VOLUME 10 | NOMOR 1 | 2025

BAKI Berkala Akuntansi dan Keuangan Indonesia

Financial Literacy, Demographic Factors, Overconfidence, And Investment Decisions Among University Students In Indonesia's Major Cities

Helma Malini

Faculty of Economics and Business, Universitas Tanjungpura, Indonesia
Corresponding Author: helma.malini@untan.ac.id

I N F O A R T I K E L

Histori Artikel: Tanggal Masuk 27 April 2024
Revisi Diterima 21 September 2024
Tanggal Diterima 24 September 2024
Tersedia Online 31 Maret 2025

Keywords: Financial Literacy, Gender, Age, Income, Ethnicity, Semester, Overconfidence, Investment Decisions

A B S T R A C T

This study aims to examine the influence of financial literacy, gender, age, income, ethnicity, and semester on overconfidence and investment decisions among university students in three major cities in Indonesia (Jakarta, Bandung, and Surabaya). It also investigates the role of overconfidence as a mediating variable in the relationship between these factors and investment decisions. This research uses a quantitative approach with an associative research design. The population includes all university students in Jakarta, Bandung, and Surabaya who have invested in stocks. A sample of 100 respondents was selected using purposive sampling, with criteria that respondents must be university students (from both public and private universities in these cities) who have not graduated, are listed stock investors in the Indonesia Stock Exchange, are at least 18 years old, and have been investing in the stock market for a minimum of one year.

The results show that financial literacy, income, and semester positively influence overconfidence, while gender, age, and ethnicity do not. Financial literacy positively influences investment decisions, whereas gender, age, income, ethnicity, and semester do not. Overconfidence positively influences investment decisions. Financial literacy impacts investment decisions with overconfidence as a mediating variable, while gender, age, income, ethnicity, and semester do not have such an influence through overconfidence.

Abstrak

Penelitian ini bertujuan untuk menguji pengaruh literasi keuangan, jenis kelamin, usia, pendapatan, suku bangsa, dan semester terhadap over confidence dan keputusan investasi pada mahasiswa di tiga kota besar di Indonesia (Jakarta, Bandung, dan Surabaya). Penelitian ini juga menyelidiki peran over confidence sebagai variabel mediasi dalam hubungan antara faktor-faktor tersebut dengan keputusan investasi. Penelitian ini menggunakan pendekatan kuantitatif dengan desain penelitian asosiatif. Populasi penelitian meliputi seluruh mahasiswa di Jakarta, Bandung, dan Surabaya yang pernah berinvestasi saham. Sampel sebanyak 100 responden dipilih secara purposive sampling, dengan kriteria responden harus merupakan mahasiswa (baik dari perguruan tinggi negeri maupun swasta di kota-kota tersebut) yang belum lulus, merupakan investor saham yang terdaftar di Bursa Efek Indonesia, berusia minimal 18 tahun, dan telah berinvestasi di pasar modal minimal satu tahun.

Hasil penelitian menunjukkan bahwa literasi keuangan, pendapatan, dan semester berpengaruh positif terhadap over confidence, sedangkan jenis kelamin, usia, dan suku bangsa tidak berpengaruh. Literasi keuangan berpengaruh positif terhadap keputusan investasi, sedangkan jenis kelamin, usia, pendapatan, suku bangsa, dan semester tidak berpengaruh. Over confidence berpengaruh positif terhadap keputusan investasi. Literasi keuangan memengaruhi keputusan investasi dengan rasa percaya diri yang berlebihan sebagai variabel mediasi, sedangkan jenis kelamin, usia, pendapatan, etnis, dan semester tidak memiliki pengaruh seperti itu melalui rasa percaya diri yang berlebihan.

Berkala Akuntansi dan Keuangan Indonesia p-ISSN: 2459-9581; e-ISSN 2460-4496
DOI: 10.20473/baki.v10i1.66329

1. Introduction

Financial literacy is inherently an abstract concept, encompassing not only the practical knowledge of financial tools and systems but also the cognitive and behavioral abilities to make sound financial decisions. Its abstract nature lies in the fact that it combines theoretical understanding with personal judgment, influenced by individual experiences, cultural contexts, and psychological factors. Financial literacy goes beyond memorizing financial terms or following budgeting rules—it involves the ability to interpret and adapt financial knowledge to unique and dynamic real-world situations. This complexity makes it challenging to measure or standardize, as what constitutes "adequate" financial literacy can vary significantly across different demographic groups and socioeconomic conditions. Consequently, efforts to improve financial literacy must address its abstract qualities by blending theoretical education with practical, experiential learning tailored to diverse individual needs (Apochi et al., 2024; Kramer, 2016; Nguyen et al., 2022; Novoa-Hoyos et al., 2022).

Certain individuals are often perceived as having strong financial literacy due to their higher levels of education, particularly those who have completed advanced degrees or have specialized

training in finance-related fields. This perception assumes that education directly equips them with the knowledge and skills needed for sound financial decision-making. On the other hand, students pursuing undergraduate degrees, especially those with unstable or limited incomes, are sometimes underestimated in terms of their financial literacy and investment capabilities. They are often viewed as less experienced or less capable of making stable and informed investment decisions. This presents an intriguing contradiction, as students, despite being in the process of gaining financial independence, come from diverse ethnic backgrounds and academic levels (semester level), which significantly influence their financial attitudes and behaviors. Their differing levels of exposure, access to financial resources, and cultural contexts challenge the assumption that financial literacy and capability are solely tied to educational attainment or income stability. However, despite the growing literature on financial literacy, few studies have explicitly examined the role of ethnicity and semester level in shaping financial literacy and investment behavior among university students.

As university students, possessing strong financial literacy is essential for navigating the complexities of financial products, services, and markets, particularly as they face increasing financial risks in the future. While some may perceive students as less capable due to their ongoing educational journey and limited income stability, their diverse demographic backgrounds offer unique perspectives that can shape their financial attitudes and behaviors. Financial literacy equips students with the knowledge and skills to make informed financial decisions, enabling them to effectively manage their resources, assess risks, and seize investment opportunities. This capability challenges the assumption that only those with advanced education or stable incomes can make sound financial decisions. Instead, it highlights the potential of students, despite their circumstances, to develop responsible financial behavior and make meaningful contributions to the investment landscape (Huston, 2010; Lusardi et al., 2010; Thomas & Subhashree, 2020).

Understanding financial literacy helps students navigate the influence of psychological factors and biases, such as overconfidence, which can lead to irrational decision-making and an underestimation of risks. Overconfidence may cause individuals to misjudge their actual financial knowledge, resulting in excessive risk-taking in investment decisions. Despite the increasing focus on financial literacy, there remains a gap in research exploring the mediating role of overconfidence in the relationship between financial literacy and investment decisions. By equipping themselves with financial knowledge, students can mitigate these biases and adopt a more rational and informed approach to managing their finances and investments. This is particularly important given the diverse demographic factors, including gender, age, ethnicity, semester level, education, and income, that shape financial behaviors. Improved financial literacy enables students to adapt to these influences, challenging the perception that their limited income or ongoing education restricts their investment capabilities.

In today's global market, financial literacy is more than a necessity—it is a competitive advantage. Students who develop strong financial literacy skills can make strategic financial decisions, embrace calculated risks, and contribute to creating a financially responsible society. By leveraging their unique demographic backgrounds and addressing psychological biases, students are not only preparing to overcome future financial challenges but also laying the groundwork for long-term financial stability and success. This highlights the potential for students to defy conventional assumptions and emerge as key players in the investment landscape (Lemmon & Lins, 2003).

Many studies have explored the importance of financial literacy, emphasizing its role in shaping financial behaviors and decision-making (Abdullah et al., 2017; Akben-Selcuk & Altiok-Yilmaz, 2014; Ergün, 2018). However, these studies often overlook the impact of demographic factors, which play a critical role in shaping an individual's financial perspective. Demographic differences such as gender, age, ethnicity, semester level, income, education level, and cultural background significantly influence how people understand and manage their finances. This oversight is particularly relevant for university students, who are in a transitional phase of life where they are exploring their identity, including their financial habits and attitudes(Asmara & Wiagustini, 2021).

For students, financial literacy cannot be examined in isolation, as their financial behaviors and decisions are deeply intertwined with demographic factors. For instance, a student’s financial knowledge and confidence may vary based on their socioeconomic background, access to financial education, or even cultural norms. Recognizing these differences is crucial in understanding how students approach financial matters, as they often depend on their demographic circumstances to shape their financial choices. Furthermore, previous research has not sufficiently addressed the role of overconfidence as a mediating variable in the relationship between financial literacy and investment decisions, particularly in the context of emerging markets.

Furthermore, while the existing literature acknowledges the importance of financial literacy, it has not sufficiently explored the nuances of overconfidence as a mediating variable in the relationship between financial literacy and investment decisions, particularly in the context of emerging markets. This gap is significant, as overconfidence can lead to misjudgments and excessive risk-taking, which can undermine the benefits of financial literacy. Furthermore, previous studies often treat financial literacy as a unified concept without considering its interactions with demographic variables, such as gender, ethnicity, and academic level. Addressing these limitations is critical to developing a more comprehensive understanding of financial literacy among students and improving educational initiatives tailored to their diverse backgrounds. The novelty of this study lies in its emphasis on demographic influences and

psychological biases, which provide new insights into how financial literacy can be effectively developed in emerging markets.

2. Literature Review

Financial literacy is a crucial skill for individuals across all age groups and socioeconomic backgrounds, particularly for university students. It equips them with the knowledge and ability to make informed financial decisions, manage resources effectively, and navigate challenges such as budgeting, student loans, and investments. According to (Gustiarum & Kusumawardhani, 2023), financial literacy significantly impacts financial behavior, influencing saving habits, investment decisions, and long-term financial planning**.** For students, who are at a transitional stage of gaining financial independence, financial literacy helps them understand the basics of financial management while preparing them for future economic responsibilities. Beyond students, financial literacy is essential for empowering individuals from all walks of life to make sound financial decisions, avoid financial pitfalls, and achieve financial stability (Sentosa & Gosal, 2023).

Moreover, financial literacy shapes how individuals approach financial risks and opportunities by influencing their knowledge of budgeting, saving, investing, and debt management. Financial Social Learning Theory by (Asmara & Wiagustini, 2021) explains that individuals acquire financial knowledge and behaviors through social interactions, parental guidance, and educational exposure it ensures that financial decisions are made based on informed analysis rather than emotional or uninformed choices. For example, individuals with higher financial literacy are more likely to evaluate the risks and benefits of financial products effectively while those with limited knowledge may rely on heuristics or misinformation (Putra, 2021).

According to financial theory, each investor has a unique investment style influenced by various factors, including age, income, education, and personal preferences. Young individuals, including students, tend to be more willing to take risks, as they have more time to recover from potential losses and are often driven by a desire to maximize returns (Purnamasari et al., 2021). This contrasts with older individuals, who are typically more risk-averse due to a focus on preserving wealth and ensuring financial stability for retirement. Behavioral finance research by (Prayudi & Purwanto, 2023) also suggests that gender differences affect investment behavior, with men exhibiting overconfidence and engaging in excessive trading, while women tend to be more conservative.

Income and educational background further shape investment behaviors. Those with higher incomes are more likely to engage in investment activities, as they have greater disposable income to allocate toward financial opportunities. Similarly, individuals with education in finance

or related fields are typically more knowledgeable and confident in making investment decisions compared to their peers in other disciplines. According to Human Capital Theory (Aisa, 2021), individuals with higher education and income levels are more likely to engage in investment activities due to their greater financial knowledge (Oppong et al., 2023).

The importance of financial literacy extends beyond individual benefits. It contributes to broader societal outcomes by fostering financially responsible communities and reducing economic inequalities. Students, as future economic contributors, can act as agents of change by applying financial knowledge to influence their peers, families, and communities positively (Kadoya et al., 2017). The rise of digital financial technologies further amplifies the importance of financial literacy, as individuals must navigate online investment platforms, digital banking services, and emerging fintech innovations (Mate & Dam, 2017).

Ultimately, targeted financial literacy programs that consider demographic and cultural diversity are essential. Such programs can help address specific challenges faced by different groups, including university students, professionals, and underserved populations. By providing tailored education, these initiatives can empower individuals to make sound financial decisions, enhance their economic potential, and contribute to a more financially literate and inclusive society (Shafique et al., 2023).

By integrating an understanding of demographic factors into financial literacy initiatives, policymakers and educators can create more inclusive and effective programs. These efforts can help address disparities in financial knowledge and behavior, empower individuals to make better financial decisions, and contribute to the overall economic well-being of society.

2.1 Conceptual Framework

Based on the background and theoretical framework that have been outlined, this study identifies and employs two independent variables, one mediating variable, and one dependent variable as the main focus of the analysis. The first independent variable is Financial Literacy (X1), which is rooted in the Financial Knowledge and Behavior Model (Hartono et al., 2023). This model suggests that financial literacy comprises both knowledge and application in real-life financial decision-making. It refers to the level of understanding and the ability of individuals to manage personal finances and make informed decisions regarding investments.

The second independent variable is Demographic Factors (X2), as explained by the Lifecycle Hypothesis (Novoa-Hoyos et al., 2022), which states that individuals' financial decisions change based on their stage in life. These factors include age, education level, income, and employment status, all of which are believed to influence an individual’s investment decisions.

The mediating variable used in this study is Overconfidence, a key concept in Behavioral Finance introduced by (Koti, 2019), which suggests that investors often overestimate their knowledge and ability to predict market movements. Overconfidence refers to the excessive confidence individuals have in their ability to manage investments or predict market outcomes, potentially influencing their investment decisions. Overconfidence is often considered a psychological factor that can alter how individuals process information and make financial decisions.

On the other hand, Investment Decision (Y) is based on Prospect Theory (Oppong et al., 2023), which states that individuals make investment decisions based on perceived gains and losses rather than absolute outcomes. It represents the choices and actions taken by individuals regarding their investments, whether in stocks, bonds, mutual funds, or other investment instruments.

Thus, based on the explanation above, the conceptual framework for this research can be illustrated as a model that connects financial literacy and demographic factors as independent variables influencing investment decisions through the mediating effect of overconfidence. By integrating theories such as Behavioral Finance and Prospect Theory, this conceptual model provides a comprehensive understanding of the cognitive biases and rational decision-making factors that affect investment behavior.

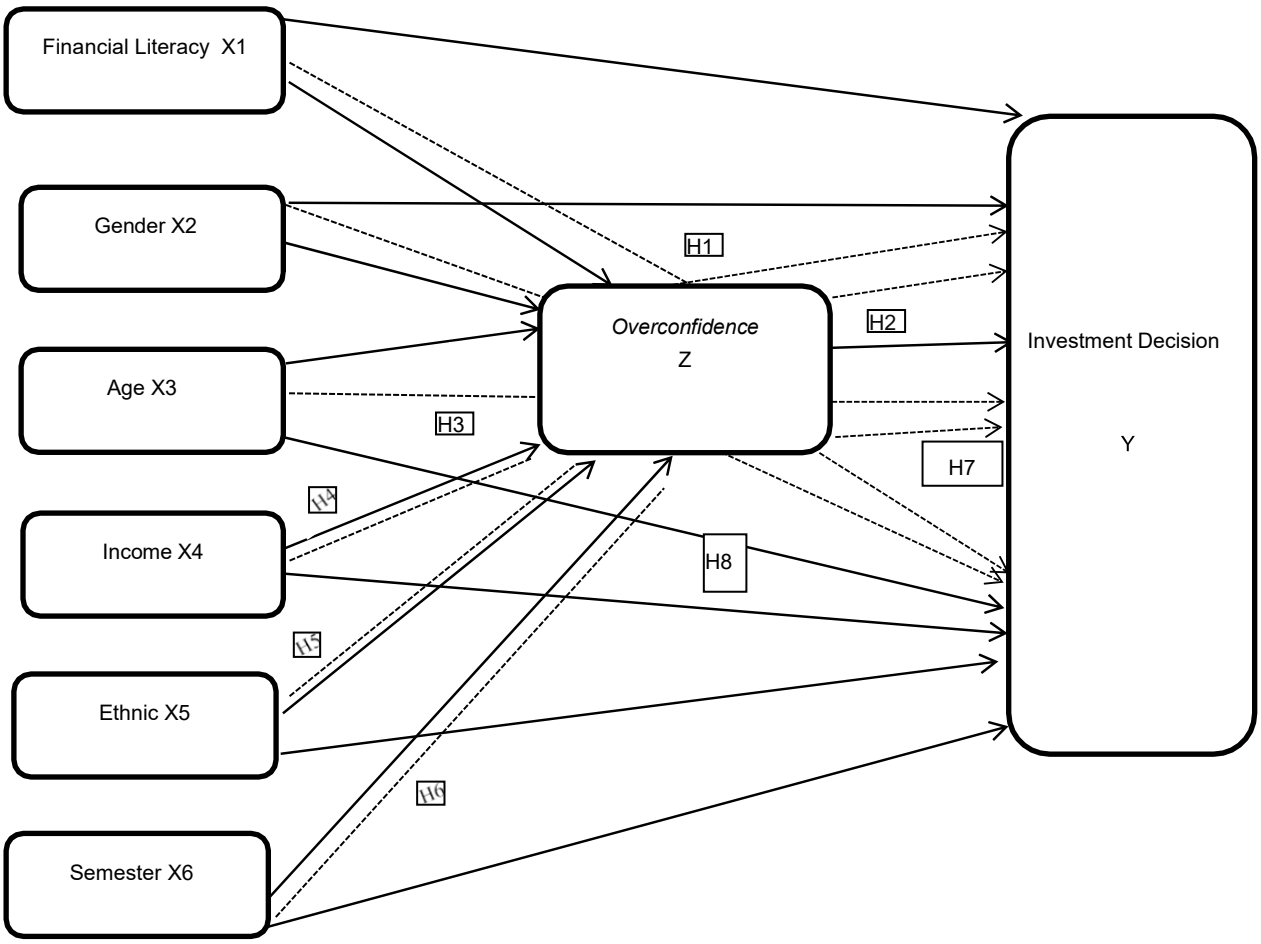


Figure 1 Research Conceptual Framework

2.2 Research Hypothesis

The Impact of Financial Literacy on Overconfidence

Financial literacy refers to an individual's ability to understand and apply financial concepts to make informed decisions (Yuliani et al., 2024). The theory of bounded rationality (Simon, 1957) suggests that individuals with higher financial literacy may overestimate their knowledge, leading to overconfidence. Previous research by (Hamza & Arif, 2019) found that financially literate individuals tend to trade more frequently due to overconfidence.

H1: Financial literacy has a positive effect on overconfidence.

The Influence of Gender on Overconfidence

Gender differences in financial decision-making are well-documented in behavioral finance. The overconfidence bias theory (Wijaya et al., 2023) states that men tend to be more overconfident than women in financial decision-making. Empirical studies have shown that male investors exhibit greater overconfidence in stock trading than female investors (Nguyen et al., 2022).

H2: Gender positively influences overconfidence.

The Influence of Age on Overconfidence

The life-cycle hypothesis (Putra, 2021) suggests that financial decision-making patterns change with age. Younger individuals may exhibit greater overconfidence due to limited experience, while older individuals may rely more on accumulated knowledge. Research by (Prasetyo & Ratnawati, 2023) supports that younger investors tend to overestimate their financial knowledge.

H3: Age positively influences overconfidence.

The Influence of Income toward Overconfidence

According to the wealth effect theory (Lusardi et al., 2010), individuals with higher income tend to feel more secure in their financial decisions, which may lead to overconfidence. Studies such as those by (Servon & Kaestner, 2008) have found that high-income individuals often exhibit excessive confidence in their investment capabilities.

H4: Income positively influences overconfidence.

The Influence of Ethnicity toward Overconfidence

Ethnicity can influence financial decision-making through cultural and social norms. The cultural finance theory (Yeh & Ling, 2022) suggests that different ethnic groups may have varying levels of risk tolerance and confidence in financial matters. Empirical studies ((Fitriyani & Anwar, 2022) have shown that cultural background shapes financial behaviors, including overconfidence.

H5: Ethnicity positively influences overconfidence.

The Influence of Semester toward Overconfidence

Academic exposure and educational experience influence confidence in financial decision-making. The learning curve theory (Baihaqqy et al., 2020) suggests that individuals with more experience (higher semesters) tend to gain more knowledge, which may lead to either increased or reduced overconfidence depending on the context. Research by (Mandell & Klein, 2007) indicates that students in higher semesters may believe they have sufficient financial knowledge, leading to overconfidence.

H6: Semester positively influences overconfidence.

The Influence of Financial Literacy toward Investment Decision

Financial literacy plays a crucial role in investment decisions, as explained by the modern portfolio theory (Yanti & Endri, 2024). Individuals with higher financial literacy tend to make more rational investment decisions (Lusardi & Mitchell, 2011). Empirical studies, such as those by (Syarkani & Tristanto, 2022), confirm that financial literacy is positively associated with investment participation.

H7: Financial literacy has a positive effect on investment decisions.

The Influence of Gender on Investment Decisions

Behavioral finance studies suggest that gender differences influence investment preferences and risk-taking behavior. Prospect theory (Yanti, 2024) states that men and women perceive financial risks differently. Empirical studies (e.g., (Gustiarum & Kusumawardhani, 2023) show

that men are generally more risk-taking in investments, while women tend to be more risk-averse.

H8: Gender positively influences investment decisions.

3. Research Methodology

In this study, the author uses a quantitative research method with an associative research type. Quantitative research methods are based on positivism and are used to study populations or samples, with the aim of testing hypotheses or examining the relationships between variables. This method typically involves data collection through instruments such as surveys or questionnaires, which are then analyzed statistically to draw conclusions about the patterns or relationships present in the data. By using this approach, the study aims to quantify the impact of various factors, such as financial literacy, gender, age, and income, on overconfidence among the respondents.

This study is conducted in three major cities in Indonesia: Jakarta, Bandung, and Surabaya. These cities were chosen due to their diverse economic, social, and demographic characteristics, which provide a representative sample for examining the research variables across different urban contexts in Indonesia

Table 1

Operational Definition of Variables

Variable	Definition	Indicators	Scale	Source
Financial Literacy	The ability to understand and apply financial concepts in decision-making.	1. Understanding of basic financial concepts 2. Knowledge of investment options 3. Budgeting and saving behavior	Likert Scale (1–5)	(Asmara & Wiagustini, 2021)
Overconfidence	The tendency to overestimate one's knowledge and ability in financial decision-making.	1. Self-assessment of financial knowledge 2. Confidence in investment decisions 3. Trading frequency	Likert Scale (1–5)	(Prayudi & Purwanto, 2023)
Gender	Biological differences that influence financial decision-making behavior.	1. Male or Female	Nominal	(Bhushan, 2014)
Age	The number of years since birth, influencing financial behavior and decision-making.	1. Age category (young, middle-aged, senior)	Ordinal	(Akben-Selcuk & Altiok-Yilmaz, 2014)

Variable	Definition	Indicators	Scale	Source
Income	The level of financial earnings that may impact financial decision-making.	1. Monthly income category 2. Perceived financial security	Ordinal	(Kadoya et al., 2017)
Ethnicity	Cultural background influencing financial attitudes and decision-making.	1. Ethnic group classification	Nominal	(Riwayati et al., 2023)
Semester	The level of academic experience that influences financial knowledge and decision-making confidence.	1. Number of semesters completed	Ordinal	(Raut, 2020)
Investment Decision	The process of selecting financial instruments for investment purposes.	1. Risk-taking behavior 2. Diversification strategy 3. Long-term planning	Likert Scale (1–5)	(Kramer, 2016)

3.1 Data

Primary data in this research is obtained through the distribution of questionnaires to university students in Jakarta, Bandung, and Surabaya who have invested in stocks. The author selected respondents residing in these cities due to their unique characteristics and economic significance. Jakarta, as the capital city and financial center of Indonesia, hosts numerous financial institutions, investment firms, and educational programs, providing students with extensive exposure to financial literacy and investment opportunities. Bandung, known for its strong academic environment and startup culture, fosters a dynamic financial awareness among students, particularly in technology-driven investments. Surabaya, as the largest economic hub in eastern Indonesia, represents a critical market where students engage in investment activities, bridging financial literacy gaps between western and eastern Indonesia.

Additionally, students in Jakarta, Bandung, and Surabaya come from diverse demographic and socioeconomic backgrounds, making them an ideal sample for studying the relationship between financial literacy, demographic factors, and investment decisions. This diversity provides a richer understanding of how financial knowledge and behaviors manifest across various groups, reflecting the dynamic and multifaceted nature of financial literacy in Indonesia's urban settings. Furthermore, according to the 2024 National Survey on Financial Literacy and Inclusion (SNLIK)

conducted by OJK and BPS, financial literacy levels among Indonesian students remain uneven, with significant disparities across different regions and socioeconomic groups. By incorporating this national survey data, this study strengthens its rationale for selecting university students as respondents, as they represent a crucial demographic in understanding financial behavior and decision-making. By focusing on these three cities, the study aims to capture a broader spectrum of financial attitudes and practices among university students, aligning with national financial literacy trends.

In this study, several statistical tests were conducted to ensure the validity and reliability of the analysis. The linearity test was performed to assess the linear relationship between independent and dependent variables. Additionally, the selection of statistical analysis tools was based on their suitability for testing the hypotheses. Regression analysis was chosen because it effectively evaluates the relationship between financial literacy, demographic factors, and investment decisions, allowing for a comprehensive understanding of their influence.

The sampling method in this study uses a non-probability sampling type because the population to be studied is a large population using a purposive sampling technique.

The criteria for the respondent samples to be used in this study are as follows:

a) Respondents are students from universities in the cities of Jakarta, Bandung and Surabaya, both state and private and have not graduated.
b) Respondents are stock investors who have or are still investing in stocks listed on the Indonesia Stock Exchange.
c) Respondents are at least 18 years old.
d) Respondents have invested in stocks in the capital market for at least 1 year.

4. Result and Discussion

4.1 Respondent Characteristics

The respondent characteristics in this study refer to the identities and demographic details of students in Jakarta, Bandung, and Surabaya who have invested in stocks. A total of 100 respondents were selected using the purposive sampling method, which involves choosing participants based on specific criteria relevant to the research objectives. The sample size of 100 respondents aligns with previous studies on financial literacy and investment behavior, where similar sample sizes have been deemed sufficient for generating statistically relevant insights (source). Additionally, Roscoe's (1975) rule of thumb suggests that for behavioral research, a sample size between 30 and 500 respondents is appropriate, making 100 a reasonable choice for this study.

The questionnaire was distributed online through Google Forms and shared via student investment forums, university financial communities, and social media platforms to ensure accessibility and targeted outreach. This approach facilitated data collection from students actively engaged in investment activities, ensuring that the responses were relevant to the study's

objectives. The data gathered through questionnaires highlights various aspects of the respondents, including their university affiliation, year of graduation, length of investment, and demographic attributes such as gender, age, income, ethnicity, and academic semester.

Table 2

Summary of Respondent Demographics

Variable	Category	Frequency (N)	Percentage (%)
University	Bandung University	31	31%
	Jakarta Universities	18	18%
	Surabaya Universities	51	51%
Length of Investment	1 year	52	52%
	2 years	39	39%
	More than 3 years	9	9%
Gender	Male	30	30%
	Female	70	70%
Age	21 - 23 years old	86	86%
	Others	14	14%
Monthly Allowance	Rp 500,000 - Rp 1,000,000	46	46%
	Rp 1,000,000 - Rp 3,000,000	33	33%
	Others	21	21%
Ethnicity	Malay	40	40%
	Batak	21	21%
	Chinese	17	17%
	Javanese	14	14%
	Other Ethnicities	7	7%
Semester of Learning Investment	1st - 3rd semester	44	44%
	4th - 6th semester	56	56%

Note: Percentages may not total 100% due to rounding.

The study found that most respondents were from Surabaya universities, comprising 51% of the sample, followed by 31% from Bandung universities and 18% from Jakarta universities. This distribution indicates a significant representation of students from Surabaya, who may have

distinct investment awareness and behaviors. Regarding the length of investment, 52% of respondents had invested for one year, followed by 39% with two years of investment experience, and 9% with more than three years. This aligns with the notion that newer investors, often receiving monthly allowances, engage more actively in online trading.

In terms of gender, the sample was predominantly female (70%), reflecting greater enthusiasm among women for investing. Age-wise, 86% of respondents were between 21 and 23 years old, a period when students are beginning to recognize and act on financial opportunities. The data on income revealed that 46% of respondents received a monthly allowance between Rp 500,000 and Rp 1,000,000, followed by 33% with allowances ranging from Rp 1,000,000 to Rp 3,000,000, indicating that most students have modest financial resources.

Ethnically, the study was dominated by Malay respondents (40%), followed by Batak (21%), Chinese (17%), Javanese (14%), and other ethnicities (7%), reflecting the demographic diversity of students in Jakarta, Bandung, and Surabaya. Lastly, the majority of respondents (56%) learned about investment during their fourth to sixth semesters, highlighting the second and third years of college as critical periods for financial education and preparation. These findings illustrate the diverse demographic and experiential factors influencing students' investment behaviors.

Table 3

Descriptive Statistical

	N	Minimum	Maximum	Mean	Std. Deviation
Financial Literacy	100	17	30	25.60	3.081
Gender	100	1	2	1.70	.461
Age	100	1	3	1.96	.374
Income	100	1	3	1.74	.787
Ethnicity	100	1	5	2.45	1.175
Semester	100	1	4	2.23	.815
Overconfidence	100	14	25	20.00	2.899
Investment Decision	100	20	30	25.64	2.929
Valid N (listwise)	100				

The results of the descriptive analysis show that the number of samples observed in this study was 100. The financial literacy variable had an average value of 25.60 with a standard deviation of 3.081, and minimum and maximum values of 17 and 30, respectively. This indicates that most respondents have a relatively good level of financial literacy, although there is considerable variation among them. The gender variable had an average of 1.70 with a standard deviation of 0.461, with a minimum value of 1 and a maximum of 2. This suggests that the majority of respondents are female, as the value of 1 corresponds to male and 2 to female. The range of gender values indicates only two categories: male and female.

The age variable had an average value of 1.96 with a standard deviation of 0.374, and a minimum value of 1 and a maximum value of 3. This shows that most respondents are in the

younger age group, while those in the older age category (3) are fewer. For the income variable, the average was 1.74 with a standard deviation of **0.787**, indicating that the majority of respondents have low to medium income, with values ranging from 1 to 3. The ethnicity variable had an average of 2.45 with a standard deviation of 1.175, and a minimum value of 1 and a maximum of 5, suggesting a relatively large ethnic diversity among the respondents.

The semester variable had an average value of 2.23 with a standard deviation of 0.815, with values ranging from 1 to 4, indicating that most respondents are in the second or third semester of their studies. For the overconfidence variable, the findings suggest that respondents generally exhibit moderate confidence in their investment decisions, as reflected in the average score of 20.00, with some variation between individuals. This moderate level of overconfidence may imply that respondents are somewhat self-assured in their abilities, but they may still acknowledge potential limitations. Regarding investment decisions, the average score of 25.64 suggests that respondents are relatively confident in making financial decisions. However, the variation, indicated by a standard deviation of 2.929, shows that some individuals are more confident than others, which could stem from differences in experience, financial literacy, or other factors.

The descriptive analysis overall highlights the diverse characteristics of the respondents in terms of ethnicity, gender, age, and academic progress, suggesting a range of perspectives in financial decision-making. While the moderate levels of financial literacy, overconfidence, and investment decisions indicate a generally balanced approach among the respondents, the variations observed underline the importance of individual differences. These factors, such as background, knowledge, and personal confidence, play a critical role in shaping how respondents perceive and engage with financial decision-making.

Table 4
Financial Literacy Variable Respondents' Responses

No.	Question	SD	D	N	A	SA	Mean	Category
1	I record daily/monthly/annual cash inflows and outflows.	0	2	6	51	41	4.31	Very High
2	I understand the purpose of financial planning to overcome financial difficulties.	0	0	6	61	33	4.27	Very High
3	When I want something but don’t have the money to buy it, I won’t borrow money to purchase it.	1	4	16	37	42	4.15	High
4	I lend money to friends based on my financial condition.	0	4	10	31	55	4.37	Very High

5	I always save money and believe savings make it easier to meet future needs.	0	0	7	51	42	4.35	Very High
6	I know that insurance can be a means of saving and investing.	0	3	11	54	32	4.15	High

Financial Literacy: 4.26 (Very High)
(Source: Processed Data, 2023)

The analysis indicates that respondents demonstrate the strongest agreement with lending money to friends based on their financial condition, showing careful consideration of their finances. The lowest levels of agreement pertain to avoiding borrowing money for desired items and understanding insurance as a tool for saving and investing, though these remain positive. Overall, the responses reflect a very high level of financial literacy, with participants showing positive attitudes across all related items.

Table 5
Respondents' Responses on Overconfidence Variables

No.	Question	SD	D	N	A	SA	Mean	Category
1	I have high confidence in investing.	0	0	14	56	30	4.16	High
2	I have high confidence in analyzing stock price movements in the Stock Exchange.	0	3	20	50	27	4.01	High
3	I believe my skills are better than other investors regarding investments.	0	8	34	40	18	3.68	High
4	I am confident I will profit from the investments I undertake.	0	4	14	55	27	4.05	High
5	I am confident in my knowledge about investments.	0	1	12	63	24	4.10	High

Overconfidence: 4.00 (High)
(Source: Processed Data, 2023)

The analysis shows that respondents exhibit the highest confidence in their ability to invest, reflecting a positive outlook on their investment skills. The lowest confidence level relates to comparing their investment abilities to others, though it remains relatively high. Overall, respondents demonstrated a generally positive attitude toward all aspects of overconfidence, indicating a strong sense of self-assurance in their financial capabilities.

Table 6
Respondents' Responses on Investment Decision Variables

No.	Question	SD	D	N	A	SA	Mean	Category
1	I prioritize the returns of the investment products I choose.	0	0	7	57	36	4.29	Very High
2	I seek various critical information from different sources to understand the returns I will receive.	0	1	9	49	41	4.30	Very High
3	I study all potential benefits before making an investment decision.	0	0	8	43	49	4.41	Very High
4	I understand how to mitigate risks in investing.	0	0	10	59	31	4.21	Very High

No.	Question	SD	D	N	A	SA	Mean	Category
5	I am confident in my ability to resolve financial problems.	0	2	11	54	33	4.18	High
6	I am confident in my ability to make the right decisions.	0	0	10	55	35	4.25	Very High

Investment Decisions: 4.27 (Very High)
(Source: Processed Data, 2023)

The analysis of respondent responses reveals that the highest level of agreement is with the importance of studying potential benefits before making investment decisions, reflecting strong attentiveness in decision-making. Conversely, the lowest level of agreement pertains to confidence in solving financial problems, though it remains relatively high. Overall, respondents demonstrated a very positive attitude toward all aspects of the investment decision variable, indicating strong engagement and alignment with the factors assessed.

Table 7 Linearity Result

Variable	Sig. *Deviation From Linearity*	Remarks
Financial Literacy	0,884	Linear
Demografi Factor	0,105	Linear
Overconfidence	0,130	Linear

The linearity test results indicate that the relationship between the independent and intervening variables in this study is linear, suggesting a consistent and proportional association among the variables examined.

4.2 Statistical Analysis Test

Determination Coefficient Test (R2)

Table 8
Results of Overconfidence Determination Coefficient Test
Model Summary

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
Model 1	.542[a]	.294	.248	2.514
1	.806[a]	.650	.624	1.797

a Predictors: (Constant), Financial Literacy, Gender, Age, Income, Etnic, Semester
(Sumber: Data Processing, 2023)

The analysis indicates that financial literacy, gender, age, income, ethnicity, and semester collectively contribute to influencing investment decisions, accounting for a portion of the

outcomes. However, a significant portion of the influence comes from other factors not explored in this study, suggesting that investment decisions are shaped by a broader range of variables beyond those examined here. The findings highlight that financial literacy positively influences student overconfidence, emphasizing the importance of financial knowledge in shaping self-perception and confidence in financial decisions, while income also impacts overconfidence, suggesting that financial resources may play a role in boosting confidence. On the other hand, gender, age, ethnicity, and academic semester do not significantly influence overconfidence, indicating that demographic and educational progression variables have a limited role in shaping students' confidence levels. Overall, the results underline the stronger influence of cognitive and financial factors over demographic characteristics in determining overconfidence among students.

Tabel 9
Results of the Overconfidence Significance Test
Coefficients[a]

Model		Unstandardized Coefficients		Standardized Coefficients	t	Sig.
		B	Std. Error	Beta		
1	(Constant)	10.634	2.748		3.870	.000
	Financial Literacy	.438	.085	.465	5.142	.000
	Gender	.356	.555	.057	.641	.523
	Age	-.665	.712	-.086	-.934	.353
	Income	-1.117	.341	-.303	-3.274	.001
	Ethnicity	-.309	.226	-.125	-1.368	.174
	Semester	.697	.323	.196	2.158	.033

a Dependent Variable : Overconfidence

(Source: Processed Data, 2023)

The SPSS analysis indicates that financial literacy significantly influences overconfidence, highlighting its role in shaping self-assuredness in financial behavior. Gender, age, and ethnicity, however, do not show any significant impact on overconfidence, suggesting that these demographic factors may not directly determine confidence levels. Income is found to negatively influence overconfidence, implying that higher income might lead to a more cautious or measured approach. Semester progression has a significant positive effect, indicating that advanced academic experience does contribute to increased confidence. Nonetheless, a substantial portion of overconfidence remains unexplained by the studied factors, suggesting that other variables may also play a role in influencing overconfidence.

Based on hypothesis testing, financial literacy is confirmed to influence student overconfidence, reinforcing the importance of financial knowledge in shaping confidence levels. Gender and ethnicity do not significantly impact overconfidence, suggesting that these demographic factors are not primary determinants of confidence in financial decision-making. Age also does not show a significant effect, indicating that confidence levels may not necessarily

increase with maturity. Meanwhile, income has a negative effect on overconfidence, suggesting that students with higher financial resources tend to be more cautious in their investment decisions. Lastly, semester progression is found to have a significant effect on overconfidence, meaning that academic advancement contributes to increasing confidence levels. These findings align with the results presented in Table 8 and emphasize the role of financial literacy and academic experience in shaping students' investment confidence.

Table 10
Investment Decision Significance Test Results
Coefficients

Model		Unstandardized Coefficients		Standardized Coefficients	T	Sig.
		B	Std. Error	Beta		
1	(Constant)	3.945	2.116		1.864	.066
	Financial Literacy	.590	.069	.621	8.551	.000
	Gender	-.133	.398	-.021	-.333	.740
	Age	.378	.511	.048	.739	.462
	Income	.170	.257	.046	.659	.511
	Ethnicity	-.228	.163	-.091	-1.398	.165
	Semester	-.200	.237	-.056	-.845	.400
	Overconfidence	.340	.074	.336	4.581	.000

a. Dependent Variable : Investment Decision

(Source : Data Processing, 2023)

The SPSS analysis reveals that financial literacy significantly influences investment decisions, demonstrating its critical role in shaping financial behavior. Conversely, demographic factors such as gender, age, income, ethnicity, and semester progression do not have a significant impact on investment decisions, suggesting these variables may not directly drive how students make financial choices. Overconfidence, however, does play a significant role, indicating that higher self-assuredness can lead to more active or decisive investment behavior. Additionally, the analysis shows that a portion of the variance in investment decisions remains unexplained, suggesting that other factors beyond the variables studied may also contribute to influencing investment decisions.

Based on the data, the hypotheses are accepted or rejected as follows: H7, financial literacy influences students' investment decisions, is accepted, indicating its importance in shaping investment behavior. H8, gender influences students' investment decisions, is rejected, suggesting no significant impact of gender. Similarly, H9, age influences students' investment decisions, is rejected, as age does not appear to be a determining factor. H10, income influences students' investment decisions, is also rejected, showing that income level alone does not directly affect decision-making. H11, ethnicity influences students' investment decisions, is rejected, indicating no significant correlation between ethnicity and investment choices. H12, semester

influences students' investment decisions, is rejected, suggesting academic progression does not significantly alter investment behavior. Lastly, H13, overconfidence influences students' investment decisions, is accepted, underscoring the role of self-assuredness in financial decision-making. These results highlight the critical influence of financial literacy and overconfidence while downplaying the direct role of demographic factors in investment decisions.

Table 11
Direct and Indirect Effects

No	Direct Effect	Value	Indirect Effect	Value	Total Effect
1	Financial literacy on investment decisions (P8*P*8)	0.590	Financial literacy on investment decisions through overconfidence (P1×P7*P*1 ×*P*7)	0.14892	0.73892
2	Gender on investment decisions (P9*P*9)	-0.133	Gender on investment decisions through overconfidence (P2×P7*P*2 ×*P*7)	0.12104	-0.001196
3	Age on investment decisions (P10*P*10)	0.378	Age on investment decisions through overconfidence (P3×P7*P*3×*P*7)	-0.2261	0.1519
4	Income on investment decisions (P11*P*11)	0.170	Income on investment decisions through overconfidence (P4×P7*P*4 ×*P*7)	-0.37978	-0.20978
5	Ethnicity on investment decisions (P12*P*12)	-0.228	Ethnicity on investment decisions through overconfidence (P5×P7*P*5 ×*P*7)	-0.10506	-0.33306
6	Semester on investment decisions (P13*P*13)	-0.200	Semester on investment decisions through overconfidence (P6×P7*P*6 ×*P*7)	0.23698	0.03698
7	Overconfidence on investment decisions (P7*P*7)	0.340	-	-	-

Source: Processed Data, 2023

4.3 Path Analysis Interpretation

The relationships among variables derived from the SPSS output can be expressed through the following regression equations:

Equation 1: Overconfidence Model

Y1=10.634+0.438X1+0.356X2−0.665X3−1.117X4−0.309X5+0.697X6+e1Y1 = 10.634 + 0.438X1 + 0.356X2 - 0.665X3 - 1.117X4 - 0.309X5 + 0.697X6 + e1Y1=10.634+0.438X1+0.356X2−0.665X3−1.117X4−0.309X5+0.697X6+e1

This equation illustrates the combined impact of financial literacy (X1), gender (X2), age (X3), income (X4), ethnicity (X5), and semester (X6) on overconfidence (Y1). Financial literacy and semester progression positively influence overconfidence, suggesting that individuals with greater financial knowledge and more academic experience tend to have higher confidence in

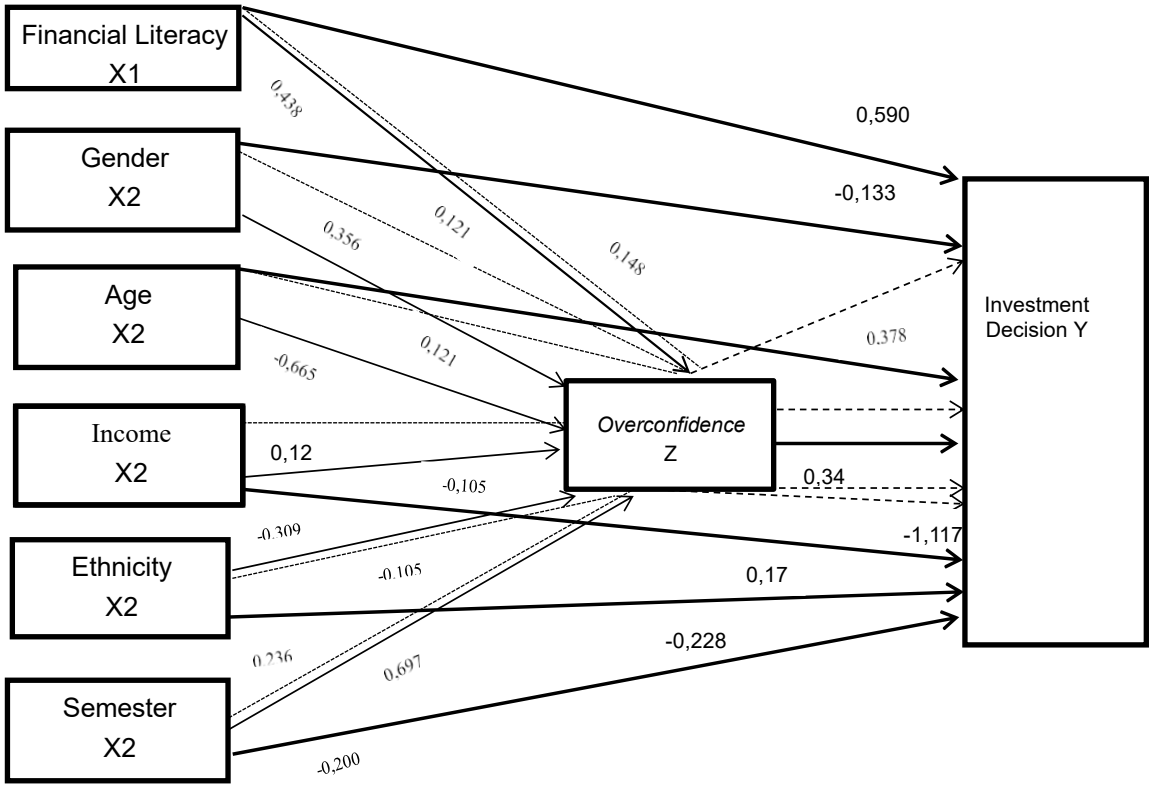
their financial abilities. Meanwhile, age, income, and ethnicity exhibit negative relationships, implying that older individuals, those with higher income levels, and those from diverse ethnic backgrounds may develop a more cautious or measured approach to financial decisions. Gender, while showing a slight positive effect, does not significantly contribute to variations in overconfidence. These findings highlight that overconfidence is shaped by both cognitive and demographic factors.

Equation 2: Investment Decision Model

Y2=3.945+0.590X1−0.133X2+0.378X3+0.170X4−0.228X5−0.200X6+0.340X7+e2Y2 = 3.945 + 0.590X1 - 0.133X2 + 0.378X3 + 0.170X4 - 0.228X5 - 0.200X6 + 0.340X7 + e2Y2=3.945+0.590X1−0.133X2+0.378X3+0.170X4−0.228X5−0.200X6+0.340X7+e2

This equation demonstrates how financial literacy (X1), gender (X2), age (X3), income (X4), ethnicity (X5), semester (X6), and overconfidence (X7) influence investment decisions (Y2). Financial literacy and overconfidence positively affect investment decisions, reinforcing the idea that greater financial knowledge and self-assuredness encourage individuals to engage in financial activities. Age and income also show positive effects, indicating that experience and financial stability contribute to better investment choices. Conversely, gender, ethnicity, and semester display negative coefficients, suggesting that these factors do not directly enhance investment decision-making. The significant role of overconfidence in shaping investment behavior highlights the psychological dimension of financial decision-making, where confidence levels influence individuals' willingness to take financial risks

The interpretations of the path analysis results can be visualized in the following diagram.



Figures 2 The Interpretations of the Path Analysis

The analysis of respondent responses to financial literacy, demographic factors, overconfidence, and investment decisions highlights several important insights. Financial literacy plays a crucial role in shaping overconfidence, with individuals who are more financially literate tending to exhibit higher confidence in their financial decisions. Meanwhile, demographic factors such as gender, age, and ethnicity do not appear to influence overconfidence significantly. However, income and academic progression contribute to confidence levels, with higher income fostering more cautious behavior and advanced academic semesters boosting confidence through increased exposure to financial knowledge. These findings align with previous studies that suggest financial literacy significantly impacts an individual's confidence in managing finances, while demographic factors often have a more indirect or negligible effect on overconfidence (Mandell & Klein, 2009; Prayudi & Purwanto, 2023; Yanti & Endri, 2024)

In terms of investment decisions, both financial literacy and overconfidence emerge as key factors influencing outcomes. On the other hand, demographic attributes such as gender, age, income, ethnicity, and semester progression show little direct impact. Overconfidence acts as a bridge between financial literacy and investment decisions, amplifying the influence of financial knowledge on decision-making, though it does not mediate the effects of other demographic variables. These findings underscore the importance of cultivating financial literacy and managing overconfidence to support better investment decision-making among students in Jakarta.

5. Conclusions

Based on the analysis of data and discussions, several conclusions can be drawn. Financial literacy positively influences overconfidence, suggesting that individuals with higher financial knowledge tend to be more confident in their financial decisions. Gender, age, and ethnicity do not appear to have a direct impact on overconfidence, indicating that these demographic factors may not be significant determinants of confidence levels in financial contexts. Income and academic semester are positively associated with overconfidence, with individuals having higher incomes or being in advanced semesters displaying greater confidence in their financial abilities. Financial literacy also plays a significant role in influencing investment decisions, emphasizing the importance of financial knowledge in making sound investment choices. However, gender, age, income, ethnicity, and semester do not significantly affect investment decisions, suggesting that these factors may not directly shape investment behavior. Overconfidence, however, has a clear positive influence on investment decisions, highlighting the role of self-perception in driving financial actions. Furthermore, overconfidence serves as a mediator between financial literacy and investment decisions but does not mediate the effects of other demographic variables.

These findings underscore the importance of cultivating financial literacy and managing overconfidence to support better investment decision-making among students across the three cities studied, rather than limiting the discussion to Jakarta. Additionally, the hypothesis analysis section has been refined to maintain consistency, ensuring that the number of hypotheses discussed aligns with the hypotheses initially introduced.

Future research is encouraged to explore additional demographic factors, such as academic performance, background, and cultural influences, as well as alternative mediating variables. Expanding the scope of the study to include a broader population, such as individuals actively involved in stock investments, would provide a more comprehensive understanding of these dynamics.

References

Abdullah, S., Mohammed, N. H., Salleh, S. M., Rashid, K. M., & Kamal, S. S. (2017). Financial Literacy among UiTM's Students,'. *Journal of Applied Environmental and Biological Sciences*, *7*(5S), 31–36.

Aisa, N. N. (2021). Do financial literacy and technology affect intention to invest in the capital market in the early pandemic period. *Journal of Accounting and Investment*, *23*(1), 49–65.

Akben-Selcuk, E., & Altiok-Yilmaz, A. (2014). Financial literacy among Turkish college students: The role of formal education, learning approaches, and parental teaching. *Psychological Reports*, *115*(2), 351–371.

Apochi, J. G., Ahmed, N. M., Okpanachi, J., & Agbi, S. E. (2024). Herding Bias and Financial Risk Tolerance On Individual Investment Performance in Nigeria: Moderated by Financial Literacy. *International Journal of Business and Management Review*, *12*(3), 1–17.

Asmara, I., & Wiagustini, L. P. (2021). the Role of financial literacy in mediation of sociodemographic effects on investment decisions. *International Journal of Business*

Management and Economic Review, *4*(04), 133–152.
Baihaqqy, M. R. I., Disman, N., Sari, M., & Ikhsan, S. (2020). The effect of financial literacy on the investment decision. *Budapest International Research and Critics Institute-Journal (BIRCI-Journal)*, *3*(4), 3073–3083.
Bhushan, P. (2014). Relationship between financial literacy and investment behavior of salaried individuals. *Journal of Business Management & Social Sciences Research (JBM&SSR)*, *3*(5), 82–87.
Ergün, K. (2018). *Financial behaviour and financial literacy among university students*. SSRN.
Fitriyani, S., & Anwar, S. (2022). Pengaruh Herding, Experience Regret Dan Religiosity Terhadap Keputusan Investasi Saham Syariah Pada Investor Muslim Millennial Dengan Financial Literacy Sebagai Variabel Moderasi. *Jurnal Ekonomi Syariah Teori Dan Terapan*, *9*(1), 68–77.
Gustiarum, T., & Kusumawardhani, I. (2023). The effects of financial literacy, accounting information, risk perception and herding behavior on investment decision. *Journal of Business and Information Systems (e-ISSN: 2685-2543)*, *5*(1), 1–10.
Hamza, N., & Arif, I. (2019). Impact of financial literacy on investment decisions: The mediating effect of big-five personality traits model. *Market Forces*, *14*(1).
Hartono, H., Halim, E., Aswieri, A., Suharli, D., & Aurella, M. (2023). The Influence of Financial Literacy and Heuristic Behavior on Generation Z's Investing Decisions During a Global Pandemic. *E3S Web of Conferences*, *426*, 2008.
Huston, S. J. (2010). Measuring financial literacy. *Journal of Consumer Affairs*, *44*(2), 296–316.
Kadoya, Y., Khan, M. S. R., & Rabbani, N. (2017). Does financial literacy affect stock market participation? *Available at SSRN 3056562*.
Koti, K. (2019). Financial literacy and its impact on the investment decisions of working women. *Humanities & Social Sciences Reviews*, *7*(6), 554–561.
Kramer, M. M. (2016). Financial literacy, confidence and financial advice seeking. *Journal of Economic Behavior & Organization*, *131*, 198–217.
Lemmon, M. L., & Lins, K. V. (2003). Ownership Structure, Corporate Governance, and Firm Value: Evidence from the East Asian Financial Crisis. *Journal of Finance*, *58*(4), 1445–1468. https://doi.org/10.1111/1540-6261.00573
Lusardi, A., Mitchell, O. S., & Curto, V. (2010). Financial literacy among the young. *Journal of Consumer Affairs*, *44*(2), 358–380.
Mandell, L., & Klein, L. S. (2007). Motivation and financial literacy. *Financial Services Review*, *16*(2).
Mandell, L., & Klein, L. S. (2009). The impact of financial literacy education on subsequent financial behavior. *Journal of Financial Counseling and Planning*, *20*(1).
Mate, R. M., & Dam, L. (2017). Role of an attitude and financial literacy in stock market participation. *International Journal of Management, IT and Engineering*, *7*(8), 137–149.
Nguyen, L. T. M., Nguyen, P. T., Tran, Q. N. N., & Trinh, T. T. G. (2022). Why does subjective financial literacy hinder retirement saving? The mediating roles of risk tolerance and risk perception. *Review of Behavioral Finance*, *14*(5), 627–645.
Novoa-Hoyos, A., Depoo, L., & Jiménez-Rodríguez, E. (2022). ROLE OF FINANCIAL LITERACY AND AWARENESS OF TAX IMPACTS IN AN EMERGING ECONOMY FACING TAX REFORM. *Economics & Sociology*, *15*(1), 222–240.
Oppong, C., Salifu Atchulo, A., Akwaa-Sekyi, E. K., Grant, D. D., & Kpegba, S. A. (2023). Financial literacy, investment and personal financial management nexus: Empirical evidence on private sector employees. *Cogent Business & Management*, *10*(2), 2229106.
Prasetyo, P., & Ratnawati, K. (2023). The impact of disposition effect, herding and overconfidence on investment decision making moderated by financial literacy. *International Journal of Research in Business and Social Science (2147-4478)*, *12*(9), 241–251.
Prayudi, R. M. N., & Purwanto, E. (2023). The Impact of Financial Literacy, Overconfidence Bias, Herding Bias and Loss Aversion Bias on Investment Decision. *Indonesian Journal of Business Analytics*, *3*(5), 1873–1886.
Purnamasari, V., Merlinda, S., Narmaditya, B. S., & Irwansyah, M. R. (2021). The millennial's

investment decisions: Implications of financial literacy, motivation, and digitalization. *Ekuitas: Jurnal Pendidikan Ekonomi*, *9*(2), 314–320.

Putra, R. (2021). Financial literacy and risky investment decision making of millennials in Indonesia mediated by information search. *Turkish Journal of Computer and Mathematics Education (TURCOMAT)*, *12*(10), 695–705.

Raut, R. K. (2020). Past behaviour, financial literacy and investment decision-making process of individual investors. *International Journal of Emerging Markets*, *15*(6), 1243–1263.

Riwayati, H. E., Cahaya, Y. F., & Markonah, M. (2023). Financial Literacy's Influence on Investment Decisions. *Accounting & Finance Review (AFR)*, *8*(1).

Sentosa, K. Y. K., & Gosal, G. G. (2023). Exploring the Influence of Parental Financial Behavior, Financial Literacy, and Herding Behavior on Investment Behavior Among Generation Z Investors. *SAR (Soedirman Accounting Review): Journal of Accounting and Business*, *8*(2), 192–205.

Servon, L. J., & Kaestner, R. (2008). Consumer financial literacy and the impact of online banking on the financial behavior of lower-income bank customers. *Journal of Consumer Affairs*, *42*(2), 271–305.

Shafique, M. R., Sohail, A., Nisar, S., & Munir, M. (2023). Examining financial decision-making of retail investors in Pakistan Stock Exchange (PSX): Moderating role of financial literacy. *Journal of Applied Research and Multidisciplinary Studies*, *4*(1), 2–22.

Syarkani, Y., & Tristanto, T. A. (2022). Examining the predictors of crypto investor decision: The relationship between overconfidence, financial literacy, and attitude. *International Journal of Research in Business and Social Science (2147-4478)*, *11*(6), 324–333.

Thomas, B., & Subhashree, P. (2020). Factors that influence the financial literacy among engineering students. *Procedia Computer Science*, *172*, 480–487.

Wijaya, R., Sembel, R., & Malau, M. (2023). How Heuristics and Herding Behaviour Biases Impacting Stock Investment Decisions with Financial Literacy as Moderating Variable. *South East Asia Journal of Contemporary Business, Economics and Law*, *29*(1), 6–12.

Yanti, F. (2024). THE INFLUENCE OF FINANCIAL BEHAVIOR, OVERCONFIDENCE, AND RISK PERCEPTION ON INVESTMENT DECISIONS: THE ROLE OF FINANCIAL LITERACY MEDIATION (AN EMPIRICAL STUDY OF MILLENNIAL INVIDUAL INVESTORS IN JAKARTA). *International Journal of Social Service and Research*, *4*(6).

Yanti, F., & Endri, E. (2024). Financial Behavior, Overconfidence, Risk Perception and Investment Decisions: The Mediating Role of Financial Literacy. *International Journal of Economics and Financial Issues*, *14*(5), 289–298.

Yeh, T., & Ling, Y. (2022). Confidence in financial literacy, stock market participation, and retirement planning. *Journal of Family and Economic Issues*, *43*(1), 169–186.

Yuliani, Y., Taufik, T., Malinda, S., & Umrie, R. H. (2024). Impact of financial literacy and financial behavior on investment among millennial in Indonesia: the moderating role of risk profile. *International Journal of Financial Studies, Economics and Management*, *3*(1), 13–25.