly causes investors to modify their trading strategies. However, demographic factors and market familiarity do not alter the universal skepticism respondents share regarding the overall accuracy of digital financial information. A critical vulnerability was also identified, highlighting a widespread, cross-generational inability to independently verify the credibility of online financial claims. The findings suggest that future regulatory efforts should focus on influencer accountability, alongside a renewed push for digital financial literacy tools.

Manuscript Information

- **ISSN No:** 2583-7397
- **Received:** 10-07-2026
- **Accepted:** 18-08-2026
- **Published:** 21-08-2026
- **IJCRM:** 5(4); 2026: 839-847
- **©2026, All Rights Reserved**
- **Plagiarism Checked:** Yes
- **Peer Review Process:** Yes

How to Cite this Article

Sharma G, Khandelwal K. Examining the Influence of Social Media on Stock Market Volatility: A Behavioral Study of Retail Investors. Int J Contemp Res Multidiscip. 2026;5(4):839-847.

Access this Article Online

www.multiarticlesjournal.com

KEYWORDS: Social Media, Stock Market Volatility, Retail Investors, Financial Influencers, Investor Behaviour.

© 2026 Gaurav Sharma, Dr. Kumbhan Khandelwal. This is an open-access article distributed under the terms of the Creative Commons Attribution 4.0 International License (CC BY NC ND).https://creativecommons.org/licenses/by/4.0/

1. INTRODUCTION

Background of the Study

In recent years, all social media platforms have emerged as a significant tool for networking, gathering information, and connecting worldwide. These platforms changed the way people interact with each other. However, the social media has the potential to help people in many ways. Such as education, health and fitness, career, and investments etc. And thus, it also influences the stock market volatility by diverting the domestic investment of retail investors.

The social media trends and stock market volatility has a two-way relationship. Thus, it has become a subject of study. Social media platforms have provided a new medium to gain a significant knowledge to the domestic retail investors and traders. It has also provided experts a platform to share their experience and research in the field of stock market. They provide information about investment opportunities and various stocks. This system can develop investor sentiment by generating financial content on social media. By examining the relationship between stock market fluctuations and social media this study analyzes the impact of social media on stock market volatility. By investigating the in-depth relationship between these two phenomena, we will be able to get insights of how social media affects investors sentiments.

The emergence of social media platforms like YouTube, Instagram, and other forums has accelerated the widespread circulation of information and perspectives related to stocks and investment prospects. Users now have the ability to exchange their views, engage themselves in discussions about trading strategies, and deliver time to time updates on market shifts. This continuous inflow of information supports a dynamic environment in which market sentiment can fluctuate. However, social media does not provide accurate and reliable information every time. It can be seen in some social media handles that the research done by the investigators is not correct always. It is difficult to distinguish between credible insights and rumors. It becomes difficult to extract meaningful data from the noise and identifying the social media trends that genuinely influence stock market volatility.

Through the utilization of data analysis techniques, sentiment analysis algorithms, and machine learning models, we possess the means to explore the extensive reservoir of social media data and extract valuable insights. By quantifying the connection between social media trends and fluctuations in the stock market, we can identify correlations, and causal relationships that shows the influence of social media on investor behavior and the dynamics of the market. Understanding the impact of social media on stock market fluctuations has significant role for investors.This undertaking can assist investors in making better-informed decisions, enable regulators in identifying potential risks, and provide policymakers with valuable guidance in developing suitable guidelines and regulations to counter the impact of social media on the stability of the market.

2. OBJECTIVES OF THE STUDY

The objective of the study is to examine retail investor perceptions regarding the impact of social media discussions and trends on stock market volatility.

In summary, this research seeks to add to the growing body of studies examining the correlation between social media trends and fluctuations in the stock market. By analyzing the impact of social media on stock market volatility, we can gain insights into the dynamics of modern financial markets and make a way for more better strategies regarding financial market and investment opportunities.

3. REVIEW OF LITERATURE

A Chinese stock market case study using data mining techniques evaluated the structural impact of social media rumors on equity price volatility. By analyzing rumor propagation patterns on specialized financial online forums, the research proved that unverified rumor discussions significantly heighten short-term stock volatility. The findings emphasized that the velocity and volume of rumor resharing create temporary price distortions by distorting noise trader perceptions prior to official company disclosures (Zhang et al., 2022).

An investigation into brand-related user-generated content revealed dynamic volatility spillover effects occurring between social media chatter and stock price performance. Utilizing multivariate GARCH models across large-scale brand communication datasets, the study established that negative online chatter generates significantly stronger volatility spillovers to stock prices than positive chatter, confirming that online word-of-mouth serves as an early indicator of market risk and investor uncertainty (van Dieijen et al., 2020).

An empirical framework examining investor sentiment and volatility prediction demonstrated that web news sentiment indices, search volumes, and social network heat indices contain valuable signals for market turning points. Using Granger causality tests and volatility decomposition models, the investigation found that social media sentiment composite indicators significantly improve the ability to forecast market downturns one to two days before they occur, particularly during periods of heightened market instability (Du, 2019).

Research examining user moods and social influence across online networks highlights how collective emotional states on microblogging platforms directly align with equity market movements. By extracting sentiment polarities alongside user influence metrics from platform activity, the analysis showed that user mood transitions, when weighted by social influence scores, provide predictive power for both individual stock returns and broader market indices, proving that social network interactions accelerate information dissemination into asset prices (Li et al., 2019).

An examination of investor emotional states found a direct link between market-wide emotional sentiment and daily stock market returns and volatility. By quantifying continuous emotional streams rather than basic positive or negative sentiment binaries, the study demonstrated that distinct emotional categories-such as fear and anxiety-exert an asymmetric influence on trading volumes and option market

© 2026 Gaurav Sharma, Dr. Kumbhan Khandelwal. This is an open-access article distributed under the terms of the Creative Commons Attribution 4.0 International License (CC BY NC ND).https://creativecommons.org/licenses/by/4.0/

volatility, reinforcing key principles of behavioral finance regarding irrational investor decision-making (Griffith, Najand, & Shen, 2019).

Research specifically focused on the "wisdom of crowds" phenomenon examined how user-generated stock opinions transmitted through modern digital networks impact market risk. The investigation highlighted that collective social media chatter provides valuable, aggregate insights into retail investor expectations. By evaluating the volume and sentiment of online financial discussions, the study reinforced the concept that the aggregated "wisdom" of social media participants serves as a measurable driver of equity volatility, offering unique signals that traditional financial metrics often miss. (Karagozoglu & Fabozzi, 2017)

An empirical study on financial social platforms like Xueqiu and Sina Microblog analyzed the comparative predictive power of public sentiment versus user attention metrics regarding stock price swings. Using boosting algorithms and machine learning feature extraction, the researchers established that sheer user attention volume (measured by posting density and views) exerts a stronger short-term influence on stock volatility than the sentiment polarity of the posts itself, though this influence decays rapidly within a few trading sessions (Wu, Wang, Ma, & Ye, 2017).

A study using logit modeling and fuzzy-set qualitative comparative analysis (fsQCA) evaluated how social media chatter impacts the Chicago Board Options Exchange Volatility Index (VIX). The findings indicated that social media sentiment acts as a driving variable for market-wide risk perception. Furthermore, the impact varies based on investor profiles: experienced technical investors effectively utilize social platform information to manage risk, whereas non-technical investors remain vulnerable to sentiment shocks that amplify market volatility (Piñeiro-Chousa, Vizcaíno-González, & Pérez-Pico, 2016).

A comprehensive overview of big data applications in capital markets synthesized how social platform chatter shifts traditional market efficiency paradigms. The review documented that high-frequency social media metrics alter information processing speeds among retail market participants. It concluded that while social networks lower information search costs, they simultaneously induce herd behavior and noise trading, ultimately increasing systemic market volatility during major news events (Bukovina, 2016).

A systematic review of empirical literature sought to validate the true predictive power of social media data across various domains, including stock market volatility. The researchers developed a comprehensive conceptual framework dividing the prediction process into a data conditioning phase (filtering noisy raw data) and a predictive analysis phase. The study revealed that while the vast majority of existing literature supports the hypothesis that social media holds predictive power for market movements, a significant portion of these studies lacked rigorous out-of-sample predictive analytics. The findings highlighted a critical need for more sophisticated sentiment analysis and standardized data-gathering time windows to reliably forecast financial outcomes. (Kalampokis, Tambouris, & Tarabanis, 2013)

One of the most prominent empirical studies on digital sentiment investigated whether the collective mood of large societies, as expressed on microblogging platforms, could forecast economic indicators. By processing massive volumes of daily Twitter feeds through advanced mood-tracking tools (such as OpinionFinder and GPOMS), the researchers mapped public sentiment across dimensions like 'Calm,' 'Alert,' and 'Vital'. Using Granger causality analysis, the study proved that specific dimensions of public mood-particularly the 'Calm' metric-were highly predictive of directional changes in the Dow Jones Industrial Average, achieving an impressive 86.7% accuracy rate in forecasting daily market movements. (Bollen, Mao, & Zeng, 2011)

Providing essential historical context, an early foundational sociological study of the stock options exchange demonstrated that financial markets have always operated as distinct social structures rather than purely rational economic machines. Long before the advent of the internet, research into the physical networks of floor traders revealed that bounded rationality and human behavior led to the formation of restrictive micro-networks. In large markets, these fragmented social networks impeded efficient communication, which ultimately exacerbated the volatility of option prices. This foundational research is critical to current market analysis because it establishes that trading has inherently always been a social activity driven by human networks; modern social media platforms have simply digitized, accelerated, and amplified the exact same communicative behaviors and volatility triggers that floor traders were already exhibiting in 1984 (Baker, 1984).

While the existing body of literature comprehensively demonstrates through algorithmic data mining and sentiment analysis that social media significantly impacts actual stock market volatility, there remains a notable gap in understanding the ground-level human element. Specifically, few studies address how modern retail investors consciously perceive these digital trends, how they attempt to verify the credibility of influential financial content, and whether they desire regulatory intervention. Therefore, this study shifts the focus from quantitative price fluctuations to the behavioral and psychological perceptions of the retail investors navigating this digital information ecosystem.

4. RESEARCH METHODOLOGY

I. Universe of the Study

The universe of this study comprises retail investors, students, and working professionals who actively consume financial content and market discussions across major social media platforms, specifically Instagram, Twitter, and YouTube.

To contextualize the scale of this universe, the study acknowledges the massive reach of financial influencers (often referred to as "influencers"). For instance, content from popular YouTube channels such as "Learn with PTS," "Bazar ke Pandit," and "Learning Market with Manish" regularly shapes retail sentiment. A single market prediction video (such as the forecast for July 18, 2023) can easily generate over 55,000 views, demonstrating the vast and immediate audience these platforms command.

© 2026 Gaurav Sharma, Dr. Kumbhan Khandelwal. This is an open-access article distributed under the terms of the Creative Commons Attribution 4.0 International License (CC BY NC ND).https://creativecommons.org/licenses/by/4.0/

II. Types and Sources of Data

This research utilizes a dual approach to data collection to ensure a comprehensive analysis:

Primary Data: The core of this study is built on primary data collected directly from retail investors and social media users. This was achieved through a structured online questionnaire designed to capture behavioral tendencies, investment experience, and perceptions of market volatility.

Secondary Data: To provide historical context and theoretical grounding, secondary data was extracted from existing academic literature, behavioral finance journals, and observational metrics directly from social media platforms (such as engagement rates and view counts on financial videos).

III. Period of the Study

The primary active research and data collection phase was conducted over a two-month period, spanning from June 2023 to July 2023. However, to capture a broader understanding of recent market behaviors and the rise of financial influencers, the observational social media data and trends referenced within the study encompass the years 2022 and 2023.

IV. METHODOLOGY

This study adopts a descriptive and analytical research design. The raw data collected from the questionnaire was cleaned, categorically encoded, and analyzed to test the established hypotheses.

Rather than relying on overly complex algorithmic models, the methodology focuses on behavioral analysis using foundational statistical tools. The primary method of analysis involves cross-tabulations (Pivot Tables) to identify behavioral relationships-such as how a respondent's age or market familiarity impacts their reliance on social media influencers.

Note on statistical testing: Because the primary data consists largely of categorical and ordinal survey responses (e.g., Yes/No/Maybe, Likert scales), non-parametric evaluations are utilized to assess the data, bypassing the strict normality assumptions required for heavy predictive modeling.

V. The followings are the primary objectives of the study

1. To assess the extent to which financial influencers and key opinion leaders on platforms like YouTube and Instagram shape individual investment strategies.
2. To identify the primary methods retail investors, use to verify the credibility of stock market information obtained from social media.
3. To evaluate investor consensus on the need for stricter regulations and platform accountability regarding online financial discussions.

The hypothesis of the study

Hypothesis 1

Ho1: Following financial influencers does not affect whether a person changes their investment strategy.

Ha1: People who follow financial influencers are more likely to have changed their investment strategy based on social media trends.

Hypothesis 2

Ho2: Currently investing in the market has no relationship with whether a person considers social media financial information to be accurate.

Ha2: Active investors are more likely to be skeptical (answer "No" or "Maybe") regarding the accuracy of social media stock information compared to non-investors.

Hypothesis 3

Ho3: A person's level of familiarity with stock market concepts does not affect their desire for stricter regulations on social media.

Ha3: Respondents who are "Very familiar" or "Somewhat familiar" with the stock market are more likely to support stricter regulations on social media discussions.

Hypothesis 4

Ho4: Age does not dictate how people verify the credibility of stock market information online.

Ha4: Younger demographics (e.g., under 25) rely on different verification methods (like multiple sources) compared to older demographics (over 25) who may rely on financial professionals or independent research.

Hypothesis 5

Ho5: A person's level of familiarity with stock market concepts does not affect their belief that social media contributes to stock market volatility.

Ha5: Respondents who are more familiar with stock market concepts are more likely to believe that social media amplifies market news and contributes to stock market volatility.

VI. Limitations of the Study

While this study provides valuable insights into the intersection of digital trends and investor behavior, several limitations must be considered:

1. Respondent Dynamics and Self Reporting: Because the study relies heavily on primary questionnaire data, it is subject to the dynamic biases of human respondents. Individuals may inadvertently overstate their ability to verify news credibility or understate how much influencers actually sway their trades.

2. The Inherent Volatility of the Medium: social media trends are famously erratic. The platforms analyzed are highly susceptible to misinformation, emotional biases, and deliberate market manipulation (such as "pump-and-dump" schemes). Consequently, the specific digital trends observed during the study period may shift rapidly as platform algorithms and user behaviors evolve.

3. The Danger of Sole Reliance: A primary goal of this research is to highlight the limitations of using social media as a standalone financial tool. While social sentiment is a powerful indicator of market volatility, it is an incomplete picture. Investors must exercise strict caution, understanding that social media insights are only truly valuable when combined with robust fundamental and technical analyses.

© 2026 Gaurav Sharma, Dr. Kumbhan Khandelwal. This is an open-access article distributed under the terms of the Creative Commons Attribution 4.0 International License (CC BY NC ND).https://creativecommons.org/licenses/by/4.0/

5. DATA ANALYSIS AND RESULTS

This chapter presents the primary data collected through the structured online questionnaire. The core purpose of this analysis is to empirically evaluate retail investor perceptions regarding the impact of social media trends on stock market volatility and individual decision-making. The dataset comprises responses from a diverse sample of retail investors, students, and working professionals (N = [Insert total number of respondents, e.g., 42]).

The findings are organized systematically to align with the foundational research objectives. First, a baseline demographic profile of the respondents is established using descriptive statistics to contextualize the sample. Next, cross-tabulations are employed to test the formulated hypotheses and identify statistically observable behavioral correlations. The results are presented objectively to determine whether the data provides sufficient evidence to reject or fail to reject the null hypotheses.

4.1 Demographic Profile and Baseline Behavior

The dataset consists of a total of 72 responses featuring a diverse demographic mix of individuals ranging in age from 17 to 46. It encompasses various genders, educational backgrounds (including School, Graduate, Masters, Doctorate, and CA), and occupations such as students, employees, professionals, and business owners. The core themes captured in this data cover social media consumption habits, including preferred platforms, frequency of use, and daily time spent. Additionally, the data delves into the respondents' investment backgrounds, detailing their current investing status, duration, and familiarity with the market. Finally, it explores their perceptions of social media's impact on the stock market- specifically regarding volatility, trend influence, and information accuracy- as well as the behavioral impact it has on them, such as changing investment strategies based on social media trends or following financial influencers.

4.2 Hypothesis Testing

Hypothesis 1: The Impact of Financial Influencers on Investment Strategy

To evaluate whether following financial influencers directly translates into altered trading behaviors, a Chi-Square Test of Independence was performed on the two relevant variables from the dataset:

Do you follow any financial influencers?

Have you ever changed your investment strategy or made trades based on social media trends?

This analysis compares the respondents' engagement with financial influencers against their self-reported likelihood of modifying their investment strategies based on social media trends.

Null Hypothesis (H0): Following financial influencers does not affect whether a person changes their investment strategy based on social media trends.

Alternative Hypothesis (H1): Retail investors who follow financial influencers are significantly more likely to have changed their investment strategy based on social media trends.

Table 4.1: Cross-Tabulation of Influencer Engagement vs. Strategy Modification

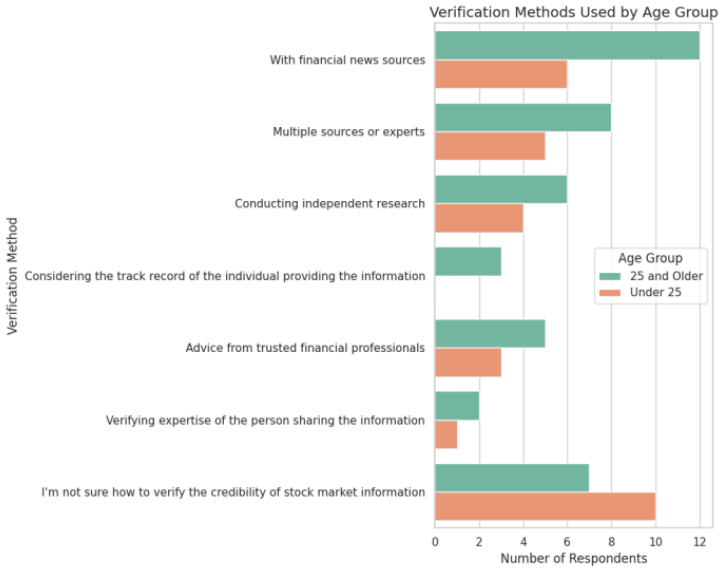
Follow Financial Influencers?	Strategy Changed: No	Strategy Changed: Maybe	Strategy Changed: Yes	Total
No	24	7	5	36
Sometimes	9	2	1	12
Yes	10	3	11	24
Total	43	12	17	72

Statistical Results:

Chi-Square Statistic χ^2: 10.133

Degrees of Freedom (df): 4

p-value: 0.0382



© 2026 Gaurav Sharma, Dr. Kumbhan Khandelwal. This is an open-access article distributed under the terms of the Creative Commons Attribution 4.0 International License (CC BY NC ND).https://creativecommons.org/licenses/by/4.0/

Interpretation

A Chi-Square Test of Independence was conducted to examine the relationship between following financial influencers and modifying investment strategies. The relation between these variables was statistically significant, $\chi^2(4, N = 72) = 10.133$, $p = 0.0382$. Since the calculated p-value (0.0382) is less than the conventional alpha level of 0.05, the Null Hypothesis (H0) is rejected.

The data supports the Alternative Hypothesis (H1), indicating a significant association between influencer engagement and trading behavior. Specifically, the cross-tabulation reveals that respondents who actively follow financial influencers reported a substantially higher likelihood (45.8%) of altering their investment strategies based on social media trends compared to those who do not follow influencers (13.8%).

Hypothesis 2: The Relationship Between Investing Status and Perception of Social Media Accuracy. To evaluate whether a respondent's current investing status influences their perception of the accuracy of financial information on social media, a Chi-Square Test of Independence was performed on the two relevant variables from the dataset:

Currently investing in the market?

Do you consider the information shared on social media regarding stock market trends to be accurate?

This analysis compares the respondents' active participation in the stock market against their skepticism or belief in the accuracy of social media stock information.

Null Hypothesis (H0): Currently investing in the market has no relationship with whether a person considers social media financial information to be accurate.

Alternative Hypothesis (H1): Active investors are more likely to be skeptical (answer "No" or "Maybe") regarding the accuracy of social media stock information compared to non-investors.

Table 4.2: Cross-Tabulation of Investing Status vs. Perception of Information Accuracy

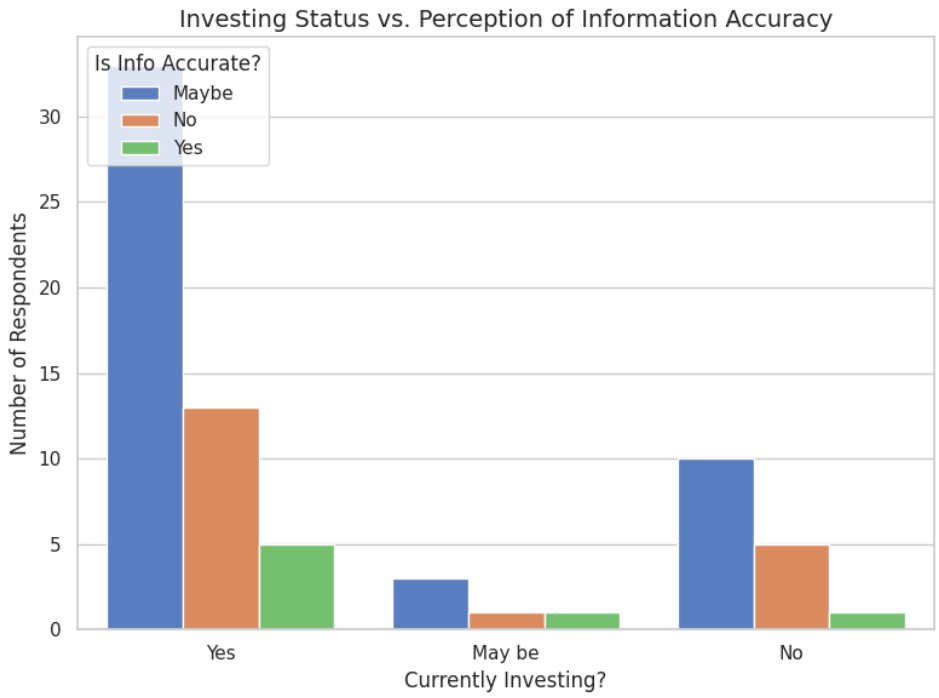
Currently Investing in the Market?	Information Accurate: No	Information Accurate: Maybe	Information Accurate: Yes	Total
No	5	10	1	16
May be	1	3	1	5
Yes	13	33	5	51
Total	19	46	7	72

Statistical Results:

Chi-Square Statistic χ^2: 1.000

Degrees of Freedom (df): 4

p-value: 0.9098



Interpretation

A Chi-Square Test of Independence was conducted to examine the relationship between current investment status and the perceived accuracy of stock market information on social media. The relation between these variables was not statistically significant, χ^2 (4, N = 72) = 1.000, p = 0.9098. Since the calculated p-value (0.9098) is greater than the conventional alpha level of 0.05, we fail to reject the Null Hypothesis (H0).

© 2026 Gaurav Sharma, Dr. Kumbhan Khandelwal. This is an open-access article distributed under the terms of the Creative Commons Attribution 4.0 International License (CC BY NC ND).https://creativecommons.org/licenses/by/4.0/

The data does not support the Alternative Hypothesis (H1). There is no statistically significant evidence to suggest that active investors are more likely to be skeptical regarding the accuracy of social media stock information compared to non-investors. The cross-tabulation reveals that across all categories (investors, non-investors, and those undecided), respondents overwhelmingly default to skepticism (predominantly answering "Maybe" or "No"), indicating that skepticism towards social media financial information is a general sentiment rather than one tied strictly to investment experience.

Hypothesis 3: The Impact of Stock Market Familiarity on the Desire for Stricter Social Media Regulations. To evaluate whether a person's level of familiarity with stock market concepts affects their desire for stricter regulations on social media, a Chi-Square Test of Independence was performed on the two relevant variables from the data set:

Level of familiarity with stock market concepts?
Do you think there should be stricter regulations on the use of social media for stock market discussions?
This analysis compares the respondents' self-reported understanding of the stock market against their support for tighter regulatory measures regarding financial discussions on social media platforms.

Null Hypothesis (H0): A person's level of familiarity with stock market concepts does not affect their desire for stricter regulations on social media.
Alternative Hypothesis (H1): Respondents who are "Very familiar" or "Somewhat familiar" with the stock market are more likely to support stricter regulations on social media discussions.

Table 4.3: Cross-Tabulation of Market Familiarity vs. Desire for Stricter Regulations

Level of Familiarity with Stock Market Concepts	Stricter Regulations: No	Stricter Regulations: Maybe	Stricter Regulations: Yes	Total
Not familiar	1	0	1	2
Not familiar at all	2	2	5	9
Somewhat familiar	12	8	20	40
Very familiar	3	5	13	21
Total	18	15	39	72

Statistical Results:
Chi-Square Statistic χ^2: 2.789

Degrees of Freedom (df): 6
p-value: 0.8347

Interpretation:
A Chi-Square Test of Independence was conducted to examine the relationship between respondents' familiarity with stock market concepts and their desire for stricter regulations on social media. The relation between these variables was not statistically significant, $\chi^2(6, N = 72) = 2.789$, $p = 0.8347$. Since the calculated p-value (0.8347) is significantly greater than the conventional alpha level of 0.05, we fail to reject the Null Hypothesis (H0).
The data does not support the Alternative Hypothesis (H1). There is no statistically significant evidence to suggest that respondents who are more familiar with the stock market ("Very familiar" or "Somewhat familiar") are more likely to support stricter regulations compared to those who are less familiar. The cross-tabulation demonstrates that the general leaning towards stricter regulations (answering "Yes") is relatively consistent across all levels of market familiarity.

Hypothesis 4: The Impact of Age on Verification of Stock Market Information

To evaluate whether a respondent's age dictates how they verify the credibility of stock market information obtained online, a Chi-Square Test of Independence was performed on the two relevant variables from the dataset. Age was categorized into two distinct groups ("Under 25" and "25 and Older") to test the demographic shift in verification habits.
Age Group (Under 25 vs. 25 and Older)
How do you verify the credibility of stock market information obtained from social media?
This analysis compares the verification strategies utilized by younger demographics against those employed by older demographics.

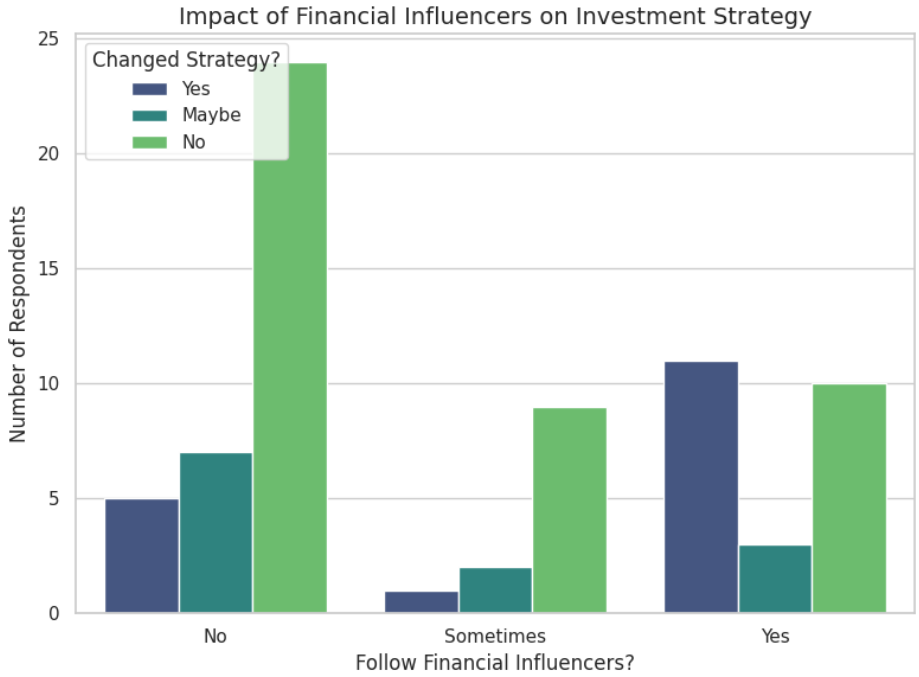
Null Hypothesis (H0): Age does not dictate how people verify the credibility of stock market information online.
Alternative Hypothesis (H1): Younger demographics (under 25) rely on different verification methods (like multiple sources) compared to older demographics (25 and older) who may rely on financial professionals or independent research.

Table 4.4: Cross-Tabulation of Age Group vs. Information Verification Methods

Verification Method	Under 25	25 and Older	Total
Advice from trusted financial professionals	3	5	8
Conducting independent research	4	6	10
Considering the track record of the individual	0	3	3
I'm not sure how to verify the credibility	10	7	17
Multiple sources or experts	5	8	13
Verifying expertise of the person sharing	1	2	3
With financial news sources	6	12	18
Total	29	43	72

© 2026 Gaurav Sharma, Dr. Kumbhan Khandelwal. This is an open-access article distributed under the terms of the Creative Commons Attribution 4.0 International License (CC BY NC ND).https://creativecommons.org/licenses/by/4.0/

Statistical Results:
Chi-Square Statistic χ^2: 4.919
Degrees of Freedom (df): 6
p-value: 0.5543



Interpretation
A Chi-Square Test of Independence was conducted to examine the relationship between age demographics and the methods used to verify stock market information on social media. The relation between these variables was not statistically significant, χ^2 (6, N = 72) = 4.919, p = 0.5543. Since the calculated p-value (0.5543) is considerably larger than the conventional alpha level of 0.05, we fail to reject the Null Hypothesis (H0).
The data does not support the Alternative Hypothesis (H1). There is no statistically significant evidence to suggest that younger demographics rely on different verification methods compared to older demographics. The cross-tabulation reveals that both age groups share similar patterns of verification, with strong reliance on financial news sources and multiple sources/experts, alongside a notably high number of respondents in both groups (particularly under 25) admitting they are "not sure how to verify" the information. Age, therefore, is not a defining factor in this behavior.

Hypothesis 5: The Impact of Stock Market Familiarity on Beliefs About Volatility

To evaluate whether a person's level of familiarity with stock market concepts affects their belief that social media contributes to stock market volatility, a Chi-Square Test of Independence was performed on the two relevant variables from the dataset:
Level of familiarity with stock market concepts?
In your opinion, does social media contribute to stock market volatility?
This analysis compares the respondents' self-reported understanding of the stock market against their perception of social media's role in driving market volatility.

Null Hypothesis (H0): A person's level of familiarity with stock market concepts does not affect their belief that social media contributes to stock market volatility.
Alternative Hypothesis (H1): Respondents who are more familiar with stock market concepts are more likely to believe that social media amplifies market news and contributes to stock market volatility.

Table 4.5: Cross-Tabulation of Market Familiarity vs. Belief in Volatility Contribution

Level of Familiarity with Stock Market Concepts	Contributes to Volatility: No	Contributes to Volatility: Maybe	Contributes to Volatility: Yes	Total
Not familiar	0	1	1	2
Not familiar at all	2	3	4	9
Somewhat familiar	3	22	15	40
Very familiar	5	6	10	21
Total	10	32	30	72

Statistical Results:
Chi-Square Statistic χ^2: 6.244
Degrees of Freedom (df): 6
p-value: 0.3964

© 2026 Gaurav Sharma, Dr. Kumbhan Khandelwal. This is an open-access article distributed under the terms of the Creative Commons Attribution 4.0 International License (CC BY NC ND).https://creativecommons.org/licenses/by/4.0/

Interpretation

A Chi-Square Test of Independence was conducted to examine the relationship between respondents' familiarity with stock market concepts and their belief that social media contributes to market volatility. The relation between these variables was not statistically significant, χ^2 (6, N = 72) = 6.244, p = 0.3964. Since the calculated p-value (0.3964) is greater than the conventional alpha level of 0.05, we fail to reject the Null Hypothesis (H0).

The data does not support the Alternative Hypothesis (H1). There is no statistically significant evidence to suggest that respondents with higher familiarity ("Very familiar" or "Somewhat familiar") are more likely to believe that social media contributes to stock market volatility compared to those with lower familiarity. The cross-tabulation demonstrates that a large portion of respondents across all knowledge levels generally agree or are undecided ("Yes" or "Maybe") regarding social media's role in volatility, indicating that this perception is widely held regardless of one's specific expertise in the stock market.

6. CONCLUSION

This study set out to see how social media really impacts retail investors' market perceptions and strategies. We ran five cores hypotheses through the wringer. What shook out were some eye-opening realities about investor psychology, what the public wants from regulators, and the sheer weight of digital financial influencers.

6.1. The Tangible Impact of Financial Influencers

The biggest takeaway here (Hypothesis 1, p = 0.0382) points straight to the outsized power of financial influencers. Passive scrolling might expose you to the flavor of the week. Actually, engaging with influencers, though, physically shifts how people trade. The numbers don't lie. Nearly half (45.8%) of active followers admitted they tweak their strategies based on social media trends. Compare that to a meager 13.8% of non-followers. Influencers aren't just background noise. They push buttons. They get people to pull the trigger on actual market decisions, rather than just handing out passive information.

6.2. Pervasive Skepticism Across Demographics

We went in expecting a split opinion. The data proved us wrong. Everyone is pretty much on the same page when it comes to doubting stock tips found on social platforms. Hypothesis 2 (p = 0.9098) showed that both seasoned investors and total rookies take online trends with a heavy grain of salt, mostly leaning toward "No" or "Maybe" when asked about accuracy. Wall Street veterans aren't the only cynical ones. It turns out healthy skepticism is just part of being a modern digital consumer.

Along those same lines, Hypothesis 5 (p = 0.3964) highlighted a shared belief about market volatility. From absolute beginners to market pros, people see social media as a giant megaphone for financial news. The idea that digital chatter swings the market is universally accepted across the board.

6.3. Universal Vulnerabilities in Information Verification

We also looked at how people fact-check (Hypothesis 4, p = 0.5543). Forget the idea of a generational divide. Younger folks and older demographics are tripping over the exact same hurdles. A massive chunk of respondents, regardless of their birth year, admitted they simply aren't sure how to separate good financial info from the bad online. That is a glaring weak spot in today's retail investing scene. Sure, people are highly skeptical. But when it comes down to brass tacks, they lack the practical skills to verify what they're reading.

6.4. Implications and Recommendations

These findings carry real-world weight for policymakers, banks, and everyday traders. Hypothesis 3 (p = 0.8347) made it clear. Everyone wants tighter rules on social media stock talk, regardless of their market familiarity.

Since influencers are the ones actually moving the needle on trading behavior, regulators might want to rethink their playbook. Trying to police broad, random social media chatter is a lost cause. They should zero in on influencer disclosures and accountability instead. Also, seeing as practically nobody knows how to fact-check online claims, the finance industry has its work cut out for it. Educational platforms need to prioritize building tools that actually make sense for the digital age-and for all age groups. It's time to stop just warning investors about misinformation. We need to hand them the actual tools to navigate it.

REFERENCES

1. Peng D. Analysis of investor sentiment and stock market volatility trend based on big data strategy. In: 2019 International Conference on Robots and Intelligent System (ICRIS); 2019 Jun 15-16; Haikou, China. IEEE; 2019. p. 269-272. doi:10.1109/ICRIS.2019.00077.
2. Kalampokis E, Tambouris E, Tarabanis K. Understanding the predictive power of social media. Internet Res. 2013;23(5):544-559. doi:10.1108/IntR-06-2012-0114.
3. Deveikyte J, Geman H, Piccari C, Provetti A. A sentiment analysis approach to the prediction of market volatility. Front Artif Intell. 2022; 5:836809. doi:10.3389/frai.2022.836809.
4. Baker WE. The social structure of a national securities market. Am J Sociol. 1984;89(4):775-811. doi:10.1086/227944.

Creative Commons (CC) License

This article is an open-access article distributed under the terms and conditions of the Creative Commons Attribution–Non-Commercial–No Derivatives 4.0 International (CC BY-NC-ND 4.0) license. This license permits sharing and redistribution of the article in any medium or format for non-commercial purposes only, provided that appropriate credit is given to the original author(s) and source. No modifications, adaptations, or derivative works are permitted under this license.

About the Corresponding Author

Gaurav Sharma is a Research Scholar at the School of Commerce, Devi Ahilya Vishwavidyalaya, Indore, Madhya Pradesh, India. His academic interests focus on commerce, business studies, and contemporary issues in management and economics. He is engaged in research activities and contributes to the advancement of knowledge through scholarly inquiry and academic pursuits.

© 2026 Gaurav Sharma, Dr. Kumbhan Khandelwal. This is an open-access article distributed under the terms of the Creative Commons Attribution 4.0 International License (CC BY NC ND).https://creativecommons.org/licenses/by/4.0/