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)

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ABSTRACT

This study aims to test and analyze the influence of financial behavior, overconfidence, and risk perception on financial literacy and investment decisions in the millennial generation in Jakarta. This study was conducted using quantitative methods, structural equation modeling (SEM), and assisted by the Smart PLS 4.0 program with a total of 100 respondents with an average age of 25-35 years. The structural model was evaluated using R-square for dependent constructs, Stone-Geisser Q-square test for Q2 predictive relevance, and significance test of structural path parameter coefficients. The results of this study can be an input in the development of investment behavior theory, especially investment decision-making, as well as the mediation role of financial literacy in these relationships, on individual millennial investors in the Jakarta area. The study found that financial behavior and overconfidence significantly impact the financial literacy of the Millennial Generation in Jakarta, while overconfidence did not. It is recommended that Millennial investors focus on improving their financial literacy, risk perception, and financial behavior to influence investment decisions, while avoiding overconfidence.

INTRODUCTION

The capital market is an activity related to public offering and securities trading, public companies related to the securities it issues and professional institutions related to securities. This is as mentioned in Law Number 8 of 1995 Article 1 Number 13. The capital market has an important role for the economy of a country, because functionally the capital market is a means of business funding or a means for companies to obtain funds from the investor community. The capital market is also functionally a means for the public to invest in financial instruments (OJK 2015).

Thus, capital owners, both individual investors and business entities, can channel funds to the capital market as a means of investment, and entrepreneurs can obtain additional capital funds to
develop and expand their business networks from investors in the capital market (Yuliana 2010). The following is the development of the capital market which can be characterized by the large number of investors in the last four years with significant growth. In 2020, there was an increase in the number of individual investors or Single Investor Identification (SID) by 56.21% from 2019. Meanwhile, the most significant increase was in 2021 which increased by 92.99% from 2020. This is as mentioned in the investor demography data published by KSEI.

![Figure 1. Total Number of SIDs Growth Chart (2019-November 3, 2022)](source)

Investment activities in the capital market are closely related to the determination of investment decisions by an investor. An investment decision is a policy taken on two or more alternatives to investment in the hope of getting returns in the future (Hariharan, 2000; Budiarto, 2017). In making investment decisions, an investor seeks to make decisions rationally. However, over time, investor psychology factors also influence investment decisions. Investors are expected to be able to make rational decisions in order to get returns that are in accordance with what they want. A rational attitude is a person’s thinking attitude that is based on reason and proven by existing data and facts. The participation of traits, likes, emotions and other things that are in humans can make humans behave irrationally (Ariani, 2015).

Based on data published by the Financial Services Authority as of July 14, 2021, the Investment Alert Task Force (SWI) has stopped 11 entities suspected of carrying out business activities without a permit from the competent authority. As well as duplicating or on behalf of licensed entities so that they have the potential to harm the community. Therefore, there are many factors that must be considered by every investor in order to avoid risks that may arise to losses in investing. One of the factors that can affect financial decisions is financial behavior. Financial behavior is behavior related to the application of financial use. Sudindra and Gajendra, (2018) explained that financial behavior can be seen from four main areas, namely: saving, shopping, borrowing, and investing. Financial behavior is constructed by various ideas and assumptions from economic behavior to determine alternatives to several options with the aim of reducing errors in investment decision-making. The choice of decisions taken is related to the involvement of the interaction of traits, emotions, preferences and various things inherent in human beings as intellectual and social beings. Previous research conducted by (Mehrotra, 2018) stated that behavior is very important when making wise investment decisions is different from research conducted by Mutawally et al. (2019) which stated that financial behavior has no effect on investment decisions.

In addition to a person’s financial behavior, human psychological influences or known as behavioral finance also have an influence on the investment decision-making process. One of the behavioral finance factors is overconfidence, overconfidence, including biased aspects that can affect investment decisions. Overconfidence is a feeling of excessive trust in the ability and knowledge possessed in making investments. When a person has excessive confidence, it will be more frequent in investing (Angga Budiarto, 2017). This is due to the confidence in the abilities and knowledge possessed by investors. Overconfidence will later affect the stock market because there are more and more selling and buying activities. The results of research conducted by Pradikasari & Isbanah (2018) state that overconfidence can affect investment decisions. This is because respondents are confident that they have the ability to do so without looking at what risks will be accepted when investing. In contrast to the results of research conducted by Rahman & Gan (2018) overconfidence has a negative effect on
investment decisions. This shows that the higher the overconfidence that an investor has, the lower the accuracy of investment decisions, making investors underestimate the level of mistakes made. Therefore, the ability, success, and accuracy of information are considered too high by overconfident investors.

When making a decision to invest, an investor must be able to pay attention to what risks will be accepted when deciding to invest. Risk perception has an important role in human behavior related to decision-making that is in uncertain conditions. In this case, risk perception needs to be considered in making investment decisions, especially for investors who are inexperienced in business investment, not just business profitability (Costa et al., 2019; Nasr et al., 2019).

In the research of Astuti (2018) which stated that risk perception had a significant positive effect on investment decisions, while the study Ellen & Yuyun (2018) stated that risk perception had no effect on investment decisions. In this study, risk perception is based on the beliefs, considerations, attitudes and approaches of investors towards risk attributes in investment products, which can be adjusted to other aspects of investment, such as profitability. This means that the perception of tolerable risk can influence investment decisions.

The millennial generation is the largest population at a productive age and plays an important role. Included in the millennial generation are those born between 1981-1996, with an estimated age of 24-39 years. Based on the results of the 2020 Population Census, the Central Statistics Agency noted that the millennial generation dominates the composition structure of Indonesia's population by 25.87 percent. In this age cycle, they are at the peak of their productive age and begin to enter the world of work. In addition, this generation also tends to be more familiar and easily understand the latest technology in all aspects of life. So the millennial generation is suitable in the world of investment because technology and innovation have shifted the pattern of economic activities that are often carried out online, starting from consumption, saving, including investment. Investment options are not only in investing in capital goods such as gold, land and buildings, but are starting to touch the realm of capital market investment. The millennial generation is not only faced with the level of complexity and increasing financial products, services, and markets, but will be more likely to accept financial risks in the future (Putri, S. A., & Herawati, 2017). The level of complexity of financial products, services and markets encourages and makes the younger generation able to manage and analyze their finances in the future. This makes the role of financial literacy very important to understand investment products. By having enough financial literacy, an investor hopes to make investment decisions well in accordance with what is expected, namely getting returns in the future.

People who have the intention to invest are ideally based on good financial knowledge or financial literacy, so that their financial decisions have a clear direction (Eko Harry Saputro et al., 2019). Financial literacy is a combination of awareness, knowledge, skills, attitudes, and behaviors necessary to make financial decisions and to achieve financial success (Munyuki & Jonah, 2022). Financial literacy in general gives rise to the ability to make the right business decisions in using and managing money better. Adequate financial literacy has a positive influence on a person's financial behavior, especially in allocating finances appropriately (A. Robb & S. Woodyard, 2011). Weak financial literacy can lead to reduced financial sustainability due to poor business decision-making, leading to business failure. Low financial literacy can lead to poor financial results (Gilal et al., 2012).

In the study Rasuma Putri & Rahyuda (2017) that stated that financial literacy had a significant positive effect on investment decisions, although in the research conducted by Khairunizam & Isbanah (2019) stated that financial literacy variables had no effect on investment decisions. However, in an investment, financial behavior and psychological conditions such as overconfidence that are not balanced with financial literacy will plunge into financial failure. Therefore, financial literacy is suspected to be able to mediate the influence of investors' behavior and psychological conditions in making investment decisions. This is based on the results of research by Hildebrandus et al (2023) and Iram et al. (2023) who found that investment decisions can be well influenced by the quality factor of a person's overconfidence if mediated by financial literacy. In addition, Dinarjito (2023) in his research also found that financial literacy can mediate the relationship between risk perception and a person's overconfidence in investment decisions.

From the description of the phenomenon and some of the studies above, there is a research gap that is the focus of researchers, namely there are pros and cons to the results of the research from the influence between variables, namely overconfidence, financial behavior, risk perception, and also financial literacy on financial decisions. In addition, there are no research results that have found that
financial literacy can mediate other factors besides risk perception and overconfidence factors. Therefore, this study will conduct research on the influence of these variables by including the mediation effect of financial literacy in the influence of risk perception, financial behavior and overconfidence on financial decisions as previously conducted by previous research.

Based on this, the main focus of this study is the influence of financial literacy, risk perception, financial behavior, and overconfidence on investment decisions in the millennial generation in the Jakarta area. So it can be concluded that research is now new, original, and has never been done before.

This study aims to test and analyze the influence of financial behavior, overconfidence, and risk perception on financial literacy and investment decisions, as well as the mediation role of financial literacy in these relationships, on individual millennial investors in Jakarta. The results of this research can be an input in the development of investment behavior theory, especially investment decision-making, as well as investment theory involving the concepts of financial behavior, overconfidence, and risk perception.

**Literature Review**

**Investment Decision**

In this study, investment decisions are the decisions of a person or company to manage financial resources through an investment mechanism with the aim of achieving the expected profit results in a certain period of time. This investment decision can be seen from several main indicators, including: capital borrowing, capital participation, business expansion, determination of time and method of investment, determination of the amount of investment funds, and determination of investment instruments. Meanwhile, in this study, the variables of investment decisions were measured using the Likert scale and using question items taken from previous research conducted by Rahman & Gan (2018).

**Financial Literacy**

In this study, financial literacy is the ability to make various careful considerations and take effective actions in relation to the use and management of money in the present and future. Financial literacy can be seen from several main indicators, namely: the ability to understand financial choices, the ability to plan for future finances, the ability to find the right source of financial knowledge, the ability to save money, and the ability to borrow and pay loans. In this study, financial literacy was measured using the Likert scale, and using question items developed by Hamel et al. (2007) about financial literacy.

**Financial Behavior**

According to Sudindra V.R. & Naidu Gajendra (2018), financial behavior can be seen from four areas, namely: saving, shopping, borrowing, and investing. A person who has the habit of saving, shopping, and borrowing is usually less positive about running a business, while someone who is used to investing tends to be able to develop a business well. This habit is based on good financial literacy. So, financial behavior in the form of habits to invest is influenced by financial literacy, and ultimately affects investment decision-making. The measurement of financial behavior in this study uses indicators from Mehrotra (2018) clarity of goals, understanding the product, risk analysis, investment comparison, linkage to goals, and individual requirements.

**Overconfidence**

According to Lakshmi, J., & Minimol (2016) overconfidence is explained as excessive confidence in reasoning and judgment, they consider their abilities above the average of other investors. An investor behaves in a biased overconfidence because of the limited information received, which makes investors feel that they have superior abilities and knowledge than other investors. An investor who is overconfident generally expects positive results from the investment decisions taken, investment returns will be associated with the skills possessed more than the skills of other investors but if they experience negative results obtained, overconfident investors associate it with unfavorable conditions (Sheikh & Manohar, 2012). It can be concluded that overconfidence is an investor's overconfident behavior, so that the investor is confident and believes that their views and knowledge so that the information they get is ignored by them. This high self-confidence causes individuals to estimate too highly of the knowledge they have.
**Risk Perception**

In this study, risk perception is the perception of a person or company about the chance of a risk event on the financial resources invested in a certain period of time. This risk perception can be seen from several main indicators, including: consideration of the need to seek more detailed clarification on investment risks, consideration of expertise and past experience when investing, investors’ perspective on the position of financial assets in investment, investors’ beliefs regarding the opportunity of risk events, perception of the level of tolerance for risk, and evaluation of risks and returns from investment decisions. However, in this study, the risk perception variable was measured using a Likert scale and using question items developed by Pasewark & Riley (2010).

**Previous Research**

Rasuma Putri & Rahyuda (2017) conducted research on the influence of financial literacy, overconfidence, and financial behavior on the investment decisions of students of the Faculty of Economics and Business, National Development University of East Java. The method applied in this study is a quantitative approach using the stratified random sampling technique. The sample of this study consisted of 98 respondents who had experience in making investment decisions. Data collection of this research was carried out through filling out a questionnaire distributed to students of the Faculty of Economics and Business, National Development University "Veteran" East Java. Data analysis uses Partial Least Square (PLS). The findings of this study show that financial literacy has no effect on investment decisions, overconfidence has a significant influence, and financial behavior has a significant influence on investment decisions.

Mehrotra (2018) conducted Role of Behavioral Finance in Investment Decision–A Study of Investment Behavior in India. This study aims to examine the influence of financial literacy and risk perception on students' investment decisions in Jakarta. The results of this study show that behavior is very important when it comes to making wise investment decisions and therefore in choosing a particular investment option it requires investors to complete the factors such as goals in life, spending habits, expenses, income, perception towards investments, lifestyle changes, time periods, spending habits, expenses, income, perception towards investments, lifestyle changes, time period, nature of investment, thought process, natural habits, study of one's finances, risk tolerance, liquidity, and expected returns.

Dewanty & Isbanah (2018) conducted research on the determinants of financial literacy with the case of career women in Indonesia. The purpose of this study is to examine the influence of demographic factors, such as marital status, education level, income, and age, as well as financial socialization agents on financial literacy. The results of this study show that the level of education, income, and socialization by agents has a positive influence on financial literacy, while marital status and age have no effect on financial literacy. Marital status was found to have less influence on financial literacy. Unmarried women manage their finances, while married women have different responsibilities in making financial decisions. Education level affects financial literacy, but high school, diploma, or bachelor's graduates have a more significant influence and produce a positive influence on financial literacy, especially financial knowledge and behavior. In addition, personal income affects financial literacy, where the higher the income of the female workforce, the wiser they are in financial management. Age does not affect financial literacy, but financial socialization agents do. The social agents that have the most influence on the financial information of female workers in the financial sector are family (78%), then peers and the media, 72.4% each. The government needs to focus on educating the development and improvement of financial literacy for the public as the right step in practicing financial planning from an early age to complete financial management through financial knowledge, financial attitudes, and financial behavior.

**Hypothesis Development**

**Hypothesis of Financial Behavior Towards Financial Literacy**

The results of this study are in line with research conducted by those who state that financial behavior affects financial literacy (Amelia, 2022; Andarsari, 2022; Rahmayanti et al., 2019; Susilowati et al., 2020). Research from Susilowati et al. (2020) added financial behavior and financial literacy to questionnaires in the National Survey of Consumer Finance. They made the behavior-based Financial Practice Index into four variables: cash flow management, credit management, savings, and investment behavior, then they compared the index to financial literacy scores and found that those with higher
levels of financial literacy also had higher Financial Practice Index. This shows that there is a positive relationship between financial behavior and financial literacy.

**H1:** Financial behavior has a positive impact on the financial literacy of the millennial generation in Jakarta

**Hypothesis of Overconfidence in Financial Literacy**

Overconfidence refers to the attitude or behavior of investors who have excess confidence in making decisions (Bias et al., 2024). Investors with overconfidence behavior feel that they have more abilities than other investors and will have a bad effect on their portfolio by underestimating information or risks that may be faced. Overconfidence is a particular concern for planners because there are a number of possibilities that this has the potential to negatively impact financial decisions. There is evidence of a behavioral problem where overconfident investors trade more and make lower profits (de Zwaan et al., 2017).

**H2:** Overconfidence has a positive impact on the financial literacy of the millennial generation in Jakarta

**Hypothesis of Risk Perception on Financial Literacy**

Risk perception plays a very important role in human behavior, in this case it has to do with decision-making in uncertain circumstances. People view a risky situation if they have the potential to suffer losses due to poor decisions that have been made, especially to financial conditions. So, risk perception is a person's consideration of risky conditions that depend on a person's characteristics and psychological condition. The results of the research conducted by Priscilla & Saleh (2023) stated that individuals who have the ability to rationally perceive risks in making investment decisions will have adequate financial literacy. Investment risk perception is very important for investors in making investment decisions because it relates to individual knowledge, skills, and beliefs.

**H3:** Risk Perception has a positive impact on the financial literacy of the millennial generation in Jakarta

**Hypothesis of Financial Behavior on Investment Decisions**

Financial behavior is constructed by various ideas and assumptions from economic behavior to determine alternatives to several options with the aim of reducing errors in investment decision-making. The choice of decisions taken is related to the involvement of the interaction of traits, emotions, preferences and various things inherent in human beings as intellectual and social beings. Previous research conducted by Mehrotra (2018) stated that behavior is very important when making wise investment decisions is different from research conducted by Mutawally et al. (2019) which stated that financial behavior has no effect on investment decisions. Based on this understanding, the following hypothesis can be formulated:

**H4:** Financial behavior has a positive impact on the investment decisions of the millennial generation in Jakarta

**Hypothesis of Overconfidence on Investment Decisions**

When a person has excessive confidence, it will be more frequent in investing. This is due to the confidence in the abilities and knowledge possessed by investors. Overconfidence will later affect the stock market because there are more and more selling and buying activities. The results of the research conducted by Ellen & Yuyun (2018) stated that overconfidence can affect investment decisions. This is because respondents are confident that they have the ability to do so without looking at what risks will be accepted when investing. In contrast to the results of research conducted by Rahman & Gan (2018), overconfidence has a negative effect on investment decisions. This shows that the higher the overconfidence that an investor has, the lower the accuracy of investment decisions, making investors underestimate the level of mistakes made. Based on this understanding, the following hypothesis can be formulated:

**H5:** Overconfidence has a positive impact on the investment decisions of the millennial generation in Jakarta
Hypothesis of Risk Perception on Investment Decisions

Perception is an aspect of thinking through the five senses that is influenced by information and then influences consideration. In this case, risk perception is a person’s way of interpreting risks that are different from estimates or thoughts and reality. Risk perception plays a very important role in human behavior, in this case it has to do with decision-making in uncertain circumstances. People view a risky situation if they have the potential to suffer losses due to poor decisions that have been made, especially to financial conditions. Thus, risk perception is a person's consideration regarding risky conditions that depend on the characteristics and psychological conditions of a person (Ayu Wulandari & Iramani, 2014). In this study, risk perception is assumed to influence investment decisions according to opinion of Hoffmann et al. (2015) and Nguyen et al. (2016), that the higher a person’s risk perception, the more people avoid allocating funds to high-risk assets and prefer low-risk assets (Hariharan, 2000). Investors who have a lower risk perception tend to choose to invest in high-risk ventures when compared to low-risk deposits (Aren, S., & Zengin, 2016). This shows that the perception of low risk plays an important role in encouraging investors to make investment decisions. Based on this understanding, the following hypothesis can be formulated.

H6: Risk Perception has a positive impact on millennial investment decisions in Jakarta

Financial Literacy Hypothesis Mediates Financial Behavior, Overconfidence and Risk Perception of Investment Decisions

Financial literacy in general gives rise to the ability to make the right business decisions in using and managing money better. Adequate financial literacy has a positive influence on a person's financial behavior, especially in allocating finances appropriately (A. Robb & S. Woodyard, 2011). Weak financial literacy can lead to reduced financial sustainability due to poor business decision-making, leading to business failure. In an investment, financial behavior and psychological conditions such as overconfidence that are not balanced with financial literacy will plunge into financial failure. Therefore, financial literacy is suspected to be able to mediate the influence of investors’ behavior and psychological conditions in making investment decisions. This is based on the results of research by Hildebrandus et al (2023) and Iram et al. (2023) who found that investment decisions can be well influenced by the quality factor of a person’s overconfidence if mediated by financial literacy. In addition, Dinarjito (2023) in his research also found that financial literacy can mediate the relationship between risk perception and a person’s overconfidence in investment decisions. Based on this understanding, the following hypothesis can be formulated:

H8: Financial literacy mediates the influence of financial behavior on the investment decisions of the millennial generation in Jakarta.
H9: Financial literacy mediates the influence of overconfidence on millennial investment decisions in Jakarta

METHODS

This research was conducted using quantitative methods, structural equation modeling (SEM), and assisted by the Smart PLS 4.0 program with a total of 100 respondents with an average age of 25-35 years. The researcher tested the investment decision model in the millennial generation in Jakarta as a population. Survey data from this study was collected by distributing questionnaires to 100 respondents who had been designated as a sample of the millennial generation who had become investors.

The data analysis method in this study uses an appropriate quantitative approach because the variables of interest are difficult to manipulate and participants cannot be assigned randomly. The research uses field surveys and PLS-based SEM analysis with the Smart PLS program, which is strong in overcoming the distribution of abnormal data and small samples. Descriptive analysis is used to process questionnaire data, while the measurement model (outer model) evaluates the validity and reliability of the construct. The inner model describes the relationship between latent variables, with evaluation through R-Square, predictive relevance, and bootstrap hypothesis testing. The mediation test was carried out to test the influence of mediation variables on the relationship between variables.
RESULTS
Evaluation of Measurement Model (Outer Model)
Validitas Konvergen (Convergent Validity)

Based on the results of the questionnaire to 100 respondents, the following results were obtained:

![Figure 2. Outer Model Test Results](source)

From the results of the analysis shown by figure 2, it shows that as many as 38 of the total variables, as many as 38 items have a value greater than 0.5. To be able to see more clearly the value of the loading factor, the Financial Literacy data is presented in Table 1.

<table>
<thead>
<tr>
<th>Code</th>
<th>Loading Factor</th>
</tr>
</thead>
<tbody>
<tr>
<td>X1.1</td>
<td>0.502</td>
</tr>
<tr>
<td>X1.2</td>
<td>0.500</td>
</tr>
<tr>
<td>X1.3</td>
<td>0.558</td>
</tr>
<tr>
<td>X1.4</td>
<td>0.763</td>
</tr>
<tr>
<td>X1.5</td>
<td>0.732</td>
</tr>
<tr>
<td>X1.6</td>
<td>0.756</td>
</tr>
<tr>
<td>X1.7</td>
<td>0.723</td>
</tr>
<tr>
<td>X1.8</td>
<td>0.690</td>
</tr>
<tr>
<td>X1.9</td>
<td>0.809</td>
</tr>
<tr>
<td>X1.10</td>
<td>0.736</td>
</tr>
</tbody>
</table>

Source: Data processed 2023
Based on Table 1 that the loading factor value of all variables is above 0.5, then nothing is issued. To be able to see more clearly the value of the loading factor, the Financial Behavior data is presented in Table 2.

**Table 2. Value of exogenous construct loading factor Financial Behavior**

<table>
<thead>
<tr>
<th>Code</th>
<th>Loading Factor</th>
</tr>
</thead>
<tbody>
<tr>
<td>X2.1</td>
<td>0.641</td>
</tr>
<tr>
<td>X2.2</td>
<td>0.662</td>
</tr>
<tr>
<td>X2.3</td>
<td>0.655</td>
</tr>
<tr>
<td>X2.4</td>
<td>0.541</td>
</tr>
<tr>
<td>X2.5</td>
<td>0.771</td>
</tr>
<tr>
<td>X2.6</td>
<td>0.625</td>
</tr>
</tbody>
</table>

*Source: Data processed 2023*

Based on Table 2 that the loading factor value of all variables is above 0.5, then nothing is issued. To be able to see more clearly the loading factor value, the exogenous construct data of Risk Perception is presented in Table 3.

**Table 3. Value of the variable loading factor Perceived Risk Perception**

<table>
<thead>
<tr>
<th>Code</th>
<th>Loading Factor</th>
</tr>
</thead>
<tbody>
<tr>
<td>X3.1</td>
<td>0.564</td>
</tr>
<tr>
<td>X3.2</td>
<td>0.714</td>
</tr>
<tr>
<td>X3.3</td>
<td>0.624</td>
</tr>
<tr>
<td>X3.4</td>
<td>0.519</td>
</tr>
<tr>
<td>X3.5</td>
<td>0.781</td>
</tr>
<tr>
<td>X3.6</td>
<td>0.668</td>
</tr>
<tr>
<td>X3.7</td>
<td>0.726</td>
</tr>
<tr>
<td>X3.8</td>
<td>0.726</td>
</tr>
<tr>
<td>X3.9</td>
<td>0.636</td>
</tr>
<tr>
<td>X3.10</td>
<td>0.914</td>
</tr>
</tbody>
</table>

*Source: Data processed in 2023*

Table 3 shows that the loading factor value of all variables is above 0.5, then nothing is issued. To be able to see more clearly the value of the loading factor, the Exogenous Construction Data Overconfidence is presented in Table 4.

**Table 4. Value of the loading factor variable Overconfidence**

<table>
<thead>
<tr>
<th>Code</th>
<th>Loading Factor</th>
</tr>
</thead>
<tbody>
<tr>
<td>Y1.1</td>
<td>0.625</td>
</tr>
<tr>
<td>Y1.2</td>
<td>0.553</td>
</tr>
<tr>
<td>Y1.3</td>
<td>0.787</td>
</tr>
<tr>
<td>Y1.4</td>
<td>0.738</td>
</tr>
<tr>
<td>Y1.5</td>
<td>0.688</td>
</tr>
<tr>
<td>Y1.6</td>
<td>0.776</td>
</tr>
<tr>
<td>Y1.7</td>
<td>0.591</td>
</tr>
</tbody>
</table>

*Source: Data processed 2023*
Table 4 shows that the loading factor value of all variables is above 0.5, then nothing is issued. To be able to see more clearly the value of the loading factor, the exogenous construct data of the Investment Decision is presented in Table 5.

**Table 5. Value of the loading factor variable of Investment Decision**

<table>
<thead>
<tr>
<th>Code</th>
<th>Loading Factor</th>
</tr>
</thead>
<tbody>
<tr>
<td>Z1</td>
<td>0.606</td>
</tr>
<tr>
<td>Z2</td>
<td>0.683</td>
</tr>
<tr>
<td>Z3</td>
<td>0.593</td>
</tr>
<tr>
<td>Z4</td>
<td>0.610</td>
</tr>
<tr>
<td>Z5</td>
<td>0.634</td>
</tr>
</tbody>
</table>

*Source: Data processed 2023*

Table 5 shows that the loading factor value of all variables is above 0.5, then nothing is issued.

**Discriminant Validity**

It is a cross loading factor value that is useful for finding out whether the construction has adequate discrimination, namely by comparing the loading value on the intended construction must be greater than other values. With the standard value for each construct must be greater than 0.5. Based on Table 6, the cross loading value on each construct has a value of more than 0.5. This shows that the manifest variable in this study has correctly explained the latent variable and proves that all items are valid.

**Table 6. Cross Loading Factor**

<table>
<thead>
<tr>
<th>Variable</th>
<th>Validity Results</th>
<th>Conclusion</th>
</tr>
</thead>
<tbody>
<tr>
<td>Investment Decision</td>
<td>0.921</td>
<td>Reliable</td>
</tr>
<tr>
<td>Financial Literacy</td>
<td>0.937</td>
<td>Reliable</td>
</tr>
<tr>
<td>Overconfidence</td>
<td>0.695</td>
<td>Reliable</td>
</tr>
<tr>
<td>Financial Behavior</td>
<td>0.624</td>
<td>Reliable</td>
</tr>
<tr>
<td>Risk Perception</td>
<td>0.832</td>
<td>Reliable</td>
</tr>
</tbody>
</table>

*Source: Primary data processed, 2023*

**Structural Model Evaluation (Inner Model)**

The structural model was evaluated using R-square for dependent constructs, Stone-Geisser Q-square test for Q2 predictive relevance, and significance test of structural path parameter coefficients.

**R-Square (R2)**

The normality test is carried out to see whether a data is normally distributed or not. The method used is Kolmogorov-Smirnov to determine whether the data used is normal or not, so the results of the normality test are found as follows:

**Table 7. R Square**

<table>
<thead>
<tr>
<th>Variable</th>
<th>R-square</th>
<th>R-square adjusted</th>
</tr>
</thead>
<tbody>
<tr>
<td>Investment Decision</td>
<td>0.471</td>
<td>0.449</td>
</tr>
<tr>
<td>Financial Literacy</td>
<td>0.322</td>
<td>0.301</td>
</tr>
</tbody>
</table>

*Source: Processed data, 2023*
The results $R^2$ in Table 7 show that the value of $R^2$ the Investment Decision is 0.471. This value shows that Financial Literacy, Overconfidence, Financial Behavior, and Risk Perception have an effect on the Investment Decision variable by 47.1 percent and the rest (52.9) are influenced by other variables outside the variables in this study. $R^2$ Financial Literacy was 0.322; the value showed that Overconfidence, Financial Behavior, and Risk Perception had an effect on the Financial Literacy variable by 32.2 percent and the rest (67.8) was influenced by other variables outside the variables in this study.

**Significance Test (Bootstraping)**

To find out whether a hypothesis is accepted or rejected can be done by paying attention to the significance values between constructs, t-statistics and p-values. In this way, the measurement estimates and standard errors are no longer calculated based on statistical assumptions, but are based on empirical observations. In the bootstrapping method in this study, the hypothesis is accepted if the significance value of t-values is greater than 1.68 and or nilai p-values are less than 0.05, then Ha is accepted and Ho is rejected and vice versa.

| Hypothesis                              | Original sample (O) | Sample mean (M) | Standard deviation (STDEV) | T statistics (|O/STDEV|) | P values |
|-----------------------------------------|---------------------|-----------------|---------------------------|----------------|----------|
| Financial Behavior > Financial Literacy | 0.370               | 0.390           | 0.128                     | 2.886          | 0.004    |
| Overconfidence > Financial Literacy    | -0.128              | -0.127          | 0.132                     | 0.966          | 0.334    |
| Risk Perception > Financial Literacy   | 0.346               | 0.359           | 0.150                     | 2.302          | 0.021    |
| Financial Literacy > Investment Decisions | 0.204             | 0.202           | 0.097                     | 2.115          | 0.035    |
| Financial Behavior -> Investment Decisions | 0.137            | 0.142           | 0.135                     | 1.018          | 0.309    |
| Overconfidence -> Investment Decisions | 0.264              | 0.260           | 0.142                     | 1.867          | 0.069    |
| Risk Perception -> Investment Decisions | 0.251              | 0.261           | 0.168                     | 1.491          | 0.125    |
| Financial Behavior -> Financial Literacy -> Investment Decisions | 0.076            | 0.081           | 0.051                     | 2.470          | 0.042    |
| Overconfidence -> Financial Literacy -> Investment Decisions | 0.026            | -0.020          | 0.027                     | 2.981          | 0.027    |
| Risk Perception -> Financial Literacy -> Investment Decisions | 0.071              | 0.068           | 0.041                     | 2.741          | 0.024    |

*Source: Processed data, 2023*

**Hypothesis**

Based on Table 8, the determination of the hypothesis accepted or rejected is explained as follows.
Hypothesis 1
1) Hypothesis 1: The influence of Financial Behavior has an effect on Financial Literacy.  
   Ho: There is an influence of Financial Behavior on Financial Literacy.  
   Ha: There is no influence of Financial Behavior on Financial Literacy.  
2) Criteria: If P values < 0.05 then Ho is rejected and H1 is accepted.  
3) Results: Hypothesis testing showed a P value of 0.004.  
4) Conclusion: Based on the results of the calculation above, it can be concluded that hypothesis 1 is accepted and it is stated that there is an influence of Financial Behavior on Financial Literacy.

Hypothesis 2
1) Hypothesis 2: Overconfidence affects Financial Literacy.  
   Ho: There is an effect of Overconfidence on Financial Literacy.  
   Ha: There is no influence of Overconfidence on Financial Literacy.  
2) Criteria: If P values < 0.05 then Ho is rejected and H1 is accepted.  
3) Results: Hypothesis testing showed a P value of 0.334.  
4) Conclusion: Based on the results of the above calculations, it can be concluded that hypothesis 2 is rejected and it is stated that there is no influence of Overconfidence on Financial Literacy.

Hypothesis 3
   Ho: There is an influence of Risk Perception on Financial Literacy.  
   Ha: There is no effect of Risk Perception on Financial Literacy.  
2) Criteria: If P values < 0.05 then Ho is rejected and H1 is accepted.  
3) Results: Hypothesis testing showed a P value of 0.021.  
4) Conclusion: Based on the results of the above calculations, it can be concluded that hypothesis 3 is accepted and it is stated that there is an influence of Risk Perception on Financial Literacy.

Hypothesis 4
   Ho: There is an influence of Financial Literacy on Investment Decisions.  
   Ha: There is no influence of Financial Literacy on Investment Decisions.  
2) Criteria: If P values < 0.05 then Ho is rejected and H1 is accepted.  
3) Results: Hypothesis testing showed a P value of 0.035.  
4) Conclusion: Based on the results of the calculation above, it can be concluded that hypothesis 4 is accepted and it is stated that there is an influence of Financial Literacy on Investment Decisions.

Hypothesis 5
   Ho: There is an influence of Financial Behavior that affects Investment Decisions.  
   Ha: There is no influence of Financial Behavior on Investment Decisions.  
2) Criteria: If P values < 0.05 then Ho is rejected and H1 is accepted.  
3) Results: Hypothesis testing showed a P value of 0.309.  
4) Conclusion: Based on the results of the above calculation, it can be concluded that hypothesis 5 is rejected and it is stated that there is no influence of Financial Behavior on Investment Decisions.
Hypothesis 6
1) Hypothesis 6: The effect of overconfidence on investment decisions.
   Ho: There is an influence of Overconfidence on Investment Decisions.
   Ha: There is no influence of Overconfidence on Investment Decisions.
2) Criteria: If P values < 0.05 then Ho is rejected and H1 is accepted.
3) Results: Hypothesis testing showed a P value of 0.063.
4) Conclusion: Based on the results of the above calculations, it can be concluded that hypothesis 6 is rejected and it is stated that there is no influence of Overconfidence on the Investment Decision.

Hypothesis 7
1) Hypothesis 7: The Influence of Risk Perception on Investment Decisions
   Ho: There is an influence of Risk Perception on Investment Decisions.
   Ha: There is no effect of Risk Perception on Investment Decisions.
2) Criteria: If P values < 0.05 then Ho is rejected and H1 is accepted.
3) Results: Hypothesis testing showed a P value of 0.137.
4) Conclusion: Based on the results of the above calculations, it can be concluded that hypothesis 7 is rejected and it is stated that there is no influence of Risk Perception on Investment Decisions.

Hypothesis 8
1) Hypothesis 8: Financial Literacy Mediates the Influence of Financial Behavior on Investment Decisions
2) Criteria: If P values < 0.05 then Ho is rejected and H5 is accepted.
3) Results: The hypothesis test showed a P value of 0.042.
4) Conclusion: Based on the results of the calculation above, it can be concluded that hypothesis 4 is accepted and it is stated that Financial Literacy can mediate the Influence of Financial Behavior on Investment Decisions.

Hypothesis 9
   Ha: Financial Literacy cannot mediate the Effect of Overconfidence on Investment Decisions.
2) Criteria: If P values < 0.05 then Ho is rejected and H4 is accepted.
3) Results: Hypothesis testing showed a P value of 0.027.
4) Conclusion: Based on the results of the above calculations, it can be concluded that hypothesis 9 is accepted and it is stated that Financial Literacy can mediate the Influence of Overconfidence on Investment Decisions.

Hypothesis 10

2) Criteria: If P values < 0.05 then Ho is rejected and H4 is accepted.
3) Results: Hypothesis testing showed a P value of 0.024.
4) Conclusion: Based on the results of the above calculations, it can be concluded that hypothesis 10 is accepted and it is stated that Financial Literacy can mediate the Influence of Risk Perception on Investment Decisions.

Discussion

From the results of the research data processing that has been described above, the recapitulation of the results can be seen in the following table:

<table>
<thead>
<tr>
<th>Hypothesis</th>
<th>Information</th>
</tr>
</thead>
<tbody>
<tr>
<td>H1 Financial Behavior Affects Financial Literacy</td>
<td>Accepted</td>
</tr>
<tr>
<td>H2 Overconfidence affects Financial Literacy</td>
<td>Rejected</td>
</tr>
<tr>
<td>H3 Risk Perception Affects Financial Literacy</td>
<td>Accepted</td>
</tr>
<tr>
<td>H4 Financial Literacy Affects Investment Decisions</td>
<td>Accepted</td>
</tr>
<tr>
<td>H5 Financial Behavior Affects Investment Decisions</td>
<td>Rejected</td>
</tr>
<tr>
<td>H6 Overconfidence affects investment decisions</td>
<td>Rejected</td>
</tr>
<tr>
<td>H7 Risk Perception Affects Investment Decisions</td>
<td>Rejected</td>
</tr>
<tr>
<td>H8 Financial Literacy can mediate the Influence of Financial Behavior on Investment Decisions</td>
<td>Accepted</td>
</tr>
<tr>
<td>H9 Financial Literacy can mediate the Influence of Overconfidence on Investment Decisions</td>
<td>Accepted</td>
</tr>
<tr>
<td>H10 Financial Literacy can mediate the Influence of Risk Perception on Investment Decisions</td>
<td>Accepted</td>
</tr>
</tbody>
</table>

Financial Behavior Affects the Financial Literacy of the Millennial Generation in Jakarta

Based on the results of the research, there is a direct influence of financial behavior on the financial literacy of the millennial generation in Jakarta. These results confirm those who found that students' saving behavior has an influence on financial literacy. Financial literacy in the form of knowledge of financial management in general, knowledge of savings and loans, investment, and insurance affects the behavior of the millennial generation. The higher the knowledge, the more likely students are to have better financial behavior. Individuals can decide, plan, and prepare their finances for the future. Financial planning that has been determined will make it easier for them to take financial actions and behaviors that are in accordance with the main priorities of the plan. (Susilowati et al., 2020)

This is in line with research (Amelia, 2022; Andarsari, 2022; Rahman et al., 2021; Rahmayanti et al., 2019; Susilowati et al., 2020) that found that a person with high financial literacy will have a good financial attitude for the millennial generation in Jakarta. They also show good and rational financial behavior. People who show that attitudes are positively correlated with financial behavior. found that financial literacy learned during university studies can shape financial behavior. Financial literacy is very decisive in a person's decision-making because it considers the financial risks that will be faced for the decisions they make. These financial decisions will be useful in the future, so one can minimize their financial risks. Millennials with high financial literacy are more realistic in taking, they are financially educated and can eliminate the possibility of taking inappropriate and excessive risks Shim, Xiao, Barber, & Lyons (2009).
Overconfidence affects the financial literacy of the millennial generation in Jakarta

Based on the results of the research, Overconfidence has no effect on the financial literacy of the millennial generation in Jakarta. Overconfidence refers to the attitude or behavior of investors who have excess confidence in making decisions (Bias et al., 2024). Investors with overconfidence behavior feel that they have more abilities than other investors and will have a bad effect on their portfolio by underestimating information or risks that may be faced.

Overconfidence is a particular concern for planners because there are a number of possibilities that this has the potential to negatively impact financial decisions (de Zwaan et al., 2017). This research is in line with the results of the research de Zwaan et al. (2017) results that overconfidence does not have an effect on financial literacy due to behavioral problems where investors who are overconfident trade more and get lower profits.

Risk Perception Affects Millennial Financial Literacy in Jakarta

Based on the results of the research Risk Perception has an effect on the financial literacy of the millennial generation in Jakarta. Risk perception plays a very important role in human behavior, in this case it has to do with decision-making in uncertain circumstances. People view a risky situation if they have the potential to suffer losses due to poor decisions that have been made, especially to financial conditions. So, risk perception is a person's consideration of risky conditions that depend on a person’s characteristics and psychological condition.

The results of the research conducted by Priscilla & Saleh (2023) stated that individuals who have the ability to rationally perceive risks in making investment decisions will have adequate financial literacy. Investment risk perception is very important for investors in making investment decisions because it relates to individual knowledge, skills, and beliefs.

Financial Literacy on Millennial Investment Decisions in Jakarta

Based on the results of the research, financial literacy has an effect on the investment decisions of the millennial generation in Jakarta. Financial literacy refers to an individual's ability to analyze and manage personal finances (Seraj et al., 2022). This means that in this case, the indicators contained in financial literacy have made a sufficient contribution as their role to influence investment decisions. Thus, it can be interpreted that financial literacy has a significant positive influence on investment decisions.

Some researchers state that financial literacy has an effect on investment decisions (Amelia, 2022; Hashmi et al., 2023; Maheshwari et al., 2024; Priangga & Purwanto, 2024; Priscilla & Saleh, 2023; Rahman et al., 2021; Seraj et al., 2022; Susilowati et al., 2020). Financial literacy is important to enable people to make rational investment decisions so that they can manage their finances effectively. Individuals or investors who are not financially literate make irrational investment decisions that lead to financial losses.

In this study, it is known that the majority of millennials in Jakarta have a fairly good basic knowledge of finance, savings and loans, investment and insurance. In accordance with these results, the subjects in this study are at a level with their knowledge of good finance. Therefore, financial literacy has a positive effect on investment decisions, meaning that the higher the financial literacy of the millennial generation, the better the investment decisions will be. The level of financial literacy is important because individuals are likely to make an investment decision. By having a good level of financial literacy, individuals tend to be wiser and better at managing their assets so that they can provide useful feedback in supporting individual finances.
The Influence of Financial Behavior on the Investment Decisions of the Millennial Generation in Jakarta

Based on the results of the study, financial behavior has no effect on the investment decisions of the millennial generation in Jakarta. So this result is in line with the results of research conducted by (Mutawally et al., 2019) who state that financial behavior has no effect on investment decisions, but is different from research conducted by (Mehrotra, 2018) who state that behavior is very important when making wise investment decisions.

Research from Safryani et al. (2020) shows that financial behavior does not have a significant influence on investment decisions, in this case the indicators contained in financial behavior, namely Financial Planning, Financial Budgeting, Financial Management and Financial Savings, do not contribute significantly in their role to influence investment decisions. Thus, it can be interpreted that financial behavior has no effect on investment decisions in the millennial generation in Jakarta.

It can be seen from the results of the respondents' answers to the statement where from the answers only a few respondents answered very much so that it can be seen that the financial behavior of the respondents is still not optimal, so it can be seen that the financial behavior of the millennial generation in Jakarta does not affect investment decisions. Therefore, the results of this study are not in accordance with the hypothesis that has been made, namely financial behavior does not have a significant effect on investment decisions in the millennial generation in Jakarta.

The Effect of Overconfidence on Millennial Investment Decisions in Jakarta

Based on the results of the research, Overconfidence has no influence on the investment decisions of the millennial generation in Jakarta. This result is in line with the results of research conducted by Rahman & Gan (2018) overconfidence negatively affecting investment decisions, but contrary to the results of research that states that (Ellen & Yuyun, 2018) overconfidence can affect investment decisions.

Based on the table above, there is the highest indicator, namely, "I believe that your expertise and knowledge of the stock market can help outperform the market" with a mean value of 3.85. Next there is the lowest indicator, namely "I feel always lucky to invest in the best deals" with a mean value of 3.46. This shows that the higher the overconfidence that an investor has, the lower the accuracy of investment decisions, making investors underestimate the level of mistakes made.

It can be seen from the results of the respondents' answers to the statement where from the answers only a few respondents answered strongly so that it can be seen that the overconfidence of the respondents is still not optimal, so it can be seen that the financial behavior of the millennial generation in Jakarta does not affect investment decisions. Therefore, the results of this study are not in accordance with the hypothesis that has been made, namely Overconfidence does not have a significant effect on investment decisions in the millennial generation in Jakarta.

The Effect of Risk Perception on Millennial Investment Decisions in Jakarta

Based on the results of the research Risk Perception has no influence on the investment decisions of the millennial generation in Jakarta, this result is in line with the opinion (Aren, S., & Zengin, 2016), which states that investors who have a lower risk perception tend to choose to invest in high-risk businesses when compared to deposits with low risk. However, this result is different from the opinion Hariharan (2000) that the higher a person's risk perception, the more people avoid allocating funds to high-risk assets and prefer low-risk assets.

In this study, risk perception is assumed to influence investment decisions according to opinion Hoffmann et al. (2015) and Nguyen et al. (2016) The higher a person's risk perception, the more people avoid allocating funds to high-risk assets and prefer low-risk assets (Hariharan, 2000). Investors who have a lower risk perception tend to choose to invest in high-risk ventures when compared to low-risk deposits (Aren, S., & Zengin, 2016). This shows that the perception of low risk plays an important role in encouraging investors to make investment decisions.
It can be seen from the results of the respondents' answers to the statement where from the answers only a few respondents answered very much so that it can be seen that the Risk Perception of the respondents is still not optimal, so it can be seen that the Risk Perception in the millennial generation in Jakarta does not affect investment decisions. Therefore, the results of this study are not in accordance with the hypothesis that has been made, namely Risk Perception does not have a significant effect on investment decisions in the millennial generation in Jakarta.

The Mediation Role of Financial Literacy Between Financial Behavior, Overconfidence, and Risk Perception on Millennial Investment Decisions in Jakarta

Based on the results of the research, financial literacy can be a mediator between financial behavior, overconfidence, and risk perception for the investment decisions of the millennial generation in Jakarta. These results can prove that financial literacy can mediate financial behavior, overconfidence and risk perception of the financial decisions of the millennial generation in Jakarta. This result is also in line with the research of Hildebrandus et al (2023) and Iram et al. (2023) which found that investment decisions can be well influenced by the quality factor of a person's overconfidence when mediated by financial literacy. In addition, Dinarjito (2023) in his research also found that financial literacy can mediate the relationship between risk perception and a person's overconfidence in investment decisions.

Research (Hashmi et al., 2023; Maheshwari et al., 2024) has found that financial literacy can mediate the relationship between risk perception and a person's overconfidence in investment decisions. Investments have many risks, such as economic risk, compliance risk, security, and fraud risk, financial risk, reputation risk, and operational risk. As an investor, it is very important to recognize your personal risk perception because the perception of risk may differ from one person to another.

In line with risk perception, financial literacy can motivate investors to start investing (Priscilla & Saleh, 2023). Investors with higher financial literacy will have a better attitude in dealing with investment risks and the greater the motivation to save, the better the investor's behavior in making investment decisions (Ramandhanty et al., 2021). Therefore, financial literacy can mediate risk perceptions and investment decisions.

CONCLUSION

The study found that financial behavior and risk perception significantly impact the financial literacy of the millennial generation in Jakarta, while overconfidence did not. Financial literacy significantly influences investment decisions, but it can mediate the influence of these factors. It is recommended that millennial investors focus on improving their financial literacy and risk perception to influence investment decisions, while avoiding overconfidence. Strengthening financial literacy is crucial as it mediates the influence of these factors on investment decisions.

REFERENCES


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