

# “Determinants of cryptocurrency investment decisions (Study of students in Bali)”

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# DETERMINANTS OF CRYPTOCURRENCY INVESTMENT DECISIONS (STUDY OF STUDENTS IN BALI)

## Abstract

The investment world today is vying for profit from investing in cryptocurrencies, so this encourages young people, especially students, to invest in cryptocurrencies, but financial literacy, herding behavior, and risk perception are things that influence investment decisions. The aim of this study was to identify the factors that influence students' decisions to invest in cryptocurrencies. The research method used is quantitative, using questionnaires distributed to students in Bali; the sample in this study was active students currently studying at universities in Bali, Indonesia, totaling 179 samples; questionnaires were distributed using the Google form and analyzed using Warp PLS. The results show that investment decisions, herding behavior, and risk perception are all significantly and positively influenced by financial literacy. Perceived risk and herding behavior have a significant influence on investment decisions. Perceived risk and herding behavior can partially mediate financial literacy on investment decisions. The influence of financial literacy on investment decisions will be stronger if it is through perceived risk with a coefficient value of 0.412 and herding behavior with a coefficient value of 0.422. Based on the study's conclusion, it is important for investors, especially students, to prioritize improving their financial literacy before investing in cryptocurrencies. Additionally, investors should be aware of the potential impact of herding behavior and perceived risk on their investment decisions and take steps to mitigate their influence.

## Keywords

perceived risk, financial literacy, investment decision,  
herding behavior, cryptocurrency, students, Bali

## JEL Classification

F65, G41, E22

## INTRODUCTION

The intention to gain profit in the future turns investing into a type of financial management that uses cash through the investment of current assets (Van Horne, 1998). From this perspective, it can be interpreted that investing is a procedure where a number of funds are invested in real or financial assets in order to generate money or profits in the future by taking into account both technical and behavioral issues. Considering the theory of planned behavior, knowledge and attitudes and behavioral control regarding financial concepts and risks are needed so that they do not choose poorly when making investments. Investment decisions in this study are aimed at the millennial generation because the problems that are currently often experienced by the millennial generation are financial problems, where almost everyone is familiar with general financial problems such as excessive spending, causing personal savings to decrease, personal debt with friends, and even being trapped in fraudulent investments. Having good financial literacy is the most important thing to get a prosperous life (Yushita, 2017). Financial literacy is crucial before making investments, because making the wrong choices will result in poor and ineffective financial management and can influence people who are prone to financial cri-

ses to behave in certain ways. Investors with good knowledge and abilities will easily predict the profits to be obtained (Riawan et al., 2019). A person who takes responsibility for his financial behavior will typically use his money wisely. Investors who exhibit cognitive and emotional influences on their behavior become irrational because they are unable to properly translate information. Decisions based only on irrational factors will yield irrational consequences (Ramdani, 2018). Cognitive and emotional aspects of each person's personality make up behavioral bias that can affect investment choices. In decision making, investors frequently make judgments based on the activities of other investors, this event is known as Herding Behavior. Cryptocurrency is an online worldwide digital payment system (Hashemi Joo et al., 2020). The term "crypto" in cryptocurrency refers to the instrument's encryption or cryptography, which is subsequently uploaded to the blockchain database, whereas "currency" refers to acknowledgment as a means of exchange among its users (Mohd Noh & Abu Bakar, 2020). This digital money can be exchanged for real money in online transactions. The owners additionally invest in and conduct trading in cryptocurrencies. Transactions are completed immediately, across nations and continents, and with greater certainty of confidentiality (Ausop & Aulia, 2018).

## 1. LITERATURE REVIEW AND HYPOTHESES

According to Fityani and Arfinto (2015), Herding is the behavior of investors who tend to follow other investors in investing without conducting a fundamental analysis first so that the market formed becomes inefficient. Herding refers to a situation where rational people begin to behave irrationally by imitating the judgment of others when making decisions. Meanwhile, according to Hirshleifer and Teoh (2009), Herding is a behavior that tends to imitate the actions taken by others rather than following their beliefs or information they have. Herding consists of intentional herding and unintentional herding. Intentional herding occurs when investors deliberately follow the actions of other investors and ignore their personal information. Investors do herding because of the unavailability of information clearly so that it encourages investors to follow the behavior of other investors or the consensus that has been formed before. Investors who belong to herding behavior have a clear intention to ignore their personal information and imitate the behavior of other investors who lead them to trade in the same direction, thus moving in and out of the investor market as a group (Virigineni & Rao, 2017). Having financial knowledge can enable a person to use their money wisely. There are many sources of knowledge that can be obtained, among others, from formal education such as for example from learning at school or during lectures, attending training programs or seminars. Investors with good knowledge and abilities will easily predict the benefits that will

be obtained (Riawan et al., 2019). The knowledge that a person has encourages him to carry out financial planning and minimize errors in decision making, meaning that the more a person has financial knowledge, it can encourage or motivate a person to be able to allocate assets among financial instruments and will have a strong influence on financial behavior. Viantara et al. (2019) found that general knowledge of personal finance has no effect on investment decisions; these findings are supported by a study by Popat and Pandra (2020) that financial knowledge has no effect on financial decisions. Kumari (2020) also found that financial knowledge has no effect on financial decisions. Firda and Ismawati (2019) found that financial knowledge has a significant positive effect on investment decisions. Atmaningrum et al. (2021) also found that financial knowledge affects investment decisions; these findings are also supported by Astiti et al. (2019) that financial knowledge affects investment decision making.

Financial behavior is closely related to a person's financial responsibility related to how finances are managed. Financial behavior is also defined as how well households or individuals manage financial resources which include savings, insurance and investment budget planning. A person's financial behavior can be seen from how well he manages cash, debt, savings, and other expenses (Hasibuan et al., 2018). Someone who is responsible for their financial behavior will tend to be effective in using their money, such as saving, budgeting, investing, paying obligations on time and controlling their expenses. Financial behav-

ior involves traits, emotions, preferences and various other things that exist in humans as social beings who interact and underlie decisions in action (Istikomah & Bebasari, 2020). Poor behavior in managing personal finances can have negative long-term social consequences because financial behavior can affect financial well-being, so it is necessary to emphasize an important point, namely, investment decision making (Kumar et al., 2017). Good financial behavior is reflected in financial planning and management and appropriate financial decision making. Atmaningrum et al. (2021) conducted research and found that there was no influence between financial behavior on investment decisions, while Astiti et al. (2019) found that financial behavior affects investment decision making; these findings are supported by Alaaraj and Bakri (2020) that financial behavior affects investment decisions.

The aim of this study is to identify factors influencing students' investment decisions in cryptocurrencies in Bali, Indonesia. The study also aims to investigate the impact of financial literacy, risk perception, and behavior of herding on decision in investing by students in cryptocurrencies. By understanding these determinants, the study can provide valuable insights into how students can make informed investment decisions and help mitigate potential negative impacts associated with cryptocurrency investments. Based on the aims of this study, the hypothesis of this study is formulated.

### 1.1. Financial literacy toward perceived risk

Financial literacy has become an increasingly important factor in the way individuals perceive and manage risk in their financial decisions. Financial literacy, as described by Lusardi and Mitchaell (2007), is financial knowledge with the aim of obtaining wealth. Having sufficient financial literacy will positively affect a person's financial behavior, such as how they manage or allocate their assets (Robb & Woodyard, 2011). Fitriarianti (2018) adds that because people frequently have to make trade-offs, or give up one interest for another, it is essential for people to be financially literate in order to prevent financial troubles. A person's interpretation of knowledge

concerning dangers is known as risk perception. Risk perception is socially molded; Williamson and Weyman (2005) describe it as the outcome of several variables that underlie individual differences in how they choose to react to the threat of loss. Risk perception is a person's evaluation of a dangerous situation; hence the evaluation is greatly influenced by the psychological traits and environmental factors of the individual (Wulandari, 2014). In addition, investors may benefit from this research by learning how much financial information they need to handle risky situations and how investing experience can assist them manage risky assets (Awais et al., 2016). An individual's perception of risk is positively impacted by financial knowledge, indicating that higher financial literacy makes people better at identifying risks and managing their financial resources.

*H1: Financial literacy has a positive effect on perceived risk.*

### 1.2. Financial literacy toward investment decision

Understanding the relationship between financial literacy and investment decision-making is crucial in today's complex financial landscape. According to Humaira and Sagoro (2018), the better one applies financial principles to managing their money, the better their level of planning and investment decision-making will be. Atmaningrum et al. (2021) said financial attitudes have an impact on investment decisions; Astiti et al. (2019), and Kristanto and Hendry (2020) have found that financial attitudes have a significant positive impact on investment decisions. Financial knowledge is an important factor in investment decisions. Atmaningrum et al. (2021) revealed that financial knowledge had an impact on investing decisions. These conclusions were also supported by Fitra et al. (2018) and Pertiwi et al. (2020), who discovered that financial knowledge had a significant impact on investment decisions. Humans are social beings that interact and make decisions based on a variety of factors, including our nature, emotions, interests, and other characteristics (Istikomah & Bebasari, 2020). Financial conduct may influence financial well-being; thus, it is critical to underline how crucial it is to make

investment decisions, since poor financial behavior can have detrimental long-term societal effects (Kumar et al., 2017). Astiti et al. (2019) found that financial behavior affects investment decision making, and these findings are supported by Bebasari and Istikomah (2020), Kristanto and Hendry (2020), and Alaaraj and Ahmed (2020), who stated that financial behavior has a positive and significant effect on investment decisions. Zhao and Zhang (2021) imply that individual investors' investing methods will change as their financial literacy increases.

*H2: Financial literacy has a positive effect on investment decisions.*

### 1.3. Financial literacy toward herding behavior

As financial markets become more interconnected and information more readily available, the impact of financial literacy on herd behavior has become a topic of increasing interest and concern. Understanding how money functions in the real world includes knowing how to make or earn it, how to manage it, how to invest it (to make it grow), and how to donate it to others in need (Giesler & Veresiu, 2014). Emotions and human intuition therefore play a crucial part in decision making. To make a straightforward rational decision, select preferences based on ratings (Samuelson & Zeckhauser, 1988). According to the rational choice model, preferences influence investors' alternative options under particular or uncertain situations. Individual investors have more options than institutional investors (Lee et al., 2002). In these uncertain times, it is best to copy and convey other information, so often investors do the same. Someone also keeps an eye on firm management when they sell shares and then reinvest, as well as when they buy undervalued shares without sufficient expertise (Khalid, 2018). Understanding money management includes earning, managing, investing, and donating money, while herd behavior, emotions, and intuition influence decision-making, and investors tend to copy others' behavior and monitor company managers' actions to make investment decisions in uncertain times.

*H3: Financial literacy has a positive effect on herding behavior.*

### 1.4. Perceived risk toward investment decision

Perceived risk plays a crucial role in shaping investment decision making, as investors weigh potential gains against the possibility of losses in an uncertain market. If a person makes a poor judgment and suffers a loss, they are more likely to consider that circumstance as dangerous, especially if the loss has an effect on their financial condition (Wulandari & Iramani, 2014:59). The indicators that can form the Risk Perception variable, according to Wulandari and Iramani (2014), are investment without consideration, investment without collateral, and the use of income for risky investments. Ainia and Lutfi (2019) said risk perception have a significant impact on investment decision making. A different study claims that risk perception actually influences investing decision-making favorably. The findings of a study by Wulandari and Iramani (2014), which concluded that there is a positive effect of risk perception and making an investment decision, provide evidence for this. There are many cases of people who have lost their assets and even committed suicide because of frustration that their crypto assets have experienced a significant price decline (Gilbert & Loi, 2018). Even though it has a high risk, the behavior of millennials who are known to like to have fun, have fun in their youth nowadays, many even allocate their funds to invest in Crypto (Syakir et al, 2018). Perception is the process by which people organize and interpret sensory impressions, and poor judgment resulting in loss can lead to increased risk perception, which may have either a detrimental or positive impact on investment decision-making depending on the study, while high-risk investments such as Crypto are becoming increasingly popular among millennials despite the potential for significant price declines.

*H4: Perceived risk has a positive effect on investment decisions.*

### 1.5. Herding behavior toward investment decision

The phenomenon of herding behavior among investors has long been recognized as a potential factor influencing investment decisions and market

outcomes. Ramadhan and Mahfud (2016) found four reasons why institutional investors engage in herding behavior: similar data access in limited microdata emerging markets, selecting stocks with similar features, reputation maintenance through imitation, and attention to other managers' stock price valuations. Bikhchandani and Sharma (2000) found that limited information causes investors to imitate others, leading to herding behavior and an "information cascade" where individual signals are ignored. Vieira and Pereira (2015) propose that investors may choose between two strategies when it comes to herding behavior and investment decision-making, with the first assuming irrationality due to herding instincts and imitation of other investors. Institutional investors tend to exhibit herding behavior due to limited information, desire to maintain reputation, and attention to other managers' valuations, which can lead to an "information cascade"; individual investors are more likely to follow the herd than institutional investors, and herding behavior may result from irrationality or imitation of other groups or investors. The following hypothesis can be taken:

*H5: Herding behavior has a positive effect on investment decisions.*

### 1.6. The role of perceived risk mediating the influence of financial literacy on investment decisions

As individuals become more financially literate, the role of perceived risk in shaping their investment decisions becomes increasingly important to understand. Pak and Mahmood (2015) mention that the degree of financial knowledge plays a crucial part in influencing an individual's ability to accept risk in relation to certain financial investments. In addition to the element of financial literacy, there is an element of risk that makes investors reluctant to invest (Anbar & Melek (2010). Risk perception leads to subjective decisions made by investors about the characteristics and magnitude of the risks to be faced (Alquraan et al., 2016) Investors with high-risk perception skills will frequently reevaluate their investing choices (Kumar, 2014). According to Khan (2016), investors who

have low incomes or are new to the market typically perceive risk negatively when making investment decisions. Perception of risk contains two dimensions, that is uncertainty and the importance of consequences, so two separate types of behavioral responses to attempt and lower risk could potentially be required (Coo & Lee, 2006). Coo and Lee (2006) also argue that risk perception is how an individual assesses a risky condition (uncertainty), and his assessment is strongly influenced by psychological factors and situations that are not always the same. According to Gilmore et al. (2004), when circumstances change, so people's perceptions of danger also changes.

The perception of risk and risk inclinations have an impact on an individual's behavior while making investment decisions in the face of uncertainty (Sitkin & Pablo, 1992). Investors who are aware of the magnitude of their perceived risk can manage it (Singh & Bowal, 2008). As a result, since it is a subjective experience that is subject to change and even control, the perception of risk does not have a set value. Investors utilize risk perception, a subjective evaluation technique, to evaluate risk and the degree of uncertainty (Baker & Ricciardi, 2014). According to Nguyen (2017), the effect of financial literacy on the allocation of stock investments in Australia is mediated by risk perception, also risk perception mediated impact of literacy in financial towards intention to investing (Samsuri, 2020). This study discovered that those who are more risk-tolerant are more inclined to invest in cryptocurrency. Despite several regulatory authorities in most Western nations issuing warnings about the dangers of cryptocurrency (Lammer et al., 2019), more official regulation of cryptocurrency investments is still needed. The level of financial knowledge and perception of risk are crucial factors that affect an individual's investment decisions, and risk perception, which is a subjective assessment, can act as a mediator between financial literacy and investment intentions. Those who possess a greater risk appetite are more inclined to invest in high-risk assets such as cryptocurrencies, despite the pressing need for regulatory oversight. From the studies mentioned, the following hypotheses can be taken:

*H6: Perceived risk mediates the influence of financial literacy on investment decisions.*

### 1.7. The role of herding behavior mediating the influence of financial literacy on investment decisions

Understanding how behavior of herding interacts with literacy in financial to shape decisions of investment is a critical area of research for both academics and practitioners in the finance industry. Khalid et al. (2018) show that psychological bias can be diminished through financial literacy (overconfidence, herding, conservatism, disposition effect, and availability) while making risky investing decisions. Hayat and Anwar (2016) and Khalid et al. (2018) stated that financially literate investors frequently use published financial information when making investment decisions, as opposed to less literate investors who more frequently rely on stockbrokers, family members, and friends for advice. Herding can make someone suddenly change their decision because herding is very influenced by other people’s investment choices. According to Bakar and Yi (2016), herding is the propensity for a person to go with the flow, since the majority’s judgments are regarded to be always correct. Meanwhile, Setiawan et al. (2018) stated that unintentional herding occurs when there is little reliable information, other people’s investment choices even though the choices may be bad (Gozalie & Anastasia (2015), because most investors lack the financial skills necessary to analyze their assets, they mostly rely on data from the Pakistani market to guide their investment selections.

According to behavioral finance theory, while making biased financial decisions, people must also take into account psychological factors that may lead to deviations from rational behavior (Paramita et al., 2018). According to Ramadani (2022), there will be a strong preference for cryptocurrencies, bullish sen-

timent and predictions for cryptocurrencies in the future. Financial literacy can help diminish psychological biases, such as overconfidence, herding, conservatism, disposition effect, and availability, while making risky investing decisions, and financially literate investors tend to use published financial information when making investment decisions. Herding behavior has a big impact on investor decision making in Pakistan, and factors like a strong preference for cryptocurrencies, bullish sentiment, and motivation should be considered when making investment decisions to preserve economic stability; the following hypothesis can be put forward:

*H7: Herding behavior mediates the influence of financial literacy on investment decisions.*

Based on Figure 1, the hypotheses are as follows:

*H1: Financial literacy has a positive effect on perceived risk.*

*H2: Financial literacy has a positive effect on investment decisions.*

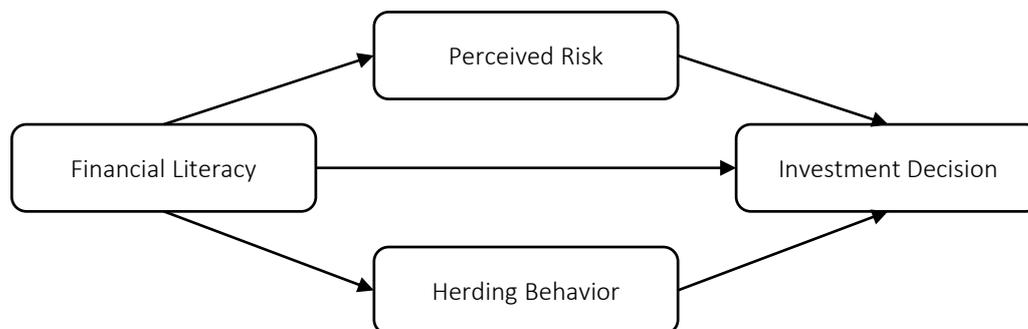
*H3: Financial literacy has a positive effect on herding behavior.*

*H4: Perceived risk has a positive effect on investment decisions.*

*H5: Herding behavior has a positive effect on investment decisions.*

*H6: Perceived risk mediates the influence of financial literacy on investment decisions.*

*H7: Herding behavior mediates the influence of financial literacy on investment decisions.*



**Figure 1.** Conceptual framework

## 2. METHODS

This study uses the causal associative methodology. This study aims to identify the association between two or more factors. This kind of associative study investigates the connection between two or more variables (Sugiyono, 2010, p. 57). This study's focus is on the impact of literacy on investment decisions.

The data for this study were gathered utilizing a survey approach with a questionnaire as a tool. The data from this research will be analyzed and processed using the Smart-PLS analysis tool. Primary data, which include those that have already been examined and those that still need to be processed, were gathered through respondents' answers in relation to the broad variables. Financial attitudes, financial knowledge, and financial behavior are the study's variables. The study will take place in Indonesia, which serves as the research location. People who have purchased shares on the Indonesia Stock Exchange or who are presently doing so are the participants in this study. The decision to invest is the object of this study. Due to the limited distance and conditions that occur today, the researchers decided to use the help of the Google form application. The time for this study is January-August 2022.

According to Sekaran and Bougie (2016, p. 236), the sample size employed in survey research should be 10 times or more than the number of research indicators. In accordance with this state-

ment, there is one dependent variable and three financial literacy dimensions (attitude, behavior, and financial knowledge). According to Sekaran and Bougie's (2016, p. 236) theory of sample determination, the study will require a minimum of  $4 \times 10 = 40$  samples. The general reference for determining the appropriate sample size in research is generally more than 30 and less than 500 (Sekaran & Bougie, 2016, p. 236). Based on the above considerations and the distribution of the questionnaire for 1 week, the researchers obtained a total of 188 observations but those who met the requirements were 179 samples, which already met the minimum requirements. Non-probability sampling with a snowball approach was the sampling method employed. A sampling approach known as the "snowball sampling technique" involves rolling a sample from one responder to another. As the study moves from one informant to another, it employs a snowball sampling strategy.

## 3. RESULTS AND DISCUSSION

The results obtained from APC, ARS, and AVIF based on the Warp-PLS output are as follows.

Based on the outcomes of the three fit model indicators, it can be concluded that the study's findings are acceptable as they fulfill the goodness of fit criteria.

Table 3 shows that each mediation path's coefficient value is positive and significant.

**Table 1.** Goodness of fit

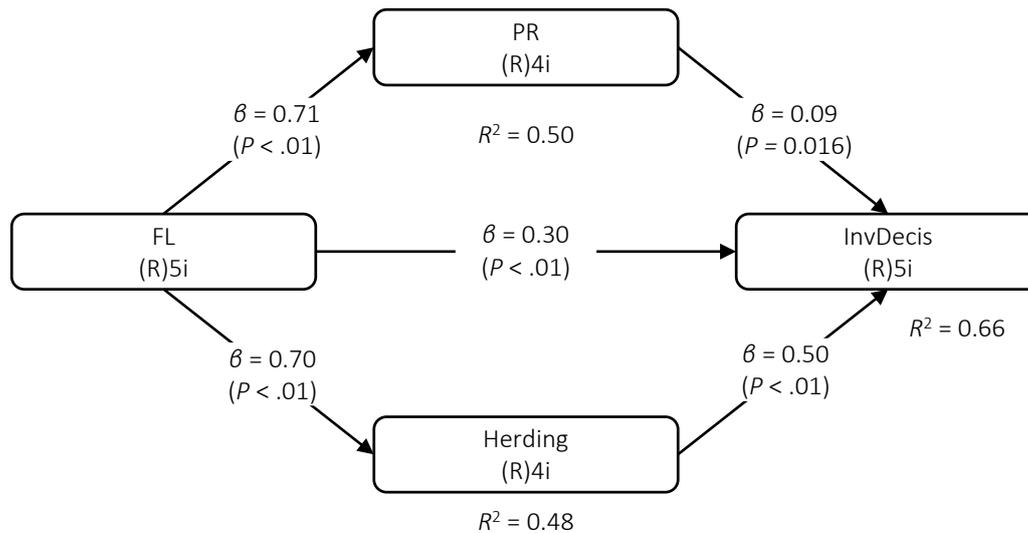
Source: Data processed, 2022.

Model fit	Index	p-value	Criteria	Information
Average path coefficient (APC)	0.458	$P < 0.001$	$P < 0.050$	Accepted
Average R-Squared (ARS)	0.548	$P < 0.001$	$P < 0.050$	Accepted
Average Block Variance Inflation Factor (AVIF)	2.513		$< 5$	Accepted

**Table 2.** Output latent variable coefficients

Source: Data processed, 2022.

Latent variable coefficients	Financial Literacy	Perceived Risk	Herding Behavior	Investment Decision
R-squared coef.		0.502	0.484	0.658
Composite reliability coef.	0.856	0.823	0.935	0.931
Cronbach's alpha coef.	0.788	0.71	0.907	0.907
Average variance extracted	0.545	0.549	0.782	0.730
Full Collinearity VIFs	2.555	2.571	3.158	2.897
Q-squared coef.		0.507	0.488	0.662



**Figure 2.** Results of the analysis of the relationship between variables

**Table 3.** Coefficient relationship between variables

Source: Data processed, 2022.

Relationship between variables	Path Coef.	P Values	Std. Error	Effect Size
Financial Literacy → Perceived Risk	0.708	< 0.001	0.08	0.502
Financial Literacy → herding behavior	0.696	< 0.001	0.08	0.484
Financial Literacy → Invest Decision	0.296	< 0.001	0.089	0.210
Perceived Risk → Invest Decision	0.093	0.016	0.094	0.063
Herding Behavior → Invest Decision	0.498	< 0.001	0.084	0.385

**Table 4.** Indirect effect of two segments

Source: Data processed, 2022.

Indirect effects for paths with 2 segments	Coefficient	P Value
Financial Literacy → Perceived Risk → Invest Decision	0,412	< 0.001
Financial Literacy → Herding Behavior → Invest Decision	0,422	< 0.001

Based on this analysis, the perceived risk R-squared construct has a value of 0.502, meaning that the variable of financial literacy can reflect for 50.2% of the variance in perceived risk. The variation of financial literacy can be explained by 48.4%, according to the R-squared of the herding behavior construct, which is 0.484. The variation of the invest decision may be described by the variance of financial literacy, perceived risk, and herding behavior by 65.8%, according to the R-squared of the invest decision construct, which is 0.658.

Cronbach’s alpha and composite reliability were used to assess the research instrument’s dependability. Based on these findings, each indication fulfills the size of composite reliability and Cronbach’s alpha, both of which are more than 0.70. The four constructs satisfied the convergent validity criterion, as

evidenced by the average variance extracted (AVE) for each indicator being greater than 0.50. Based on these data, it is determined that there are no issues with vertical, lateral. The outcome of the predictive validity testing is Q-squared estimate results, which are 0.507, 0.488, and 0.662 and have values above zero, demonstrating good predictive validity.

## 4. HYPOTHESES TESTING RESULTS

### 4.1. Financial literacy toward perceived risk

Test results show that the path coefficient is 0.708 with a p-value <0.001, which means that financial literacy has a positive and signifi-

cant effect on perceived risk. The study's data analysis showed that higher financial literacy positively influences a person's perceived risk when investing in cryptocurrencies. Making wise financial decisions requires financial literacy, which is still underdeveloped in many nations. Risk perception, a person's interpretation of knowledge concerning dangers, greatly affects human behavior in uncertain situations. Investors find out their risk in their investing decisions and pick speculative securities that are highly correlated with their level of risk tolerance. Experienced investors gain insight into how to handle risky situations and manage their assets well to boost their capacity to take on risk and generate high returns. Good financial literacy improves investors' mentality to face risks in investing in cryptocurrencies.

#### 4.2. Financial literacy toward herding behavior

Based on the test result, it can be seen that the path coefficient is 0.696 with a p-value <0.001, which means that financial literacy has a positive and significant effect on herding behavior. This study shows that persons with better financial literacy use a herding approach while investing in cryptocurrencies, proving that literacy in financial has a significant influence on herding behavior. Financial literacy can act as a moderator, reducing psychological biases experienced by investors while making risky decisions. The higher the financial literacy of an investor, the more likely they are to explore information related to cryptocurrencies, leading to a higher intention to participate in investing in the instrument. This change in user behavior is also supported by a large amount of information that can be accessed by investors through social media and news portals. Making investment decisions is significantly influenced by financial behavior and knowledge. According to studies, those with more financial literacy are more likely to invest in cryptocurrencies, and those who manage their money responsibly often make wiser investment choices. Making wise investing selections requires having a solid understanding of finances, as well as the attitudes and behaviors that support it. Financial knowledge and cryptocurrency investment choices

are positively correlated, suggesting that as financial literacy rises, people will become more risk-averse in their financial decisions.

#### 4.3. Perceived risk toward investment decisions

Based on the test result, it can be seen that the path coefficient is 0.093 with a p-value of 0.016, which means that perceived risk has a positive and significant effect on investment decisions. A person's impression of a danger is dependent on the information they have access to, their own experiences, and the beliefs they have. Despite the considerable risk involved, investors who perceive great danger are more willing to invest in cryptocurrencies. Nonetheless, risk management strategies, including capital allocation, can assist in reducing risk. Millennials are more likely to take chances and make cryptocurrency investments, proving that interest in doing so rises as risk is perceived.

#### 4.4. Herding behavior toward investment decisions

Based on the test result, it can be seen that the path coefficient is 0.498 with a p-value <0.001, which means that herding behavior has a positive and significant effect on investment decisions. The study discusses herding behavior on the decisions to invest, in particular in cryptocurrency. The study discovered a link between herding behavior and investment decisions that was both favorable and substantial. Herding conduct is common among institutional investors due to limited data, common stock features, reputation concerns, and attention to other managers' valuations. Behavioral finance theory suggests that psychological variables contribute to irrational investor behavior. Factors such as overconfidence and investment volume influence herding behavior, individual investors are more prone than institutional investors to follow the herd. There are two approaches to herding behavior: irrational and intentional. The paper concludes that herding behavior has a significant impact on investor behavior, and the higher the herding behavior, the greater the intention to invest, especially in cryptocurrencies.

#### 4.5. The role of perceived risk mediating the influence of financial literacy on investment decisions

Based on the test result, it can be seen that the path coefficient is 0.412 with a p-value <0.001, which means that perceived risk mediates the influence of financial literacy on investment decisions. Making smart investing decisions depends largely on financial literacy. Although financial literacy has a substantial influence on investing decisions, the risk perceptions of investors are critical. The study found that perceived risk can partially mediate the influence of financial literacy on investment choices. Risk perception involves assessing uncertainty and the importance of consequences, and is influenced by psychological factors and changing circumstances. Risk perception also varies between individuals and can be managed with awareness. More risk-tolerant investors are more inclined to put money into risky investments like cryptocurrencies. Therefore, to assist investors in making accurate investment decisions, professional investors should categorize their investments into different risk classes that reflect the true level of potential risk.

#### 4.6. The role of herding behavior mediating the influence of financial literacy on investment decisions

Based on the test result, it can be seen that the path coefficient is 0.422 with a p-value <0.001, which means that herding behavior mediates the influence of financial literacy on investment decisions. The study found that herding behavior partially mediates the link between financial knowledge and investing choices. Financially literate investors tend to rely on published financial information, whereas less literate investors may rely on friends and family for advice. Herding behavior can lead to biased decision-making as investors copy the actions of others, even when they may not be based on sound financial information. However, the study found that good financial literacy can reduce the psychological bias in financial decision-making, herding behavior is used. Investors who lack financial expertise may be more susceptible to herding behavior while making financial decisions, particularly when it comes to cryptocurrencies.

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## CONCLUSION

Based on the findings of the analysis, perceived risk, herding behavior, financial literacy have a good and significant influence on all of these decisions. Investment decisions are positively and significantly impacted by perceived risk and herding behavior. Perceived risk and herding behavior can help to moderate the impact of financial literacy on investment decisions. The advice that can be given is for investment policy makers in a country, and campuses or universities can provide more understanding to the public, especially students, regarding investing in cryptocurrencies, and students better understand financial literacy and not be affected by herd behavior, which will later affect investment decisions. The implication of this study is that it provides an overview of herd behavior, financial literacy, risk perception and investment decisions for students, and may add new studies to support further research. The managerial implication that can be drawn from this study is that the study can make a practical contribution to cryptocurrency investment decisions that are being loved by young people, as well as provide more understanding to young people regarding cryptocurrencies.

## AUTHOR CONTRIBUTIONS

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