

**THE INFLUENCE OF FINANCIAL LITERACY, PRODUCT INNOVATION,
DIGITAL PROMOTION, AND INVESTOR RISK ATTITUDE ON LIFE
INSURANCE DECISIONS**

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Abstract

This study aims to analyze the influence of financial literacy, product innovation, digital promotion, and investor risk attitudes on life insurance purchasing decisions. This study is motivated by inconsistencies in previous study findings related to the factors that affect individuals' decisions to purchase life insurance, particularly those involving financial literacy, product innovation, digital promotion, and risk attitude. In addition, no prior study has comprehensively integrated these four variables into a single model that aligns with the current developments in digitalization and the dynamics of the insurance industry. The research employs a quantitative approach with a purposive sampling technique, in which respondents are selected based on specific criteria, namely, individuals aged 25–55 years who have held a life insurance policy for more than one year. A total of 250 respondents participated in the survey, and the data were analyzed using covariance-based Structural Equation Modeling (SEM) to examine both direct and indirect effects among the variables. The findings indicate that product innovation and digital promotion significantly affect life insurance purchasing decisions, while financial literacy exerts a significant indirect effect through investor risk attitudes. Investor risk attitude serves as a strong mediator that bridges the influence of financial literacy, product innovation, and digital promotion on life insurance decisions. Overall, the tested SEM model demonstrates a good fit and suggests that life insurance decisions are shaped not only by knowledge-related factors but also by risk perception and the quality of product innovation offered by the insurance company.

Keywords: Digital Promotion, Financial Literacy, Investor Risk Attitude, Life Insurance Purchase Decision, Product Innovation

1. Introduction

1.1 Background

Since 2018, the global economy has faced continuous pressure, ranging from the COVID-19 pandemic to geopolitical tensions that have disrupted global supply chains. These conditions have directly affected Indonesia's economic dynamics and accelerated financial sector reforms, including the digitalization of insurance services. Bank Indonesia and the Financial Services Authority (OJK) have strengthened financial system stability through financial literacy and inclusion programs, which have become an essential foundation for transforming financial

services in the digital age. Data from the OJK's National Survey on Financial Literacy and Inclusion (SNLIK) show that the financial literacy index increased from 38.03% in 2020 to 66.46% in 2025. This growth reflects the success of educational programs conducted by the government and the industry. However, as emphasized by Harrison (2024), increased literacy does not always translate into behavioral changes, particularly in long-term decisions such as purchasing life insurance. This gap is evident in the minimal growth of policy ownership, despite significant improvements in literacy.

The life insurance industry has also shown fluctuating performance with a downward trend, particularly in terms of unit-linked products. This suggests that financial knowledge alone does not automatically drive the decision to purchase protective products. Reiner et al. (2024) highlight that insurance decisions are heavily influenced by consumer perceptions of product quality and superiority rather than merely financial knowledge. A crisis of trust remains the biggest factor in suppressing the demand for life insurance. The defaults of Jiwasraya and WanaArtha Life not only created uncertainty but also shaped negative risk perceptions among the public. Between January 2023 and January 2024, 1,744 complaints related to unit-linked products were recorded (Fitriani & Hadiprajitno, 2024). These findings align with Do and Mai (2023), who showed that consumers' risk attitudes strongly determine insurance decisions, and worsening risk perceptions can significantly dampen demand. Furthermore, the industry faces internal pressure due to the weakening financial health of several companies. As of June 2025, the OJK placed six insurance and reinsurance companies under special supervision and revoked the business licenses of two of them. This situation reinforces the argument of Schiffman and Wisenblit (2019) that trust and perceived security are fundamental factors in consumer behavior, especially for long-term financial products.

The impact of the trust crisis is reflected in the decline in the number of insured individuals. Reports from the AAJI indicate that the total number of life insurance policyholders in Q1/2024 fell to 81.76 million from 87.54 million in Q1/2023. The decline was even sharper in the individual segment, reaching 33.8%. According to Thoa and Le (2021), insurance decisions are strongly influenced by marketing stimuli and product characteristics, which appear unable to prevent the declining public interest in Indonesia's current context. From an academic perspective, the findings regarding the factors influencing insurance decisions remain inconsistent. Thoa and Le (2021) highlight the roles of promotion and financial literacy; Wang et al. (2021) confirm the influence of promotion and literacy in China; Reiner et al. (2024) emphasize the dominance of product-related factors; and Do and Mai (2023) find significant effects of risk attitude.

Weedige et al. (2019) even conclude that financial literacy serves as a partial mediator. This fragmentation of findings reflects a research gap that requires a more comprehensive model to address it. To address this gap, the present study proposes a new model by reformulating the main variables: redefining promotion as digital promotion (Hidayat et al., 2023), redefining product as product innovation to reflect modern market needs (Reiner et al., 2024), and clarifying risk attitude as an investor risk attitude consistent with long-term risk characteristics. By positioning life insurance decision-making as the dependent variable, this model is expected

to provide theoretical and practical contributions to understanding consumer behavior and support industry strategies to restore public trust.

1.2 Problem Formulation

1. How does financial literacy influence insurance decision making?
2. How does financial literacy influence investors' risk attitudes?
3. How does product innovation influence insurance decision making?
4. How does product innovation influence investors' risk attitudes?
5. How does digital promotion influence insurance decision making?
6. How does digital promotion influence investors' risk attitudes?
7. How does an investor's risk attitude influence insurance decision-making?
8. How does financial literacy influence insurance decision-making through the mediation of investor risk attitudes?
9. How does product innovation influence insurance decision-making through the mediation of investor risk attitudes?
10. How does digital promotion influence insurance decision-making through the mediation of investors' risk attitudes?
11. How does product innovation influence insurance decision-making through the mediation of financial literacy
12. How does digital promotion influence insurance decision-making through the mediation of financial literacy

1.3 Research Objectives

1. This study analyzes and develops the direct influence of financial literacy on insurance decision-making.
2. This study analyzes and develops the influence of financial literacy on investors' risk attitudes.
3. This study analyzes and develops the direct influence of product innovation on insurance decision-making.
4. To analyze and develop the direct influence of product innovation on investor risk attitudes.
5. This study analyzes and develops the direct influence of digital promotion on insurance decision-making.
6. To analyze and develop the direct influence of digital promotion on investors' risk attitudes.
7. This study analyzes and develops the direct influence of investor risk attitudes on insurance decision-making.
8. This study analyzes and develops the influence of financial literacy on insurance decision-making through the mediation of investor risk attitudes.
9. This study analyzes and develops the influence of product innovation on insurance decision-making through the mediation of investor risk attitude.
10. To analyze and develop the influence of digital promotion on insurance decision-making through the mediation of investor risk attitude.
11. To analyze and develop the influence of product innovation on insurance decision-making through the mediation of financial literacy.

12. To analyze and develop the influence of digital promotion on insurance decision-making through the mediation of financial literacy

2. Literature Review

2.1 Grand Theory

The development of microeconomic theory originated from the Price Theory introduced by Hall and Hitch (1939), which emphasized price formation and resource allocation mechanisms through consumer and producer decisions. Social, technological, and cultural changes later influenced the evolution of this theory, deepening the understanding of economic decision-making through behavioral methods. One of the major milestones was the Theory of Buyer Behavior (Howard, 1969), which conceptualizes the decision-making process through cognitive, affective, and conative stages, illustrating how information, attitudes, and purchasing behavior are formed.

Subsequent advancements were reflected in Consumer Behavior theory as expanded by Kotler (1996; 2011), who emphasized that purchasing decisions result from interactions between marketing stimuli, environmental factors, and the consumer's internal processes occurring within the buyer's black box. This theory utilizes the concepts of ordinal utility and relative preference to explain how consumers evaluate alternatives and make decisions regarding them. This framework has become the foundation for numerous studies analyzing the factors that influence purchasing behavior across various contexts. In studies on life insurance decision-making, the Howard–Sheth model and Kotler's framework have been modified to incorporate contemporary and relevant variables. The stimuli that shape decisions are represented by financial literacy, product innovation, and digital promotion, whereas the internal consumer process is represented by risk attitude as a mediator. Life insurance decision-making is thus viewed as the final response emerging from the interaction between external stimuli and the consumer's internal processing, which aligns with the dynamics of modern consumer behavior.

2.2 Insurance Decision

In marketing theory, purchasing decision-making is viewed as a cognitive and behavioral process in which individuals or organizations evaluate, select, and use products or services to meet their needs and preferences (Kotler 2011). In the context of life insurance, this process is referred to as the insurance decision, namely, an individual's action to transfer the risk of death to an insurance company based on considerations of financial benefits, service provider reliability, and product suitability with their needs (Rickwood & White, 2009; Masud et al., 2021). The decision process typically refers to the five stages of consumer buying behavior—need recognition, information search, evaluation of alternatives, purchase decision, and post-purchase behavior—which have been widely adopted in studies on consumer behavior toward life insurance (Dragos et al., 2020; Bhatia et al., 2021).

Ulbinaite et al. (2013) refined the measurement of insurance decision-making by developing 18 indicators that encompass evaluations of product features, clarity of claims processes,

financial stability of the insurance company, premium structure, risk perception, attitudes toward insurance, and post-purchase loyalty. These indicators provide a comprehensive operational framework for assessing consumers' decision quality in selecting life insurance products and are highly relevant as a basis for measurement in contemporary studies.

2.3 Financial Literacy

Literacy is generally understood as an individual's ability to read, write, and comprehend information in various contexts (De Castell et al., 1981). In modern developments, literacy encompasses multiple domains, one of which is financial literacy, a crucial competency that enables individuals to manage their financial resources effectively and avoid future economic challenges. Various definitions emphasize that financial literacy involves knowledge, skills, and confidence in understanding financial information, evaluating risks, and making appropriate decisions to achieve financial well-being (Arjun & Subramanian, 2021; Cude, 2021; Mustafa et al., 2024; Mustafa et al., 2025). Based on these perspectives, financial literacy can be synthesized as a set of competencies that enables individuals to manage their finances effectively to achieve long-term welfare.

The dimensions of financial literacy have evolved alongside the different conceptual approaches proposed by previous scholars, ranging from knowledge, skills, and attitudes (Bajaj & Kaur, 2022) to financial competence, risk awareness, and financial responsibility (Lyons & Kass-Hanna, 2021; Méndez Prado et al., 2022). Jungo et al. (2024) summarize and integrate these findings into five main dimensions, namely standard mathematical knowledge, financial competence, attitudes toward money and savings, risk awareness related to financial products, and financial responsibility. The measurement instrument developed refers to indicators from Lone and Bhat (2022) and Potrich et al. (2016), resulting in a validated set of 20 indicators covering financial behavior, financial attitude, financial self-efficacy, decision-making ability, and financial planning. Thus, financial literacy can be comprehensively measured through the dimensions of knowledge, attitudes, and financial behavior, all of which are relevant to modern economic decision making.

2.4 Digital Promotion

Promotion is a strategic component of the marketing mix that functions as a persuasive communication mechanism to shape consumer knowledge, preferences, and purchasing behavior. Conceptually, promotion goes beyond conveying product information; it builds persuasion through the integration of advertising, personal selling, and publicity (Novak, 2011; Kanagal, 2013). Along with technological advancements, the communication function of promotion has expanded, shifting toward digitally based models that enable companies to reach consumers more rapidly, accurately, and efficiently. Digital promotion is thus understood as a marketing strategy conducted through online platforms to maximize connectivity and the effectiveness of marketing communications (Juska, 2021; Sousa, 2024), with the primary goals of expanding reach, increasing responsiveness, and strengthening consumer engagement within digital marketing environments (Al-Shaikh et al., 2024; Singh & Kaunert, 2024).

In empirical research, digital promotion is operationalized through four key dimensions—interactivity, incentive programs, website design, and cost and transactions—as formulated by Mahmutović (2021). These dimensions reflect the fundamental characteristics of digital marketing communication, including the intensity of consumer–producer interaction, effectiveness of incentive delivery, quality of digital interfaces, and efficiency of transaction processes. The measurement instrument developed and validated by Singh and Kaunert (2024), consisting of 16 indicators, has become a methodological reference for evaluating the effectiveness of digital promotion because of its ability to capture both the structural and functional aspects of digital marketing activities. This framework is consistently used in contemporary research to assess how digital promotion influences consumer perceptions, preferences, and decision-making across various industries.

2.5 Investor Risk Attitude

In modern finance, an investor is understood as an individual or institution that allocates capital with the expectation of future returns through various instruments, including stocks, bonds, mutual funds, property, and investment-linked life insurance products (Nikièma, 2012; Vora & Siddhapura, 2023). In investment decision-making, risk attitude functions as a key psychological determinant that reflects an individual’s tendency to respond to uncertainty positively or negatively. The concept is rooted in behavioral and economic theories that view risk as a combination of probability and consequence (Kaplan & Garrick, 1981; Dornbusch & Reynoso, 1989) and is shaped by attitudes, beliefs, and predispositions toward risky objects (Altmann, 2008; Fishman et al., 2021). Contemporary literature classifies risk attitudes into four forms: risk aversion, risk-seeking, risk tolerance, and risk neutrality (Murray-Webster & Hillson, 2016), each of which reflects different response patterns to financial uncertainty. In the context of life insurance, the measurement of investor risk attitude commonly adopts indicators that assess tendencies toward risk aversion, risk-seeking, risk tolerance, and risk neutrality, as validated by Nekmahmud et al. (2017). Based on these theoretical foundations, investor risk attitude can be synthesized as a behavioral tendency to react positively or negatively to investment objectives involving uncertainty and has been empirically proven to influence life insurance decision-making.

2.6 Research Hypotheses

Based on the conceptual framework and literature review, the following research hypotheses were formulated:

1. H1: Financial literacy positively affects life insurance decision-making.
2. H2: Product innovation positively affects life insurance decision-making.
3. H3: Digital promotion positively affects life insurance decision-making.
4. H4: Investor risk attitude positively affects life insurance decision-making.
5. H5: Financial literacy positively affects investor risk attitudes.
6. H6: Product innovation positively affects investor risk attitudes.
7. H7: Digital promotion positively affects the investor’s risk attitude.

8. H8: Financial literacy influences life insurance decision-making through the mediation of investor risk attitudes.
9. H9: Product innovation influences life insurance decision-making through the mediation of investor risk attitudes.
10. H10: Digital promotion influences life insurance decision-making through the mediation of investor risk attitudes.
11. H11: Product innovation positively affects life insurance decision-making through the mediation of financial literacy.
12. H12: Digital promotion has a positive effect on life insurance decision-making through the mediation of financial literacy

3. Research Method

3.1 Research Framework

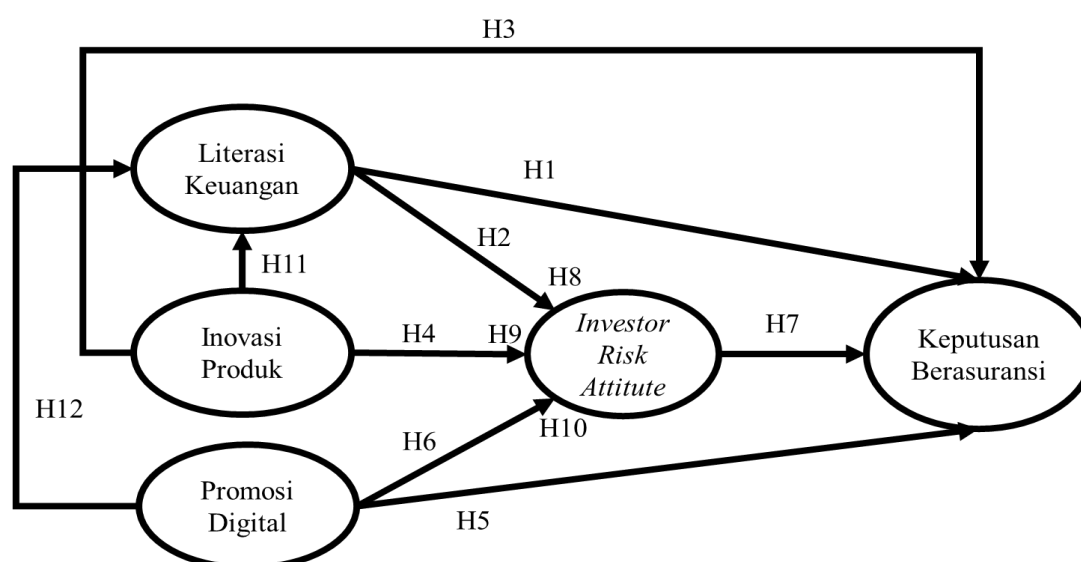


Figure 1. Conceptual Framework

Source: Author's Compilation (2025)

3.2 Data Analysis Methods

A descriptive analysis was conducted to provide a preliminary overview of the respondent characteristics and distribution tendencies of each construct. Referring to Siedlecki (2020), this analysis summarized the data systematically, enabling the identification of distribution patterns, potential outliers, and data adequacy prior to multivariate testing. In this study, the descriptive analysis includes frequency and percentage tabulations based on respondent demographics, as well as the calculation of mean values for each construct indicator. The classification of mean intervals follows Fariastuti et al. (2023), who categorized scores into high (4.00–5.00), medium (3.00–3.99), and low (1.00–2.99). These results form the preliminary basis for assessing the empirical condition of variables before further testing using Confirmatory Factor Analysis (CFA) and Structural Equation Modeling (SEM).

Hypothesis testing was conducted using a covariance-based Structural Equation Modeling (SEM) approach with AMOS. Following Ullman and Bentler (2012) and Hair et al. (2021), SEM involves two main stages: evaluation of the measurement model and evaluation of the structural model. CFA was employed to assess convergent validity, discriminant validity, and construct reliability through standardized factor loadings, Average Variance Extracted (AVE), Composite Reliability (CR), and the Fornell–Larcker criteria, with fit indices such as CFI, TLI, RMSEA, and SRMR. The structural model was then used to examine the causal relationships among the variables based on the path coefficients, t-statistics, and p-values. Mediation analysis was conducted using the Sobel test to calculate the indirect effects and their significance. This approach enables the simultaneous and comprehensive evaluation of both construct quality and structural relationships.

4. Analysis and Discussion

4.1 Descriptive Analysis

After collecting all the data, this study analyzed the effects of financial literacy, product innovation, digital promotion, and investor risk attitudes on life insurance decision-making. Data were gathered through an online questionnaire using purposive sampling targeting 250 individuals who own life insurance policies in DKI Jakarta, with a 100% response rate. All questionnaires were assessed for validity and included in the analysis. The collected data were edited, coded, and tabulated before being analyzed using SPSS and SEM–AMOS. Data analysis was conducted in two stages: descriptive analysis to present the respondent characteristics and quantitative analysis to examine validity, reliability, normality, outliers, multicollinearity, and the structural model.

Instrument testing included validity and reliability analyses to ensure the accuracy and consistency of the measurement tools. Validity testing was performed for each item using Pearson’s correlation (Corrected Item-Total Correlation) with SPSS 27.0. An item was classified as valid if the calculated correlation coefficient (r-value) $\geq$ the critical r-table value at the 5% significance level (r-table = 0.361 for 30 pilot respondents). Items that failed to meet this criterion were eliminated and excluded from further analysis. The validity and reliability tests ensured that the measurement instruments accurately captured the constructs prior to SEM testing.

Table 1. Reliability Test Results

No	Variable	Valid Items	Cronbach’s Alpha	Criterion	Description
1	Life insurance decision	11	0.860	0.700	Reliable
2	Financial literacy	15	0.889	0.700	Reliable
3	Product innovation	12	0.911	0.700	Reliable
4	Digital promotion	13	0.881	0.700	Reliable

5	Investor risk attitude	10	0.887	0.700	Reliable
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Source: Primary Data Processed, 2025

Based on Table 4.1, the reliability test using SPSS 27.0 indicates that all research variables have Cronbach's alpha values above 0.700, namely Life Insurance Decision (0.860), Financial Literacy (0.889), Product Innovation (0.911), Digital Promotion (0.881), and Investor Risk Attitude (0.887). These values indicate strong internal consistency and reliability for all instruments, confirming that they can measure the intended constructs in a stable manner while minimizing potential measurement bias.

4.1.1 Deskriptif Karakteristik Responden

The following section presents the characteristics of the respondents who participated in this study.

Table 2. Respondent Characteristics

Respondent Characteristics	Frequency	Percentage (%)
Gender		
Male	125	50.0
Female	125	50.0
Age		
20 - 29 years	99	39.6
30 - 39 years	103	41.2
40 - 49 years	34	13.6
Above 50 years	14	5.6
Education Level		
High School/Vocational	40	16.0
Diploma	50	20.0
Bachelor's Degree (S1)	128	51.2
Master's Degree (S2)	32	12.8
Occupation		
Civil Servant	68	27.2
Private Employee	116	46.4
Entrepreneur	66	26.4

Respondent Characteristics	Frequency	Percentage (%)
Gender		
Male	125	50.0
Female	125	50.0
Duration of Life Insurance Ownership		
Less than 1 year	59	23.6
1–2 years	78	31.2
More than 3 years	113	45.2

Source: Primary Data Processed, 2025

The characteristics of the respondents in this study indicate that the number of male and female participants was balanced, with 125 individuals each (50%). The majority of respondents were aged 30–39 years (41.2%), followed by those aged 20–29 years (39.6%), while respondents aged 40–49 years (13.6%) and above 50 years (5.6%) represented smaller proportions. In terms of education, most respondents held a bachelor's degree (51.2%), followed by diploma graduates (20%), Senior High School graduates (16%), and master's degree holders (12.8%). Regarding occupation, private-sector employees dominated the sample (46.4%), followed by civil servants (27.2%) and entrepreneurs (26.4%). As for the duration of life insurance ownership, the majority have owned their policies for more than three years (45.2%), followed by 1–2 years (31.2%), while 23.6% have held their policies for less than one year.

4.1.2 Hypothesis Testing Results

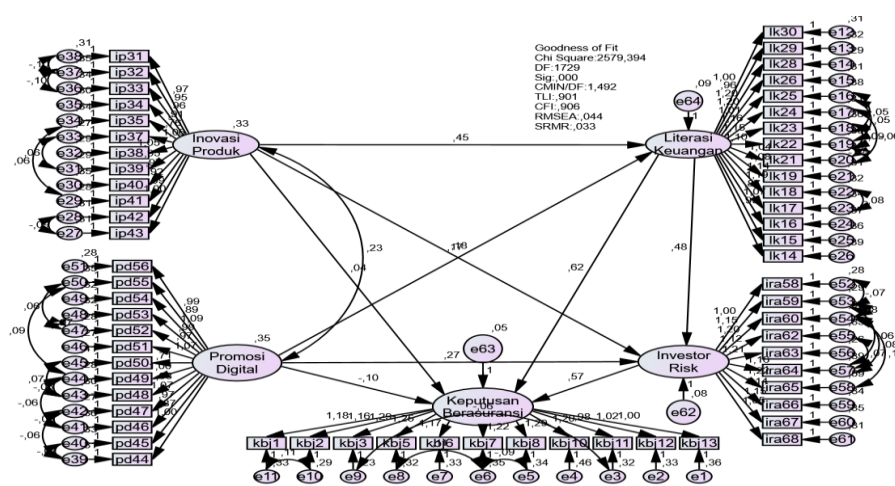


Figure 2. Research Model Testing Results

Hypothesis testing was conducted to identify the effects of the independent variables on the dependent variables across 12 hypothesized relationships, covering the influence of financial literacy, product innovation, and digital promotion on investor risk attitudes and life insurance

decision-making. A relationship was considered statistically significant if the p -value < 0.05 and the Critical Ratio (CR) > 1.96 . The hypothesis testing employed Structural Equation Modeling (SEM), where the estimated path coefficients were evaluated based on statistical significance and the coefficient of determination (R^2), which indicates the magnitude of the contribution of each construct to the model.

Table 3. Hypothesis Testing Results

Variable			Estimate	C.R.	p Sig	Keterangan
Life Insurance Decision	<---	Financial Literacy	0.623	6.025	<0.001	H ₁ : Supported
Investor risk attitude	<---	Financial Literacy	0.485	5.166	<0.001	H ₂ : Supported
Life Insurance Decision	<---	Product Innovation	0.044	0.732	0.464	H ₃ : Not Supported
Investor risk attitude	<---	Product Innovation	0.182	2.268	0.008	H ₄ : Supported
Life Insurance Decision	<---	Digital Promotion	-0.097	1.842	0.065	H ₅ : Not Supported
Investor risk attitude	<---	Digital Promotion	0.268	4.544	<0.001	H ₆ : Supported
Life Insurance Decision	<---	Investor risk attitude	0.570	6.013	<0.001	H ₇ : Supported
Financial Literacy	<---	Product Innovation	0.446	6.368	<0.001	Significant
Financial Literacy	<---	Digital Promotion	0.167	3.060	0.002	Significant

Source: Primary Data Processed, 2025

H1: The results indicate that Financial Literacy has a positive and significant effect on Life Insurance Decision-Making (CR = 6.025; estimate = 0.623; $p < 0.001$), thus H1 is supported. This finding confirms that higher financial literacy is associated with stronger intentions and decisions to purchase life insurance.

H2: The estimation results show that Financial Literacy has a positive and significant effect on Investor Risk Attitude (CR = 5.166; estimate = 0.485; $p < 0.001$). Therefore, H2 is supported by the data. This indicates that the improvement in financial literacy among respondents in DKI Jakarta contributes to a heightened level of investor risk attitude within the context of life insurance.

H3: The analysis reveals that Product Innovation does not have a significant effect on Life Insurance Decision-Making (CR = 0.732; $p = 0.464$), resulting in the rejection of H3. Although

the estimated value is positive (0.044), the effect is not statistically significant at the 5% level. Thus, product innovation does not significantly influence life insurance decisions in Jakarta.

H4: The estimation results demonstrate that Product Innovation significantly influences Investor Risk Attitude ($CR = 2.268$; $p = 0.008$), therefore H4 is supported. The positive estimate value (0.182) indicates that higher levels of product innovation correlate with an increase in the investor risk attitude. Hence, the hypothesis asserting the positive effect of product innovation on investor risk attitude is empirically supported.

H5: The analysis shows that Digital Promotion does not significantly affect Life Insurance Decision-Making ($CR = 1.842$; $p = 0.065$). Consequently, H5 was rejected. This suggests that digital promotion does not directly influence life insurance decisions among consumers in DKI Jakarta.

H6: The hypothesis testing results indicate that Digital Promotion has a positive and significant effect on Investor Risk Attitude ($CR = 4.544$; $p < 0.001$; estimate = 0.268), thus H6 is supported. This finding implies that the more intensive the digital promotion, the higher the investor risk attitude of the life insurance policyholders. Therefore, the hypothesis concerning the positive influence of digital promotion on investors' risk attitudes is validated.

H7: The analysis shows that Investor Risk Attitude has a positive and significant effect on Life Insurance Decision-Making ($CR = 6.013$; $p < 0.001$; estimate = 0.570), thus H7 is supported. This suggests that higher levels of investor risk attitudes contribute to stronger decisions to purchase life insurance. Accordingly, the hypothesis of a positive relationship between investor risk attitude and life insurance decision-making is empirically supported.

H8: The eighth hypothesis indicates that Financial Literacy influences Life Insurance Decision-Making through the mediation of Investor Risk Attitude, as demonstrated by the path analysis results generated through AMOS. The significance of both direct and indirect paths provides empirical evidence that investors' risk attitudes partially mediate the relationship between financial literacy and the decision to purchase life insurance.

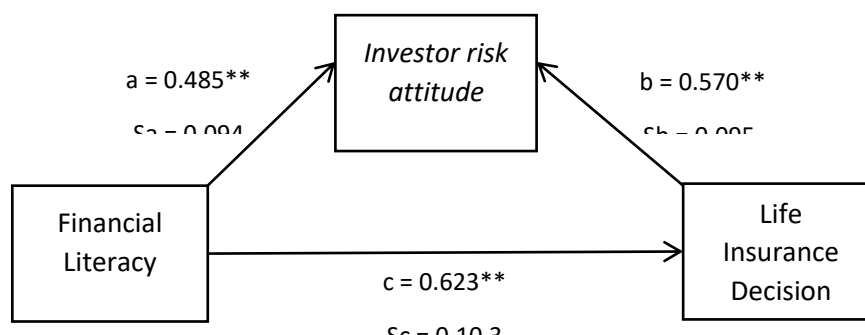


Figure 3. Mediation Test Results: The Effect of Financial Literacy on Life Insurance Decision-Making Through Investor Risk Attitude

The analysis shows that Financial Literacy has a direct and significant effect on Life Insurance Decision-Making ($\beta = 0.623$; $p < 0.001$) and exerts a significant influence on Investor Risk Attitude ($\beta = 0.485$; $p < 0.001$). In addition, Investor Risk Attitude significantly affects Life

Insurance Decision-Making ($\beta = 0.570$, $p < 0.001$). Given the significance of all three pathways, the mediating relationship was further examined using the Sobel test to evaluate the magnitude and significance of the indirect effect of Financial Literacy on Life Insurance Decision-Making through Investor Risk Attitude.

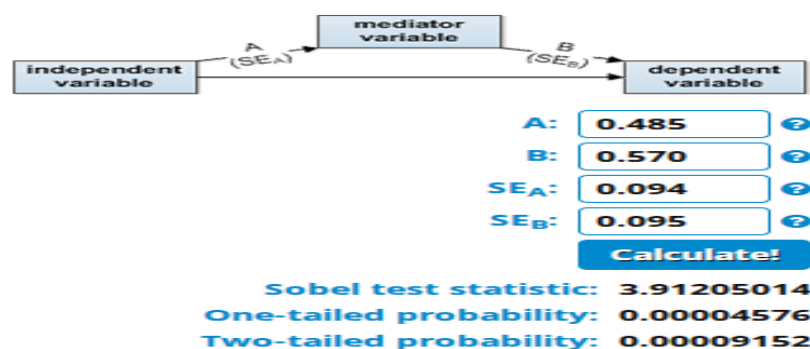


Figure 4. Sobel Test Results 1 (Financial Literacy → Investor Risk Attitude)

The Sobel test results show a test statistic of 3.219 with a p-value < 0.001 , indicating that the indirect effect of Financial Literacy on Life Insurance Decision-Making through Investor Risk Attitude is statistically significant. This finding confirms that the Investor Risk Attitude acts as an effective mediator that bridges the relationship between financial literacy and life insurance decision-making. Furthermore, financial literacy has direct and significant effects on both investor risk attitudes and life insurance decision-making, while investor risk attitudes also have a significant direct influence on life insurance decisions. Overall, these results reaffirm that improvements in financial literacy and investor risk attitudes simultaneously strengthen individuals' decisions to purchase life insurance.

H9: The results of the ninth hypothesis indicate that Product Innovation influences Life Insurance Decision-Making through the mediation of Investor Risk Attitude, as demonstrated by the path analysis model in AMOS. The model illustrates the role of the investor's risk attitude as an intervening variable in the relationship between product innovation and life insurance decision-making.

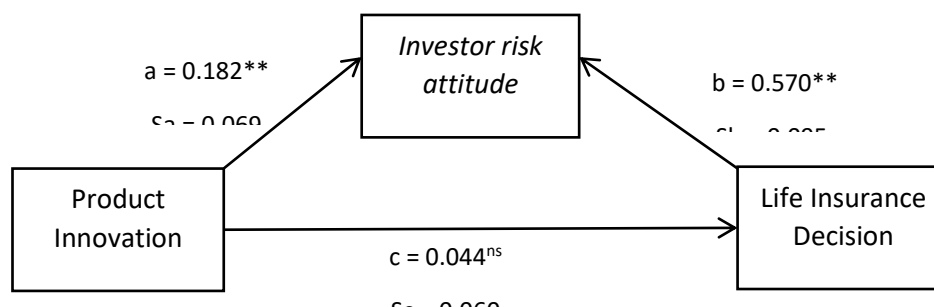


Figure 5. Mediation Test Results: The Effect of Product Innovation on Life Insurance Decision-Making Through Investor Risk Attitude

The analysis indicates that Product Innovation does not have a direct effect on Life Insurance Decision-Making ($\beta = 0.044$; $p = 0.468$), suggesting that an increase in product innovation does

not necessarily lead to a higher likelihood of purchasing life insurance. However, Product Innovation has a positive and significant effect on Investor Risk Attitude ($\beta = 0.182$; $p < 0.001$), while Investor Risk Attitude also shows a significant effect on Life Insurance Decision-Making ($\beta = 0.570$; $p < 0.001$). Therefore, the indirect relationship through Investor Risk Attitude was further examined using the Sobel test.

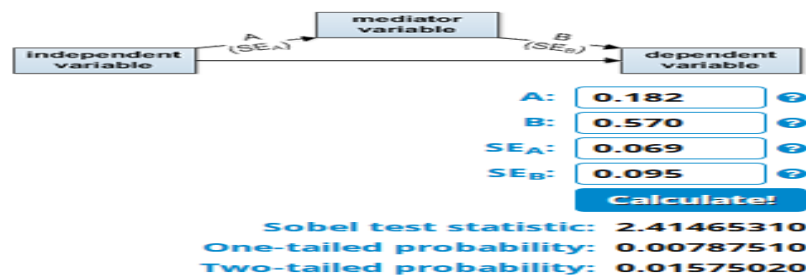


Figure 6. Sobel Test Results 2 (Product Innovation → Investor Risk Attitude)

The Sobel test results show a test statistic of 2.415 with a p-value of 0.016, indicating that the indirect effect of Product Innovation on Life Insurance Decision-Making through Investor Risk Attitude is statistically significant. This finding confirms that Investor Risk Attitude serves as an effective mediator, as Product Innovation significantly influences Investor Risk Attitude but does not have a direct effect on life insurance decision-making. Furthermore, Investor Risk Attitude has a significant direct effect on life insurance decisions, meaning that the indirect pathway through this variable statistically explains the relationship that does not appear in the direct effect of product innovation. Thus, the mediation effect demonstrates that investors' risk attitudes play a crucial role in mediating the influence of product innovation on life insurance decision-making.

H10. The results of the tenth hypothesis indicate that Digital Promotion influences Life Insurance Decision-Making through the mediation of Investor Risk Attitude, as represented in the path analysis model generated by AMOS, shown below:

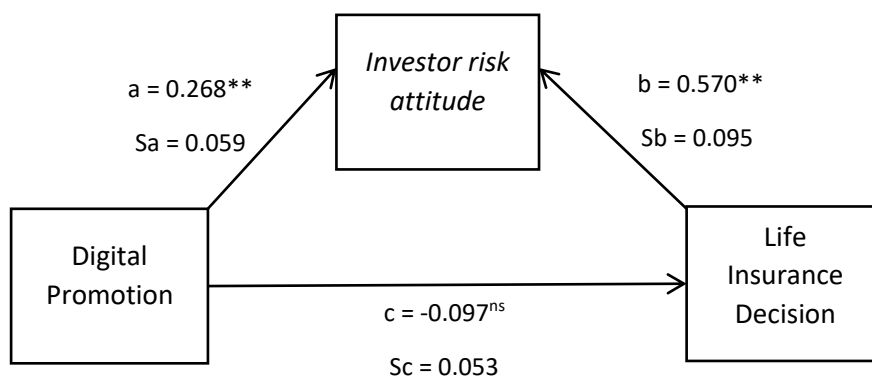


Figure 7. Mediation Test Results: The Effect of Digital Promotion on Life Insurance Decision-Making Through Investor Risk Attitude

Digital Promotion does not have a direct effect on Life Insurance Decision-Making ($\beta = -0.097$; $p = 0.065$), indicating that increases in digital promotion do not lead to changes in

individuals' decisions to purchase life insurance. Thus, digital promotion does not have a significant direct influence in this context. However, Digital Promotion has a positive and significant effect on Investor Risk Attitude ($\beta = 0.268$; $p < 0.001$), demonstrating its role in shaping consumers' risk attitudes. Furthermore, Investor Risk Attitude also has a significant effect on Life Insurance Decision-Making ($\beta = 0.570$; $p < 0.001$), confirming its position as a key determinant of insurance behavior. Therefore, the next step involved testing the mediation effect using the Sobel test to verify the mediating role of Investor Risk Attitude in this relationship.

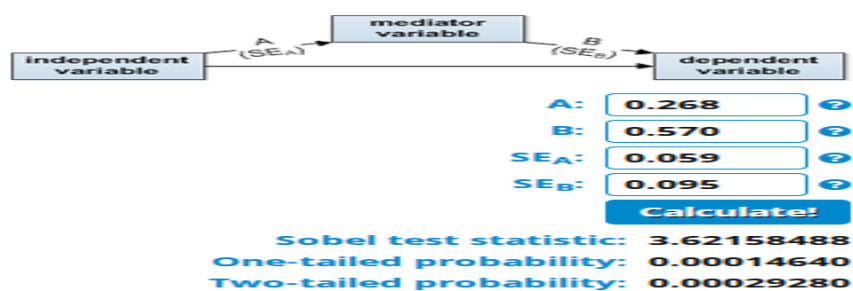


Figure 8. Sobel Test Results 3 (Digital Promotion → Investor Risk Attitude)

The Sobel test results show a test statistic of 3.622 with a p-value < 0.001 , indicating that Digital Promotion has a significant indirect effect on Life Insurance Decision-Making through Investor Risk Attitude. Thus, digital promotion influences life insurance decisions through this mediating pathway. Furthermore, Investor Risk Attitude has a significant direct effect on life insurance decision-making, reinforcing its role as an effective mediator. These findings confirm that individuals' risk attitudes effectively bridge the relationship between digital promotion and life insurance decision-making.

H11: The results of the eleventh hypothesis indicate that the effect of Product Innovation on Life Insurance Decision-Making is examined through the mediation of Financial Literacy, as represented in the path analysis model generated by AMOS.

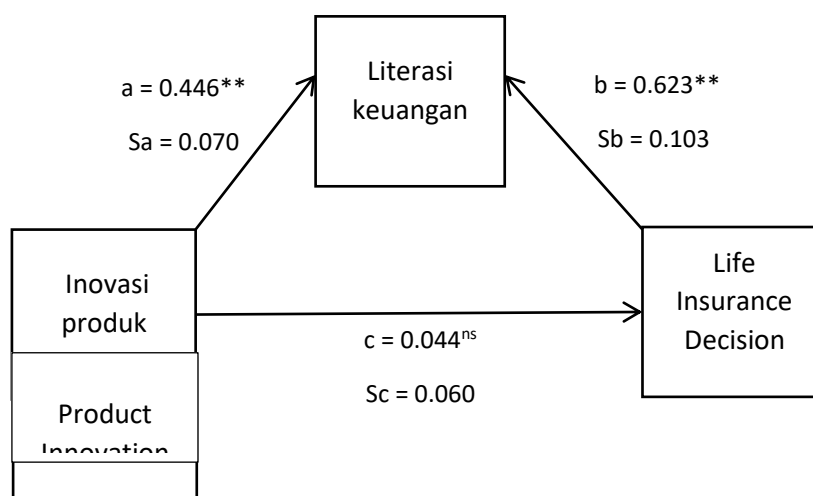


Figure 9. Mediation Test Results: The Effect of Product Innovation on Life Insurance Decision-Making Through Financial Literacy

The analysis shows that Product Innovation does not have a direct effect on Life Insurance Decision-Making ($\beta = 0.044$; $p = 0.464$), indicating that an increase in product innovation does not directly enhance individuals' decisions to purchase life insurance. However, Product Innovation has a positive and significant effect on Financial Literacy ($\beta = 0.446$; $p < 0.001$), and Financial Literacy also has a significant effect on Life Insurance Decision-Making ($\beta = 0.623$; $p < 0.001$). Therefore, the mediating role of Financial Literacy requires further examination using the Sobel test.

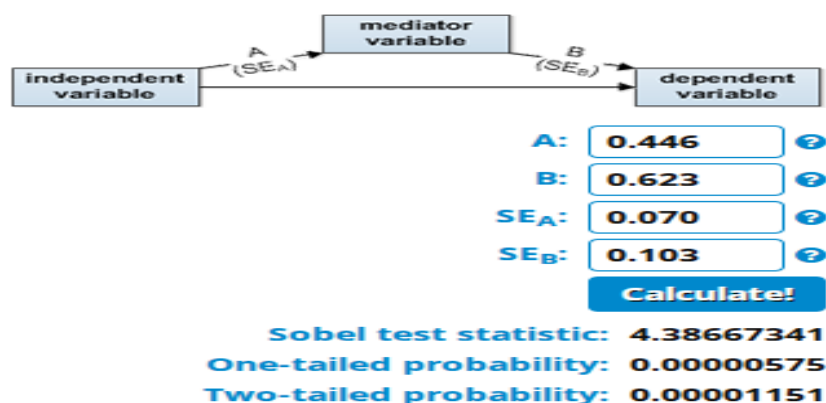


Figure 10. Sobel Test Results 4 (Product Innovation → Financial Literacy)

The Sobel test results indicate that Product Innovation has a significant indirect effect on Life Insurance Decision-Making through Financial Literacy (Sobel = 4.387; $p < 0.001$), confirming that Financial Literacy serves as an effective mediator in this relationship. This finding reinforces the notion that although Product Innovation does not have a direct effect on life insurance decision-making, its influence emerges when mediated by financial literacy, which plays a crucial role in enhancing individuals' tendency to make life insurance decisions.

H12. The results of the twelfth hypothesis indicate that the effect of Digital Promotion on Life Insurance Decision-Making is examined through the mediation of Financial Literacy, as represented in the path analysis model generated by AMOS with Financial Literacy functioning as the intervening variable.

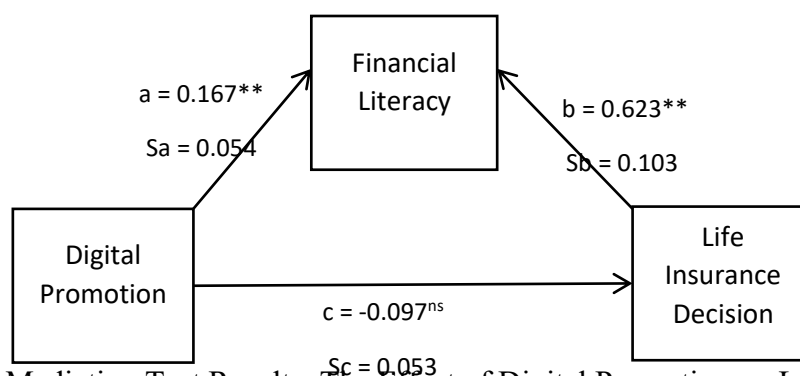


Figure 11. Mediation Test Results: The Effect of Digital Promotion on Life Insurance Decision-Making Through Financial Literacy

Based on the path analysis model, the relationship between Digital Promotion, Financial Literacy, and Life Insurance Decision-Making demonstrates a distinct pattern of influence. The analysis shows that Digital Promotion does not have a direct effect on Life Insurance Decision-Making (coefficient = -0.097 ; $p = 0.065$). In contrast, Digital Promotion has a positive and significant effect on Financial Literacy (coefficient = 0.167 ; $p = 0.002$). Furthermore, Financial Literacy exhibits a highly significant influence on Life Insurance Decision-Making (coefficient = 0.623 ; $p < 0.001$). Therefore, although Digital Promotion does not directly influence life insurance decisions, its indirect effect through Financial Literacy needs to be further examined using the Sobel test, as presented in the following calculation.

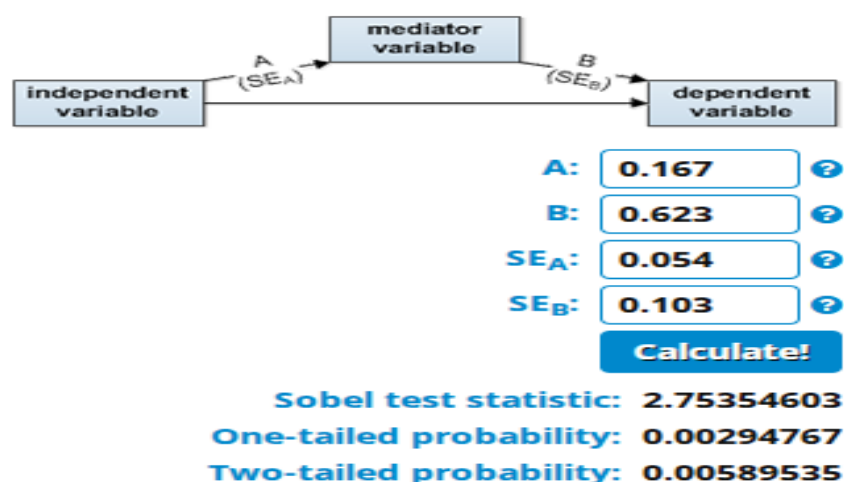


Figure 12. Sobel Test Results 5 (Digital Promotion → Financial Literacy)

The Sobel test results indicate that Digital Promotion has a significant indirect effect on Life Insurance Decision-Making through Financial Literacy (Sobel = 2.754; $p = 0.006$), despite having no direct influence. Financial Literacy is therefore confirmed as an effective mediator, explaining how digital promotion enhances individuals' decisions to purchase life insurance through improved financial understanding.

4.2 Research Discussion

1. Financial Literacy → Life Insurance Decision-Making

Financial literacy has a positive and significant effect on life insurance decision-making ($\beta = 0.623$, $p < 0.001$). The higher the level of financial literacy, the stronger the individual's decision to buy life insurance. This finding is consistent with those of Wang et al. (2021) and Luna-Cortés and Brady (2024).

2. Financial Literacy → Investor Risk Attitude

Financial literacy has a positive and significant effect on investor risk attitude ($\beta = 0.485$, $p < 0.001$). The higher the financial literacy, the more rational is the investor's risk attitude. This aligns with the consumer behavior theory proposed by Schiffman and Wisenblit (2019).

3. Product Innovation → Life Insurance Decision-Making

Product innovation has no significant effect on life insurance decision-making ($\beta = 0.044$, $p = 0.464$). The products offered tend to be traditional and less aligned with the needs of modern consumers, which reduces their ability to motivate purchasing decisions. This result supports Reiner et al. (2024), who found that limited product advantages do not necessarily influence insurance decision-making.

4. Product Innovation $\rightarrow$ Investor Risk Attitude

Product innovation has a positive and significant effect on investor risk attitudes ($\beta = 0.182$, $p < 0.001$). Innovative products tend to enhance individuals' risk attitudes toward them. This finding is consistent with those of Mamun et al. (2021) and Eling et al. (2022).

5. Digital Promotion $\rightarrow$ Life Insurance Decision-Making

Digital promotion does not significantly influence life insurance decision-making ($\beta = -0.097$, $p = 0.065$). Even with intensive promotion, insurance purchase behavior is shaped more by factors such as risk protection needs and trust in insurance providers than by price. This finding aligns with Sekita et al. (2022), who noted that digital promotion does not always directly increase insurance-purchase decisions.

6. Digital Promotion $\rightarrow$ Investor Risk Attitude

Digital promotion has a positive and significant effect on the investor risk attitude ($\beta = 0.268$, $p < 0.001$). Digital promotional content helps shape rational risk perceptions among investors.

7. Investor Risk Attitude $\rightarrow$ Life Insurance Decision-Making

Investor risk attitude has a positive and significant effect on life insurance decision-making ($\beta = 0.570$, $p < 0.001$). These results confirm that investors' risk attitudes play a substantial role in insurance purchase behavior.

8. Financial Literacy $\rightarrow$ Life Insurance Decision-Making through Investor Risk Attitude

Financial literacy has a significant indirect effect on life insurance decision-making through investor risk attitudes (Sobel = 3.219, $p < 0.001$). Investor risk attitudes serve as effective mediators.

9. Product Innovation $\rightarrow$ Life Insurance Decision-Making through Investor Risk Attitude

Product innovation significantly influences life insurance decision-making indirectly through investors' risk attitudes (Sobel = 2.415, $p = 0.016$). Investor risk attitude is an effective mediating variable.

10. Digital Promotion $\rightarrow$ Life Insurance Decision-Making through Investor Risk Attitude

Digital promotion has a significant indirect effect on life insurance decision-making through investor risk attitudes (Sobel = 3.622, $p < 0.001$). Investor risk attitude functions as a strong mediator in this relationship.

11. Product Innovation $\rightarrow$ Life Insurance Decision-Making through Financial Literacy

Product innovation significantly influences life insurance decision-making indirectly through financial literacy (Sobel = 4.387, $p < 0.001$). Financial literacy is an effective mediator.

12. Digital Promotion → Life Insurance Decision-Making through Financial Literacy

Digital promotion significantly influences life insurance decision-making indirectly through financial literacy (Sobel = 2.754; $p = 0.006$). Financial literacy effectively mediates the impact of digital promotion.

5. Conclusion

5.1 Conclusion

This study examined 12 hypotheses, consisting of seven direct and five indirect effects. The variables tested included financial literacy, product innovation, and digital promotion in life insurance decision-making, with investor risk attitude serving as the mediating variable. Structural Equation Modeling (SEM) using AMOS was employed to test the relationships among the variables. The results demonstrate that financial literacy positively and significantly affects life insurance decision-making. The higher the respondents' financial literacy, the stronger their tendency to purchase life insurance. Financial literacy also has a positive and significant effect on investor risk attitudes. These findings reinforce those of earlier studies by Wang et al. (2021) and Luna-Cortés and Brady (2024).

Product innovation does not have a significant direct effect on life insurance decision-making, indicating that increased product innovation does not automatically motivate respondents to purchase insurance. However, product innovation has a positive and significant effect on investor risk attitude, supporting the findings of Mamun et al. (2021) and highlighting the importance of innovation that aligns with the needs of modern consumers. Digital promotion also has no significant direct effect on life insurance decision-making. Increased digital promotion alone is insufficient to drive policy purchases. Conversely, digital promotion has a positive and significant effect on investors' risk attitudes. This result is consistent with those of Zheng et al. (2021) and Aiolfi et al. (2021), who reported that promotional activities help shape investor risk perceptions.

Investor risk attitudes have a positive and significant effect on life insurance decision-making. Higher levels of risk tolerance or risk awareness lead to stronger decisions regarding life insurance purchases. This finding is in line with Do and Mai (2023) and underscores the role of psychological risk factors in financial decision-making. The mediation analysis shows that financial literacy, product innovation, and digital promotion each have significant indirect effects on life insurance decision-making through investors' risk attitudes. Investor risk attitude acts as an effective mediator that bridges the influence of independent variables on insurance decisions. These findings strengthen the earlier conceptualizations of Ahmed et al. (2022) and Howard (1969).

Moreover, financial literacy mediates the indirect effects of product innovation and digital promotion on life insurance decision making. This demonstrates that financial education enhances the effectiveness of innovative products and promotions. Overall, financial literacy

is an essential variable for explaining life insurance decisions in Jakarta. This study had several limitations. First, the sample was restricted to policyholders in DKI Jakarta with a minimum of one year of insurance ownership. Second, the measures of product innovation and digital promotion may not fully capture their effects on insurance decisions. Third, the quantitative method used does not explore the social, cultural, or organizational factors that may shape consumer behavior. Therefore, the findings cannot be generalized to all Indonesian life insurance consumers.

5.2 Recommendations

1. Recommendations for Future Researchers
 - a. Future researchers may expand financial behavior theories, particularly regarding the role of investor risk attitudes as a mediator between financial literacy, product innovation, digital promotion, and insurance decisions. Additional moderator variables, such as trust in insurance companies, claims experience, or generational differences, could be incorporated to create a more comprehensive model that captures consumer behavior dynamics more thoroughly.
 - b. Future studies should employ mixed methods or longitudinal designs to better understand the psychological factors, risk perceptions, and emotional experiences that influence insurance decisions. Expanding the geographical scope and conducting consumer segmentation (policyholders vs. non-policyholders) would enrich insights into the motivations, barriers, and effectiveness of product innovation and digital promotion.
2. Recommendations for Insurance Company Management and Practitioners
 - a. Insurance companies should enhance the quality of financial education through simple, relevant, and structured learning materials to help prospective customers understand the benefits of protection and long-term financial planning. Effective financial education increases consumers' trust and readiness when deciding to purchase insurance.
 - b. Digital promotion strategies must be refined and improved by incorporating engaging, personalized, and educational content. Storytelling, strong visuals, short educational videos, and the use of appropriate influencers can significantly enhance the effectiveness of digital promotion in influencing insurance decision-making.
 - c. Product innovation must be easy to understand and align with consumer needs. Companies should provide transparent explanations of product features, benefits, and differences from conventional products, while ensuring that agents are trained to communicate information clearly, so consumers feel more confident in their decisions.
3. Recommendations for Regulators
 - a. Regulators should strengthen financial literacy programs, especially those related to personal protection and risk management, through accessible curricula and collaborations across the OJK, insurance companies, educational institutions, and training organizations to ensure wider and more effective outreach.
 - b. Regulators should encourage insurance companies to present product information in simple, concise, and easy-to-understand formats. Standards, such as key fact statements or product summaries, can help consumers make informed and appropriate insurance decisions.

- c. Regulators must supervise digital marketing practices to ensure ethical and credible information while promoting inclusive and relevant product innovation through controlled policy frameworks that involve collaboration among insurance companies, fintech firms, and research institutions.

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