

**TITLE: THE INFLUENCE OF MENTAL ACCOUNTING AND RISK
AVERSION ON INVESTMENT DECISIONS
(SURVEY ON ONLINE GAME PLAYERS)**

**Orokulov Behruzbeq¹, Rozmita Dewi Yuniarti Rozali², Elis Mediawati³,
Mekhrangiz Khudayarova⁴**

¹ Accounting Study Program, Universitas Pendidikan Indonesia and Tashkent State
University of Economics

^{2,3} Accounting Study Program, Universitas Pendidikan Indonesia

⁴ Tashkent State University of Economics

E-Mail : oroqulovbehruz@gmail.com

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ABSTRACT

This study investigates how mental accounting and risk aversion shape investment decisions among online game players in Indonesia. Drawing on Thaler's (1985, 1999) mental accounting framework and Kahneman and Tversky's (1979) Prospect Theory, the research explores whether the behavioral biases commonly found in traditional investor populations also emerge within digitally mediated economic contexts. A quantitative approach was used, with primary data collected through a structured online questionnaire administered to 122 active online game players. All variables were measured using a five-point Likert scale, and the data were analyzed through multiple linear regression using SPSS version 26. The results confirm that both mental accounting and risk aversion significantly and positively influence investment decisions. Together, these two variables explain a meaningful portion of the variance in investment behavior, with the overall model reaching statistical significance. These findings indicate that behavioral finance mechanisms remain relevant within virtual economic environments, and carry practical implications for financial educators and investment platform designers working with digitally engaged young investors.

Keywords: *Mental Accounting, Risk Aversion, Investment Decisions, Behavioral Finance, Online Game Players*

INTRODUCTION

The rapid growth of digital technology has produced a new generation of financially active individuals whose economic behavior is increasingly shaped by virtual environments. Online game players, in particular, represent a distinctive and underexplored population. Their daily engagement with virtual economies, in-game asset markets, probabilistic reward systems, and resource allocation decisions closely mirrors the structure of real-world financial markets. According to Newzoo's Global Games Market Report, the global gaming industry has surpassed two hundred billion dollars in revenue in recent years, reflecting the extraordinary scale at which people now participate in digitally mediated economic activity. Despite this reality, investment decision-making among online game players remains poorly understood, especially regarding the psychological factors that drive or constrain their willingness to invest, their choice of financial instruments, and the consistency of their financial behavior over time.

Investment decisions, broadly understood as the process by which individuals allocate financial resources across available instruments in the expectation of future returns, are not made in a purely rational vacuum. Classical financial theory assumes

that investors maximize expected utility based on all available information (Markowitz, 1952). However, decades of behavioral research have consistently shown that real investment decisions are systematically distorted by cognitive biases and emotional responses that deviate substantially from this rational ideal (Barberis and Thaler, 2003). Understanding the specific psychological mechanisms behind these distortions is both theoretically important and practically urgent, particularly as online game players become increasingly active participants in real capital markets.

Two constructs from the behavioral finance literature are especially relevant to explaining investment decision distortions in this population: mental accounting and risk aversion. Mental accounting, introduced by Thaler (1985, p. 199), refers to "the set of cognitive operations used by individuals and households to organize, evaluate, and keep track of financial activities." At its core, this concept describes the tendency of people to mentally divide their financial resources into separate, non-interchangeable categories based on the source, purpose, or framing of funds, and to apply different decision rules and risk tolerances to each category rather than treating money as objectively equivalent. Risk aversion, as theorized through Kahneman and Tversky's (1979) Prospect Theory, refers to the asymmetric psychological sensitivity individuals have toward losses compared to equivalent gains. The disutility of losing a given amount is experienced as roughly twice as powerful as the satisfaction of gaining the same amount, which leads risk-averse individuals to systematically prefer lower but certain returns over higher but uncertain ones, and to delay or avoid investment commitments when outcomes are ambiguous.

Both constructs influence investment decisions through distinct but related mechanisms. Mental accounting distorts investment behavior by causing people to evaluate financial outcomes through narrow cognitive frames rather than holistically. This produces well-documented phenomena such as the disposition effect, which is the tendency to hold losing assets too long while selling winners too soon (Shefrin and Statman, 1985), and the house money effect, in which prior gains are reinvested with more risk tolerance than would otherwise be applied (Thaler and Johnson, 1990). Risk aversion, meanwhile, imposes a systematic constraint on investment engagement by making the psychological weight of potential losses disproportionately large, which leads to conservative portfolio choices and the avoidance of higher-variance instruments even when their expected values are positive. When both forces operate at the same time, their interaction can produce particularly inconsistent outcomes: an individual might exhibit risk-seeking behavior with funds mentally labeled as gaming income while remaining highly risk-averse toward regular savings, reflecting patterns that are internally contradictory yet psychologically coherent (Thaler, 1999).

Empirical support for these relationships is substantial, though not entirely consistent across studies. Sukamulja, Meilita, and Senoputri (2019) found that mental accounting did not significantly influence investment decisions among Generation Y workers in Indonesia, whereas risk perception did, suggesting that the effect of mental accounting may be indirect or context-dependent. By contrast, Kamalini and Suryanawa (2025) found that mental accounting positively and significantly influenced investment decisions among university students in Bali, indicating that individuals with stronger mental accounting tendencies are more likely to allocate funds deliberately toward investment. Regarding risk aversion, Kamalini and Suryanawa (2025) found no significant effect, which contradicts both theoretical expectations and the findings of Almansour, Elkrggli, and Almansour (2023), who demonstrated that risk perception

plays a significant mediating role between behavioral finance factors and investment decisions among equity investors in Saudi Arabia. Safitri, Mustaruddin, Wendy, and Giriati (2024) similarly found that mental accounting did not directly influence investment decisions, but that risk tolerance moderated the relationship between behavioral biases and investment behavior among stock investors in West Kalimantan. Amin, Nainggolan, and Rahadi (2025), through a systematic review of behavioral finance literature, further identified that digital environments including online gaming platforms actively elicit behavioral distortions such as mental accounting tendencies and risk-seeking investment behavior, providing a direct empirical bridge between virtual participation and real financial decision-making.

These inconsistencies, particularly regarding whether mental accounting and risk aversion exert direct or indirect effects and whether these effects hold across different populations and contexts, highlight the need for further empirical investigation. This need is compounded by the near-total absence of studies examining these constructs specifically within the online gaming population. Existing research predominantly focuses on conventional investor groups such as stock market participants or university students with securities accounts, largely overlooking the unique characteristics of online game players, including their deep familiarity with probabilistic outcomes, virtual asset valuation, and digitally mediated economic systems (Amin et al., 2025). The novelty of this study lies in its focus on this underexplored population and its simultaneous examination of both mental accounting and risk aversion as determinants of investment decisions within the Indonesian online gaming context. The purpose of this research is therefore to empirically investigate how these two behavioral factors influence investment decisions among online game players, to determine whether the mechanisms documented in traditional financial settings operate similarly in virtual economic environments, and to contribute both theoretical insights and practical implications for financial education and investor behavior research in the digital era.

LITERATURE REVIEW

Behavioral finance emerged as a formal discipline in response to the consistent failure of classical financial theory to explain the systematic and predictable ways in which real investors deviate from rational decision-making. Rooted in the integration of cognitive psychology and economics, behavioral finance challenges the assumption that individuals process information objectively and act strictly in accordance with expected utility maximization. Instead, it demonstrates that human financial behavior is routinely shaped by cognitive biases, emotional influences, and mental heuristics that produce outcomes diverging substantially from those predicted by classical models (Barberis and Thaler, 2003). This theoretical reorientation is especially relevant to the study of investment decisions, as it provides the conceptual tools needed to explain why individuals frequently make inconsistent, emotionally driven, or contextually distorted financial choices even when objective information is readily available. Within this broader framework, mental accounting and risk aversion occupy central positions as two of the most empirically robust and theoretically developed constructs in behavioral finance.

Mental accounting, as developed by Thaler (1985, 1999), describes the cognitive system through which individuals organize, evaluate, and track their financial activities by assigning money to separate mental categories rather than treating it as a single fungible resource. This categorization process operates through three core mechanisms:

how outcomes are perceived and coded as gains or losses relative to a reference point; how financial activities are assigned to specific mental accounts based on their source or purpose; and how those accounts are periodically evaluated and closed. Each of these mechanisms can introduce distortions into financial decision-making. When individuals assign a financial outcome to a particular mental account, they tend to apply the decision rules and risk tolerances associated with that account rather than making a globally optimal judgment, resulting in choices that may be locally coherent but systemically inefficient.

The behavioral implications of mental accounting for investment decisions are well established. The disposition effect, documented by Shefrin and Statman (1985), arises from the asymmetric application of Prospect Theory's value function across separate mental accounts for individual investment positions, causing investors to realize gains prematurely while deferring recognition of losses beyond any rational holding period. The house money effect, described by Thaler and Johnson (1990), explains how prior gains are mentally recategorized into a separate account with a more permissive risk tolerance, encouraging excessive risk-taking with accumulated profits. Narrow framing, meanwhile, leads investors to evaluate each position independently rather than as part of an integrated portfolio, which systematically undermines diversification and produces suboptimal aggregate risk exposure (Thaler, 1999). Empirically, Kamalini and Suryanawa (2025) found that mental accounting positively influenced investment decisions among students, suggesting that individuals who categorize their finances into separate accounts are more deliberate and structured in their investment allocations. However, Safitri et al. (2024) and Sukamulja et al. (2019) found no significant direct effect of mental accounting on investment decisions, suggesting that its influence may be mediated by variables such as risk tolerance or risk perception. In online gaming environments, mental accounting is particularly likely to manifest through players' differential treatment of in-game earnings relative to real-world income, and through the mental separation of gaming budgets from savings or investment funds.

Risk aversion, as theorized by Kahneman and Tversky (1979) through Prospect Theory, describes the fundamental asymmetry in how individuals psychologically experience gains and losses, with losses generating roughly twice the emotional impact of equivalent gains. This loss aversion is encoded in the shape of the value function, which is concave in the domain of gains and convex in the domain of losses, with the function being considerably steeper on the loss side. The practical implication for investment behavior is that individuals consistently overweight the possibility of loss relative to the possibility of gain, leading them to prefer certain but lower-return investment options, to hold excessively conservative portfolios, and to experience disproportionate psychological distress in response to market downturns. Almansour et al. (2023) demonstrated empirically that risk perception significantly and positively influences investment decision-making, with behavioral finance factors such as herding behavior and the disposition effect operating primarily through the mediating pathway of risk perception, highlighting the centrality of risk-related cognition in shaping investment behavior. Safitri et al. (2024) further found that risk tolerance served as a significant mediator between cognitive biases and investment decisions, reinforcing the view that risk-related variables do not merely accompany investment decisions but actively shape how behavioral biases translate into action. In contrast, Kamalini and Suryanawa (2025) reported that risk aversion did not significantly influence investment

decisions in their student sample, a discrepancy that may reflect the relatively low financial stakes and limited investment experience of the population studied, underscoring how much population characteristics can affect the strength of risk aversion effects.

Investment decisions, as the dependent variable in this study, refer to the process through which individuals determine how, when, and in what quantities to allocate their financial resources across available investment instruments in the expectation of future returns. In behavioral finance, investment decisions are understood not as the output of purely rational optimization but as the product of a complex interplay between individual psychological characteristics, cognitive biases, situational framing, and social influences. The key dimensions of investment decision-making examined here include willingness to invest, choice of investment type based on risk preference, investment frequency, and the proportion of income allocated to investment. Amin, Nainggolan, and Rahadi (2025) emphasize that digital environments are increasingly blurring the boundary between virtual economic participation and real investment behavior, with younger investors showing heightened susceptibility to behavioral biases in digitally mediated financial contexts, making it both theoretically justified and empirically important to study investment decisions within online gaming populations.

The conceptual framework of this study posits two direct relationships grounded in behavioral finance theory. First, mental accounting is expected to influence investment decisions by causing individuals to apply inconsistent decision rules across different mental categories of funds, producing distorted risk evaluation, suboptimal asset allocation, and investment choices that deviate from rational portfolio theory. Second, risk aversion is expected to influence investment decisions by making the psychological cost of potential losses disproportionately large relative to the utility of equivalent gains, leading to conservative choices, reduced investment frequency, and systematic avoidance of higher-return but higher-variance instruments. On the basis of this theoretical framework and the empirical evidence reviewed, two hypotheses are proposed. H1 states that mental accounting has a significant influence on investment decisions among online game players. H2 states that risk aversion has a significant influence on investment decisions among online game players.

RESEARCH METHODOLOGY

This study adopts a quantitative research methodology, which is appropriate given the research objective of empirically testing theoretically derived hypotheses about the relationships between mental accounting, risk aversion, and investment decisions among online game players. Quantitative research uses numerical measurement and statistical inference to examine the direction, magnitude, and significance of relationships between variables, enabling systematic and replicable evaluation of theoretical propositions across a defined population. This approach is consistent with the positivist epistemological tradition that underpins behavioral finance research and aligns with the methodological choices of prior empirical studies examining similar constructs, including Kamalini and Suryanawa (2025), who employed a quantitative associative design with multiple linear regression, and Almansour et al. (2023), who used structural equation modeling to examine behavioral finance factors and investment decisions among equity investors.

The data used in this study are primary data collected directly from respondents through a structured self-administered online questionnaire. Primary data collection is

appropriate because the constructs of interest, namely mental accounting tendencies, risk aversion levels, and investment decision behaviors, are internal psychological states and behavioral intentions that cannot be adequately captured through secondary sources such as market transaction records or financial databases. The questionnaire was distributed via Google Forms, which is well-suited to reaching the target population of online game players given their consistent internet connectivity and familiarity with digital interfaces. The survey instrument consists of multiple sections corresponding to each research variable, with all items measured using a five-point Likert scale ranging from one (strong disagreement) to five (strong agreement). The measurement items are as follows:

Mental Accounting (X1)

1. I tend to categorize my money based on its source or purpose (e.g., salary, game rewards, bonuses).
2. I treat money earned from gaming differently than money from other sources.
3. I prefer to keep separate budgets for spending, saving, and investing.
4. I feel more comfortable spending "extra" or "bonus" money from games than my regular income.
5. I often make financial or gaming-related spending decisions based on mental categories rather than overall wealth.

Risk Aversion (X2)

6. I avoid taking financial risks even when the potential return is high.
7. I prefer safe and predictable investment options over uncertain ones.
8. I feel anxious when investing in something with uncertain results.
9. I would rather have a small guaranteed profit than a chance for a larger but risky one.
10. I often hesitate to make investment decisions because of the possibility of loss.

Investment Decision (Y)

11. I actively consider investing through online platforms or digital assets related to gaming.
12. I analyze the risks and potential returns before deciding to invest.
13. I believe that online platforms provide convenient access for investment.
14. I plan to invest more in digital or online-based financial products in the future.
15. My investment decisions are influenced by my gaming experiences and in-game spending habits.

The population of this study consists of active online game players in Indonesia who are at least eighteen years of age and have some prior awareness of or experience with investment activities. Active online game players are defined as individuals who engage in multiplayer online games, including mobile strategy games, massively multiplayer online role-playing games, and online trading card games, at least once per week. This population is theoretically relevant because such individuals regularly encounter economic decision-making scenarios within virtual environments, including resource allocation, probabilistic reward evaluation, and virtual asset trading, making their behavioral finance tendencies particularly informative, as emphasized by Amin et al. (2025).

The sampling technique employed is purposive sampling, a non-probability method in which respondents are selected on the basis of specific criteria relevant to the research objectives, supplemented by snowball sampling through online gaming communities and social media platforms to reach an adequate number of qualified

respondents. This approach is consistent with Almansour et al. (2023), who employed purposive sampling with a targeted investor population, and with Safitri et al. (2024), who ensured a minimum sample size of one hundred fifty participants for stable regression estimation. Accordingly, the target sample size for this study is a minimum of one hundred twenty respondents, which exceeds the threshold recommended by Hair et al. (2014) of ten observations per predictor variable and provides sufficient statistical power to detect meaningful relationships between the study variables.

Data collection was conducted entirely online, with the questionnaire link distributed through gaming forums, social media groups, and digital communities frequented by active online game players. The questionnaire includes a demographic section capturing respondents' age, gender, educational attainment, average monthly income, gaming frequency, and prior investment experience, all of which serve as control variables in the regression analysis to isolate the specific effects of mental accounting and risk aversion. Respondents were informed of the academic purpose of the study and assured of the confidentiality and anonymity of their responses, to minimize socially desirable responding and encourage honest self-report.

The collected data were analyzed using a multi-stage statistical procedure in SPSS version 26, consistent with the analytical approach adopted by Kamalini and Suryanawa (2025) and Sukamulja et al. (2019). The first stage involved descriptive statistical analysis to summarize the central tendencies, variability, and distributional characteristics of all research variables and demographic characteristics across the sample. The second stage involved instrument validation through reliability and validity testing: reliability was assessed using Cronbach's alpha with a minimum acceptable threshold of 0.70 as recommended in the behavioral research literature (MacKenzie, Podsakoff, and Podsakoff, 2011), while validity was assessed through item-total correlation analysis and exploratory factor analysis to confirm that items load appropriately on their intended constructs. The third and primary analytical stage involved multiple linear regression to examine the simultaneous effects of mental accounting and risk aversion on investment decisions. The regression model is specified as $Y = \alpha + \beta_1 X_1 + \beta_2 X_2 + \varepsilon$, where Y represents investment decisions, X_1 represents mental accounting, and X_2 represents risk aversion. Individual hypotheses were tested using t-tests for each regression coefficient, while overall model fit was assessed using the F-test and the coefficient of determination.

Mental accounting was operationalized through a multi-item scale capturing respondents' tendencies to mentally segregate financial resources into separate categories, apply differential risk tolerances to different funds, and frame financial outcomes in ways consistent with Thaler's (1985, 1999) theoretical framework, adapted from the measurement instruments employed by Kamalini and Suryanawa (2025). Risk aversion was operationalized through items capturing loss sensitivity, preference for certain over uncertain returns, and behavioral avoidance of high-variance investment instruments, grounded in Kahneman and Tversky's (1979) Prospect Theory and consistent with the risk aversion measurement approach of Safitri et al. (2024). Investment decisions were operationalized as a multidimensional dependent variable encompassing willingness to invest, choice of investment type, investment frequency, and proportion of income allocated to investment, with composite scores computed as the mean of all items within each subscale to ensure balanced representation of each behavioral dimension (MacKenzie et al., 2011).

RESULTS AND DISCUSSION

	N	Minimum	Maximum	Mean	Std. Deviation
MENTAL_ACCOUNTING	122	10.00	25.00	17.6803	3.13937
RISK_AVERSION	122	8.00	25.00	18.7623	2.99049
INVESTMENT_DECISION	122	11.00	25.00	17.4590	2.95461
Valid N (listwise)	122				

The descriptive statistics based on 122 valid respondents reveal that mental accounting recorded a moderate mean score, indicating a moderate tendency among respondents to mentally categorize and segregate their financial resources based on source or purpose. Risk aversion recorded the highest mean among all three variables, reflecting a generally elevated level of risk avoidance and a preference for safe and predictable investment outcomes across the sample. Investment decisions recorded a moderate mean score, indicating a level of investment engagement that is neither entirely passive nor highly active. All three variables showed meaningful variation between their minimum and maximum values, confirming sufficient distributional spread to support robust regression analysis. Taken together, these descriptive statistics characterize the respondents as individuals with moderate mental accounting tendencies, relatively high risk aversion, and moderate investment decision engagement, providing an appropriate empirical basis for the inferential analysis that follows.

The multiple linear regression analysis was conducted to examine the simultaneous and individual influences of mental accounting and risk aversion on investment decisions among online game players. The results are interpreted across three components: the model summary, the ANOVA table, and the coefficients table.

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
1	.586 ^a	.344	.333	2.41378

a. Predictors: (Constant), RISK_AVERSION, MENTAL_ACCOUNTING

The model summary indicates a moderate positive correlation between the combined predictors and the dependent variable. The R Square value confirms that mental accounting and risk aversion together explain a meaningful portion of the variance in investment decisions among the respondents. The adjusted R Square value is consistent with this result, confirming the stability of the model's explanatory power after accounting for the number of predictors included.

Model		Sum of Squares	df	Mean Square	F	Sig.
1	Regression	362.959	2	181.479	31.148	.000 ^b
	Residual	693.336	119	5.826		
	Total	1056.295	121			

a. Dependent Variable: INVESTMENT_DECISION

b. Predictors: (Constant), RISK_AVERSION, MENTAL_ACCOUNTING

The ANOVA table confirms the overall statistical significance of the regression model. The F value is significant at the one percent level, indicating that the combined influence of mental accounting and risk aversion on investment decisions is not attributable to chance. This result confirms the overall validity and fitness of the regression model for the data collected.

Model		Unstandardized Coefficients		Standardized Coefficients	t	Sig.
		B	Std. Error	Beta		
1	(Constant)	5.285	1.610		3.282	.001
	MENTAL_ACCOUNTING	.417	.075	.443	5.592	.000
	RISK_AVERSION	.256	.078	.259	3.267	.001

a. Dependent Variable: INVESTMENT_DECISION

The coefficients table provides the individual regression estimates for each predictor. The constant term is statistically significant, confirming a meaningful baseline investment decision score in the absence of variation in the predictor variables. The regression coefficient for mental accounting is positive and highly significant at the 0.000 level, indicating that increases in mental accounting scores are associated with increases in investment decision scores, holding risk aversion constant. The standardized beta for mental accounting is the larger of the two predictors, indicating that it exerts a stronger relative influence on investment decisions. The regression coefficient for risk aversion is also positive and statistically significant at the 0.001 level, indicating that higher levels of risk aversion are similarly associated with greater investment decision engagement, holding mental accounting constant. Both predictors contribute significantly to the model, with mental accounting demonstrating a stronger relative influence as indicated by its larger standardized beta coefficient compared to that of risk aversion.

DISCUSSION

Hypothesis 1: Mental Accounting Has a Significant Influence on Investment Decisions

The regression results provide strong statistical support for Hypothesis 1, confirming that mental accounting has a significant and positive influence on investment decisions among online game players. Respondents with stronger mental accounting tendencies, characterized by the cognitive segregation of financial resources into distinct categories based on source or purpose, demonstrate greater engagement with investment decision-making. This finding is theoretically consistent with Thaler's (1985, 1999) mental accounting framework, which posits that individuals who maintain structured mental categories for their finances tend to be more deliberate and purposeful in their allocation decisions, including those related to investment.

This finding aligns with the results reported by Kamalini and Suryanawa (2025), who found that mental accounting positively and significantly influenced investment decisions among university students in Bali, concluding that individuals with stronger mental accounting tendencies are more likely to allocate funds deliberately toward investment purposes. The present study extends this finding to the distinct population of online game players, demonstrating that the positive relationship between mental accounting and investment decisions holds within a digitally mediated economic context as well.

However, this finding stands in contrast to those of Sukamulja, Meilita, and Senoputri (2019), who found no significant influence of mental accounting on investment decisions among Generation Y workers in Yogyakarta, and Safitri, Mustaruddin, Wendy, and Giriati (2024), who similarly found no significant direct effect among stock investors in West Kalimantan. These discrepancies may be explained by differences in population characteristics, measurement instruments, and contextual factors. In the present study, online game players are particularly accustomed to managing virtual financial resources across multiple categories simultaneously, a behavioral pattern that may amplify the practical relevance of mental accounting tendencies and strengthen their translation into real investment decisions. The finding that mental accounting contributes positively rather than negatively to investment decisions in this sample suggests that structured cognitive categorization of funds may, in the gaming context, encourage rather than distort investment engagement, by helping respondents mentally allocate resources toward investment as a distinct and purposeful financial category.

From a behavioral finance perspective, this result can be interpreted through the lens of Thaler's (1985) framework of account segregation. Online game players who habitually assign their financial resources to separate mental accounts, including gaming funds, savings, and investment capital, may develop a clearer mental distinction between expendable and investable funds, thereby facilitating more deliberate and active investment decision-making. This interpretation aligns with the broader finding of Amin, Nainggolan, and Rahadi (2025) that digital environments elicit structured financial behavior patterns among digitally engaged populations, and that the convergence of gaming and financial decision-making creates behavioral tendencies that mirror investment-relevant cognitive structures.

Hypothesis 2: Risk Aversion Has a Significant Influence on Investment Decisions

The regression results also provide statistical support for Hypothesis 2, confirming that risk aversion has a significant and positive influence on investment decisions among online game players. Respondents with higher levels of risk aversion demonstrate greater engagement with investment decisions, a result that requires careful theoretical interpretation given that the direction of the relationship is positive rather than negative.

This positive relationship may appear counterintuitive in light of classical behavioral finance theory, which predicts that higher risk aversion should lead to reduced investment engagement due to the disproportionate psychological weight assigned to potential losses (Kahneman and Tversky, 1979). However, within the specific context of online game players, this finding may reflect the fact that risk-averse individuals are not necessarily less willing to invest; rather, they may be more deliberate, cautious, and structured in their approach. In this interpretation, risk

aversion serves as a motivating force for structured investment decision-making rather than a deterrent to engagement, consistent with the possibility that risk-averse online game players prefer lower-risk investment instruments, such as fixed deposits or money market funds, which still constitute active investment decisions within the scope of the dependent variable as operationalized in this study.

This finding is partially consistent with Almansour, Elkrggli, and Almansour (2023), who found that risk perception exerted a significant positive influence on investment decision-making among equity investors in Saudi Arabia, suggesting that awareness of and sensitivity to risk can motivate rather than suppress investment engagement when measured as a multidimensional behavioral construct rather than purely as avoidance behavior. Safitri et al. (2024) similarly found that risk tolerance served as a significant mediating variable between cognitive biases and investment decisions, reinforcing the view that risk-related cognition plays a meaningful structural role in investment behavior.

In contrast, Kamalini and Suryanawa (2025) found that risk aversion did not significantly influence investment decisions among their student sample, a discrepancy that may reflect the relatively low financial stakes and limited investment experience of university students compared to the more financially exposed and economically active online game player population examined here. The significant positive relationship observed in the present study may therefore reflect the unique characteristics of this population, whose engagement with virtual economic systems involving probabilistic outcomes and resource allocation under uncertainty may foster a form of risk awareness that actively shapes rather than suppresses investment decision-making. This interpretation is supported by Amin et al. (2025), who noted that digital environments and gaming contexts create behavioral finance dynamics that differ meaningfully from those observed in traditional investor populations, making population-specific empirical investigation essential for advancing our understanding of investment behavior in the digital era.

CONCLUSION, LIMITATIONS, AND SUGGESTIONS

Conclusion

This study set out to examine whether mental accounting and risk aversion influence investment decisions among online game players in Indonesia. Based on the findings, both hypotheses are supported. Mental accounting was found to positively and significantly influence investment decisions, indicating that cognitive financial organization facilitates rather than distorts investment behavior within this population. Risk aversion was similarly found to exert a positive and significant influence, suggesting that heightened risk awareness motivates more deliberate and structured investment decision-making rather than simply deterring investment engagement. Taken together, the results demonstrate that behavioral finance mechanisms identified in traditional financial contexts remain relevant within virtual economic environments, and that the online gaming context shapes these mechanisms in ways that are distinct from other investor populations.

Research Limitations

Several limitations should be acknowledged when interpreting these findings. The sample is confined to Indonesian online game players reached through online communities and social media, introducing potential self-selection bias and limiting the generalizability of results to other geographic or gaming contexts. The study also relies

exclusively on self-reported survey data, which is subject to response biases including social desirability and acquiescence bias. Furthermore, the cross-sectional design prevents causal inferences about the temporal dynamics of the relationships examined.

Additionally, the model incorporates only two independent variables, leaving a substantial portion of the variance in investment decisions unexplained. This suggests that other relevant constructs such as financial literacy, overconfidence, herding behavior, and prior investment experience were not captured in the present research design and may contribute meaningfully to a more complete explanatory model.

SUGGESTIONS

For future researchers, subsequent studies are encouraged to expand the scope of independent variables to include other behavioral finance constructs such as overconfidence, regret aversion, and financial literacy, as identified in Sukamulja et al. (2019), Almansour et al. (2023), and Safitri et al. (2024). Longitudinal or experimental designs would also be valuable for establishing more robust causal relationships between these variables. Researchers are additionally encouraged to replicate this study across different countries and demographic subgroups to assess the broader generalizability of the findings.

For investors, financial educators, and platform designers, the findings suggest that mental accounting tendencies and risk aversion among digitally engaged young investors should be recognized not purely as sources of bias but as behavioral characteristics that can be constructively leveraged. Targeted financial education, low-risk investment product design, and behavioral finance-informed interventions are among the approaches recommended for promoting sustainable investment behavior in digital environments, consistent with the recommendations of Amin et al. (2025).

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