

# The influence of financial literacy, digital literacy, and income on investment decisions with religiosity as an intervening variable among Muslim millennials in Yogyakarta

Amri Satria Nugraha, Sutrisno\*

Department of Management, Universitas Islam Indonesia, Yogyakarta

\*Corresponding author: sutrisno@uii.ac.id

---

## Abstract

This research aims to examine the influence of digital literacy, financial literacy, and income variables on investment decisions with religiosity as an intervening in the Muslim millennial generation in Yogyakarta. The approach used in this research is quantitative. The sample used in this research was 185 respondents. Research data was obtained from the results of filling out the questionnaire and then analyzed using SEM analysis techniques with the help of the SEM AMOS program. The results of this research show that: (1) Financial literacy directly has a positive and significant effect on investment decisions; (2) Digital literacy directly has a positive and significant effect on investment decisions; (3) Income directly has a positive and significant effect on investment decisions; (4) religiosity directly has a positive and significant effect on investment decisions; (5) Religiosity can mediate financial literacy on investment decisions; (6) Religiosity cannot mediate digital literacy on investment decisions; (7) Religiosity cannot mediate income on investment decisions.

Keywords: Financial literacy, digital literacy, income, religiosity, and investment decisions

---

## INTRODUCTION

The population in Yogyakarta has been steadily increasing, with data from the Central Statistics Agency (BPS, 2023) indicating a total population of 4.02 million people. Most of the population in Yogyakarta adheres to the Islamic faith. With the growing population, an increase in the well-being of the community is expected, measured by rising incomes. Typically, individuals allocate their money or income into various categories such as daily consumption, savings, and investments. The people in Yogyakarta invest in gold, real estate, stocks, deposits, and other avenues. As of April 2023, PT Pegadaian in the Yogyakarta area reported approximately 68,600 gold savings accounts. According to Bank Indonesia, the growth of home loans (KPR) in Yogyakarta is estimated to reach 17.6% in 2021, surpassing the national KPR growth of 15.5%. This indicates an increasing demand for real estate in Yogyakarta in line with stable economic growth (Solusindojitu, 2023).

The millennial generation plays a crucial role in driving the development of the investment world, especially in the digital era. According to Salsabila (2021), millennials are increasingly aware of the importance of investment and market mastery, leading to an increase in the number of investors in the capital market. BPS reports that the millennial population in Yogyakarta is around 23.42%. Investment planning from personal financial management is essential for individuals today, as investing involves learning processes for managing current and future finances (Pritazahara & Sriwidodo, 2015). To avoid losses in investing in the capital market, one must have sufficient knowledge of the correct investment methods and investment knowledge as a basic capital (Pajar & Pustikaningsih, 2017). Given this background, it is crucial to examine the influence of financial literacy, digital literacy, income, and religiosity on investment decisions, as well as to investigate whether religiosity can mediate financial literacy, digital literacy, and income on investment decisions among Muslim millennials in the Yogyakarta.

## LITERATURE REVIEW AND HYPOTHESIS DEVELOPMENT

### Literature Review

#### Financial Literacy

The Financial Services Authority (OJK) defines financial literacy as a series of processes or activities that enhance consumers' and society's knowledge, skills, and confidence to better manage personal finances.

#### Digital Literacy

Digital literacy is an ability to read, write, and interact with information using the technology and formats available at the time (Ahmadi & Ibda, 2018).

#### Income

According to the Badan Pusat Statistik (BPS), income comprises wages for working hours, overtime pay, all bonuses and allowances, calculation of leave, paid bonuses, and similar payment values from completed work.

#### Investment Decision

Investment, fundamentally, involves placing a sum of funds with the hope of yielding profits in the future (Halim, 2005). An investment decision is the use of current money while calculating the net cash flow in the future. This means that future cash flows or net cash flows are uncertain (Julita et al., 2014).

#### Religiosity

According to Saputra et al. (2020), religiosity is an individual's understanding of their beliefs that drive specific behaviors. Religion instigates attitudes and behavioral choices in societal life originating from an individual's embraced religious beliefs.

#### Millennial Generation

According to the Ministry of Communication and Information, the term "millennial generation" began in 1991, where historians Neil Howe and William Strauss used the word "millennial" in their book titled 'Generations.' Howe and Strauss divided this generation based on shared birth years and historical events. Generation Y (1981-1994), born during the millennial era, is often referred to as the millennial generation.

### Hypothesis Development

#### The Influence of Financial Literacy on Investment Decisions

According to Awais et al. (2016), financial literacy has a positive and significant influence on investment decisions. Khanif (2022) asserts that financial literacy holds positive value but lacks significant influence on investment decisions. Boon et al. (2011), in their research, indicate that the financial literacy variable serves as a useful indicator of an individual's financial planning decisions.

Hypothesis 1 (H1): Financial literacy has an impact on investment decisions.

The higher an individual's digital literacy, the more positive and significant its influence on investment decisions. Ranatunga et al. (2020) concluded that digital literacy profoundly impacts minimizing uncertainty conditions in business, thereby enhancing the economic performance of SMEs in Sri Lanka. This is supported by Kumar et al. (2023) research, indicating that digital literacy influences financial decision-making.

Hypothesis 2 (H2): Digital literacy influences investment decisions.

#### The Influence of Income on Investment Decisions

According to Safryani et al. (2020), income has a positive and significant impact on investment decisions, with higher income leading to better and more responsible investment decisions. Income concurrently significantly influences investment decisions.

Hypothesis 3 (H3): Income amount positively influences investment decisions.

### **The Influence of Religiosity on Investment Decisions**

Based on the research by Ariyadi (2023), religiosity significantly and positively influences investment decisions. Saputra et al. (2020) define religiosity as an individual's understanding of their beliefs, prompting specific behaviors. Generally, the higher an individual's level of religiosity, the more consideration of religious obedience in making investment decisions.

Hypothesis 4 (H4): Religiosity positively influences investment decisions.

### **Financial Literacy and Investment Decisions with Religiosity as a Mediating Variable**

Research on this theme is notably scarce, leading the researcher to draw on previous studies closely aligned with the topic in terms of variables or research methodologies. Annisah (2022) found that variables such as Sharia financial literacy and knowledge partially influence client decisions mediated by religiosity. This aligns with Hasanah (2019) study, indicating that student knowledge indirectly affects interest in saving in Islamic banks through religiosity as a mediating variable.

Hypothesis 5 (H5): Religiosity can mediate financial literacy on investment decisions.

### **Digital Literacy and Investment Decisions with Religiosity as a Mediating Variable**

Existing research on this theme, as per the author's references, remains limited, necessitating reliance on prior studies closely related to the topic's variables or research methods. Septiana (2021) suggested that introducing digital literacy to students significantly and positively influences their level of religiosity. Syawaluddin & Ispriyahadi (2023) observed a significant positive influence of religiosity on investment decisions. According to Hasanah (2019), religiosity encompasses a system of beliefs adopted by society, understanding key values expressed in religion, and using available choices to influence decision-making.

Hypothesis 6 (H6): Religiosity can mediate between digital literacy and investment decisions.

### **Income and Investment Decisions with Religiosity as a Mediating Variable**

Existing research on this theme, according to the author's references, is limited, leading the researcher to draw on previous studies that closely approach the topic in terms of variables or research methods. Safryani et al. (2020) found that income significantly and positively influences investment decisions. Rusnah & Devi (2006) indicated that religiosity significantly influences the investment behavior of Muslims in Malaysia, albeit at a level below 5%. Nithin (2001) stated that religion positively influences investment behavior. Based on previous research indicating the positive relationship between income and investment decisions and the positive impact of religion on investment behavior, the following hypothesis is proposed:

Hypothesis 7 (H7): Religiosity can mediate between income and investment decisions.

## **METHODS**

The population of this study comprises Islamic individuals residing in the Yogyakarta who belong to the millennial generation. The sampling method employed in this research is purposive sampling. The criteria for sample selection in this study encompass individuals in the Yogyakarta who are of Islamic faith, aged between 27 to 42 years (millennial generation), and engaged in investments. The sample size in this study adheres to the suggestion by Ferdinand (2014), where the number of samples equals the number of indicators multiplied by 5-10. With 37 indicators in this study, multiplying by 5 results in 185 samples.

The data collection method comprises primarily obtained data disseminated through questionnaires via Google Forms to selected respondents based on predetermined samples. The questionnaire instrument utilized Likert scales. Secondary data in this research was acquired through the collection of library materials, literature, and scholarly works, obtained either directly or through online data searches (library research), necessary to acquire theoretical information.

The research variables consist of the dependent variable, investment decisions; independent variables encompass financial literacy, digital literacy, and income, alongside the intervening variable, religiosity, with the following indicators:

**Table 1.** Independent variables and indicator variables

| Variable                  | Indicator  | Code               |
|---------------------------|--|--------------------|
| Financial Literacy (LK)   | a. Basic financial knowledge   | LK1, LK2           |
|                           | b. Savings and loans   | LK3, LK4           |
|                           | c. Insurance   | LK5, LK6           |
|                           | d. Investment  | LK7, LK8           |
| (Chen & Volpe, 1998)      |  |                    |
| Digital Literacy (LD)     | a. Proficient in digital media ( <i>digital skills</i> )                     | LD1, LD2           |
|                           | b. Digital media culture ( <i>digital culture</i> )                          | LD4, LD5           |
|                           | c. Ethical digital media ( <i>digital ethics</i> )                           | LD6, LD7           |
|                           | d. Safe digital media ( <i>digital safety</i> )                              | LD8, LD9           |
| Income (P)                | We can measure total income from wages and salaries.<br>(Ida & Dwinta, 2010) | P1, P2, P3, P4, P5 |
| Variable                  | Indicator  | Code               |
| Investation decision (KI) | a. Expected rate of return   | KI1, KI2,          |
|                           | b. Risk level  | KI3, KI4           |
|                           | c. The relationship between returns and expectations                         | KI5, KI6           |

**Table 2.** Dependent Variable and Indicator Variable

Source: (Taendelilin, 2010)

**Table 3.** Intervening Variables and Indicator Variables

| Variable        | Indicator              | Code    |
|-----------------|------------------------|---------|
| Religiosity (R) | a. Faith               | R1, R2  |
|                 | b. Religious practice  | R3, R4  |
|                 | c. Experience          | R5, R6  |
|                 | d. Religious knowledge | R7, R8  |
|                 | e. Consequence         | R9, R10 |

Source: Glock and Stark dalam (Ancok &amp; Suroso, 2008)

In this study, the data analysis method employed is quantitative analysis using Structural Equation Modeling (SEM) with AMOS 24 software. According to Ghazali (2014), SEM represents a combination of various statistical methods, including factor analysis and time-series analysis. SEM illustrates the relationships among multiple independent/exogenous and dependent/endogenous variables that form constructs constructed from several directly measured indicators.

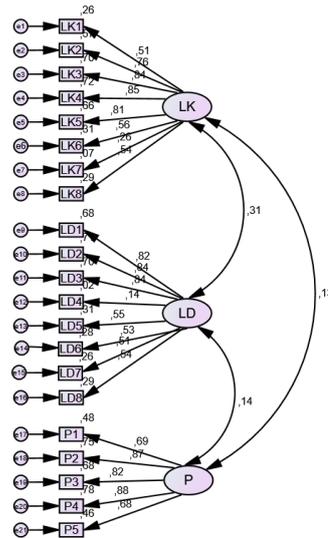
## RESULTS AND DISCUSSIONS

### Measurement Model Testing (CFA Analysis)

The measurement model testing is used to examine the validity and reliability of indicators in measuring their constructs.

### Exogenous Construct CFA Analysis

This research model comprises three exogenous constructs: financial literacy, digital literacy, and income. The estimation of the exogenous construct CFA model can be observed in the following diagram:



**Figure 1.** CFA Model Estimation Results for Exogenous Constructs  
Source: Data analysis (2023)

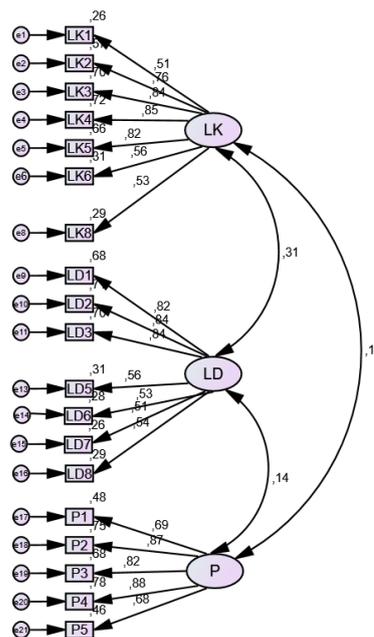
Based on the results of the CFA model estimation of exogenous constructs, the following data were obtained:

**Table 4.** Standardized Regression Weights Konstruksi Eksogen

|     |      | Estimate |
|-----|------|----------|
| LK7 | <--- | LK       |
|     |      | ,255     |
| LD4 | <--- | LD       |
|     |      | ,143     |

Source: Data proceed (2023)

Based on Figure 1, it can be observed that among all indicators within each exogenous construct, two indicators are deemed invalid in measuring their constructs due to having loading factor values <0.5. These indicators are LK7 (loading factor 0.255) and LD4 (loading factor 0.43). Hence, both indicators need to be excluded from the SEM model due to their lack of validity. The measurement of the estimation results of the exogenous construct model after removing LK7 and LD4 can be observed in the following figure:



**Figure 2.** CFA Model Estimation Results for Valid Exogenous Constructs  
Source: Data analysis (2023)

The analysis results in Table 4 above indicate that after excluding LK7 and LD4 from the model, all indicators within the model became valid. Therefore, the testing can proceed to further examination, namely the assessment of construct reliability, which will be conducted by examining the CR and AVE values for each construct. Employing the calculation formulas for CR and AVE Hair et al. (2006), the computed CR and AVE values for the three exogenous constructs are as follows:

**Tabel 5.** Reliabilitas Konstruk Eksogen

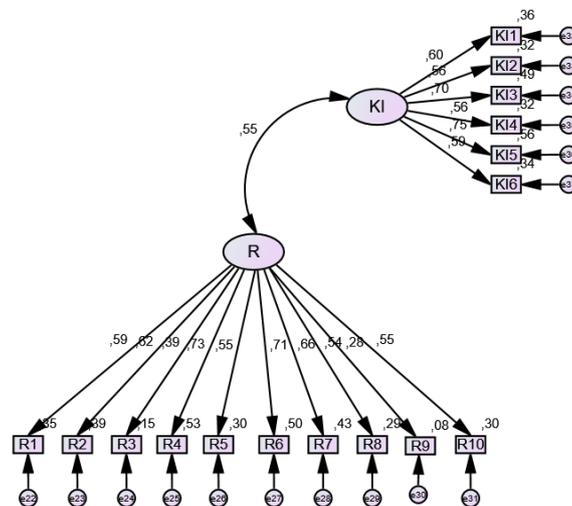
| Variabel           | Indikator | $\lambda$ | Validitas | $e$   | AVE   | CR    | Keterangan |
|--------------------|-----------|-----------|-----------|-------|-------|-------|------------|
| Financial literacy | LK8       | 0,535     | Valid     | 0,526 | 0,578 | 0,902 | Reliable   |
|                    | LK6       | 0,561     | Valid     | 0,540 |       |       |            |
|                    | LK5       | 0,815     | Valid     | 0,241 |       |       |            |
|                    | LK4       | 0,847     | Valid     | 0,226 |       |       |            |
|                    | LK3       | 0,836     | Valid     | 0,207 |       |       |            |
|                    | LK7       | 0,758     | Valid     | 0,319 |       |       |            |
| Digital literacy   | LK6       | 0,515     | Valid     | 0,515 | 0,547 | 0,874 | Reliable   |
|                    | LD8       | 0,541     | Valid     | 0,519 |       |       |            |
|                    | LD5       | 0,555     | Valid     | 0,497 |       |       |            |
|                    | LD3       | 0,838     | Valid     | 0,267 |       |       |            |
|                    | LD2       | 0,842     | Valid     | 0,267 |       |       |            |
|                    | LD1       | 0,822     | Valid     | 0,288 |       |       |            |
| Income             | LD1       | 0,51      | Valid     | 0,601 | 0,718 | 0,926 | Reliable   |
|                    | LD6       | 0,528     | Valid     | 0,574 |       |       |            |
|                    | P 5       | 0,677     | Valid     | 0,378 |       |       |            |
|                    | P 4       | 0,881     | Valid     | 0,130 |       |       |            |
|                    | P 3       | 0,824     | Valid     | 0,211 |       |       |            |
|                    | P 2       | 0,866     | Valid     | 0,165 |       |       |            |
|                    | P 1       | 0,692     | Valid     | 0,35  |       |       |            |

Source: Data analysis (2023)

Based on the computed values of CR and AVE for the exogenous constructs, the CR values for the three exogenous constructs are 0.902, 0.874, and 0.926, while the AVE values for the three exogenous constructs are 0.578, 0.547, and 0.718. Since all CR values for the exogenous constructs are > 0.7 and all AVE values for the constructs are > 0.5, it can be concluded that all three exogenous constructs meet the required criteria for construct reliability.

**CFA Analysis of Endogenous Constructs**

This research model comprises two endogenous constructs: investment decision construct and religiosity construct.

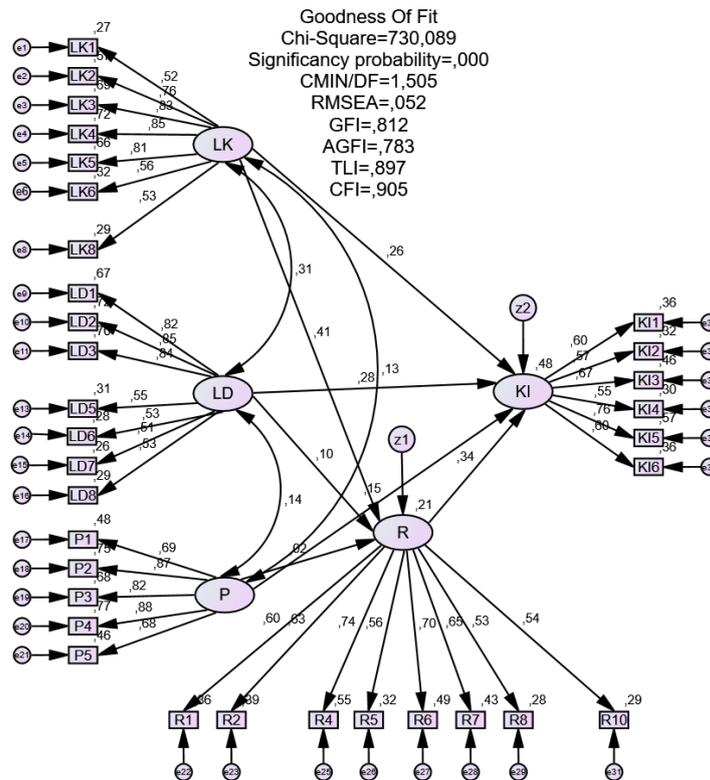


**Figure 3.** CFA Model Estimation Results for Valid Endogenous Constructs

Source: Data analysis (2023)

**Uji Goodness of Fit Model**

The following are the results of the model estimation results from the goodness of fit model test:



**Figure 4.** Goodness of fit test results of the structural model  
 Source: Data analysis (2023)

In the Table 6 below are the results of the model fit based on the Goodness of Fit analysis test in this research.

**Table 6.** Goodness of fit model results (initial)

| <i>Goodness of Fit Indexs</i>   | <i>Cut off Value</i> | <b>Results</b> | <b>Model evaluation</b> |
|---------------------------------|----------------------|----------------|-------------------------|
| <i>Chi-Square</i>               | Diharapkan kecil     | 730,089        | Not Fit                 |
| <i>Significancy probability</i> | ≥ 0,05               | 0,00           | Not Fit                 |
| RMSEA                           | ≤ 0,08               | 0,52           | Good Fit                |
| GFI                             | ≥ 0,90               | 0,812          | Marginal Fit            |
| AGFI                            | ≥ 0,90               | 0,783          | Marginal Fit            |
| CMIN/DF                         | ≤ 2,00               | 1,505          | Good Fit                |
| TLI                             | ≥ 0,90               | 0,897          | Marginal Fit            |
| CFI                             | ≥ 0,90               | 0,905          | Good Fit                |

Source: Data analysis (2023)

Based on the estimation results of the structural model in Table 4.10 above, it is evident that the SEM model exhibits relatively good goodness of fit criteria, especially noted by the values of CMIN/DFI, CFI, and RMSEA falling within the category of good fit. However, other parameters such as GFI, AGFI, and TLI fall within the criteria of marginal fit. Notably, the chi-square value and significance probability fall under the category of not fit.

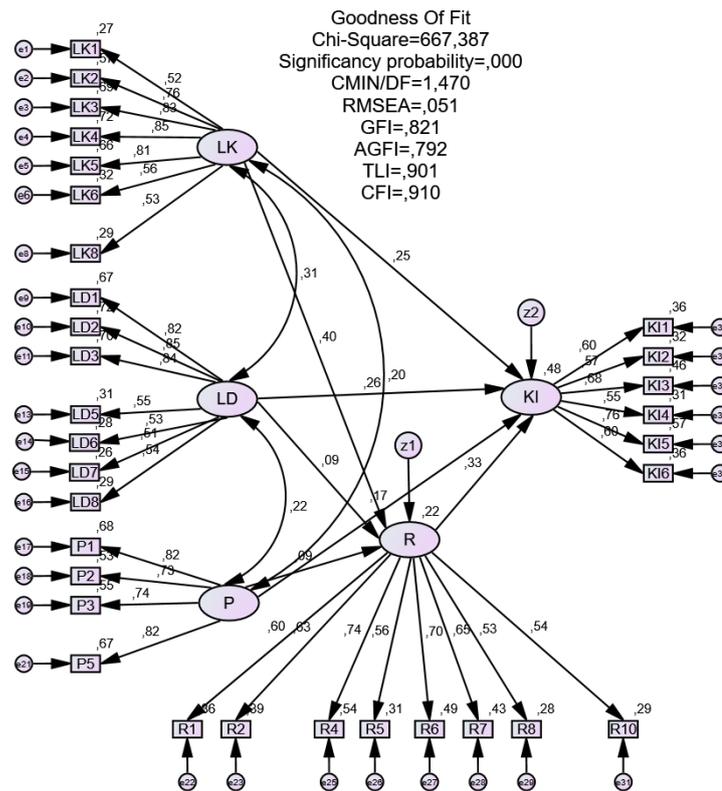
Before conducting direct and indirect influence tests, the next step is to examine the residual values. These values should be small or close to zero, and the distribution of residual covariances should be symmetrical. A good model exhibits small standardized residual variances. The required standard residual limit is ±2.58, indicating statistical significance at α = 5%. The standardized residual covariance results

indicate the presence of residuals: P4-K2 (-2.946), P5-R2 (2.655), and P5-P1 (3.246), suggesting that the model is not yet optimal.

According to Arbuckle as cited in Ferdinand (2014), the following actions can be taken to improve the model:

1. Modifying the model by adding or removing connections.
2. Adding variables (if data is available).
3. Reducing variables (elimination of indicators).

After implementing the first point, residuals were still found in the standardized residual covariance table. Consequently, the decision was made to remove indicator P4, resulting in no further residuals found at the required standardized residual value limit of 2.58. This indicates the model's statistical significance and improvement. The estimation results of the model's goodness of fit test after removing indicator P4 are as follows:



**Figure 5.** Goodness of fit test results of valid structural model  
Source: Data analysis (2023)

In table 7 below are the results of the model fit based on the Goodness of Fit analysis test which looks fitter than before.

**Table 7.** Goodness of fit model results (final)

| Goodness of Fit Indexes         | Cut off Value    | Result  | Model evaluation |
|---------------------------------|------------------|---------|------------------|
| <i>Chi-Square</i>               | Diharapkan kecil | 667,387 | Not Fit          |
| <i>Significance probability</i> | ≥ 0,05           | 0,00    | Not Fit          |
| RMSEA                           | ≤ 0,08           | 0,51    | Good Fit         |
| GFI                             | ≥ 0,90           | 0,821   | Marginal Fit     |
| AGFI                            | ≥ 0,90           | 0,792   | Marginal Fit     |
| CMIN/DF                         | ≤ 2,00           | 1,470   | Good Fit         |
| TLI                             | ≥ 0,90           | 0,901   | Good Fit         |
| CFI                             | ≥ 0,90           | 0,910   | Good Fit         |

Source: Data analysis (2023)

## Hypothesis Testing

### Direct Influence Testing

Assessing the influence between variables in the SEM model is performed by examining the p-value and CR, followed by a review of the path coefficient values. With a significance level of 5%, a variable is deemed to have a significant impact on another variable if, along that path, the p-value  $< 0.05$  or CR  $> 1.96$ . Conversely, if the p-value  $> 0.05$  and CR  $< 1.96$ , the influence between those variables is considered not significant.

**Table 8.** Results of Influence Tests Between Variables

|    |      |    | Estimate | S.E. | C.R.  | P    | Description              |
|----|------|----|----------|------|-------|------|--------------------------|
| KI | <--- | P  | ,114     | ,051 | 2,244 | ,025 | Positive and significant |
| KI | <--- | LD | ,258     | ,089 | 2,905 | ,004 | Positive and significant |
| KI | <--- | LK | ,248     | ,092 | 2,703 | ,007 | Positive and significant |
| KI | <--- | R  | ,387     | ,122 | 3,188 | ,001 | Positive and significant |

Source: Data analysis (2023)

Based on the analysis results presented in the above table, the direct influence testing between variables yields the following findings:

#### Financial Literacy → Investment Decision

On the path indicating the impact of financial literacy on investment decisions, a significant p-value (0.007) is obtained with a CR of 2.244 and a positively signed path coefficient of 0.248. Consequently, as the p-value  $< 0.05$  and CR  $> 1.96$  with a positively signed path coefficient, it is concluded that financial literacy has a positive and significant influence on investment decisions.

#### Digital Literacy → Investment Decision

On the path illustrating the influence of digital literacy on investment decisions, a significant p-value (0.004) is observed with a CR of 2.905 and a positively signed path coefficient of 0.258. Therefore, with a p-value  $< 0.05$  and CR  $> 1.96$  alongside a positively signed path coefficient, it can be concluded that digital literacy has a positive and significant impact on investment decisions.

#### Income → Investment Decision

On the path demonstrating the impact of income on investment decisions, a significant p-value (0.025) is obtained with a CR of 2.244 and a positively signed path coefficient of 0.114. Since the p-value  $< 0.05$  and CR  $> 1.96$  with a positively signed path coefficient, it is concluded that income has a positive and significant influence on investment decisions.

#### Religiosity → Investment Decision

On the path indicating the influence of religiosity on investment decisions, a significant p-value (0.001) is observed with a CR of 3.188 and a positively signed path coefficient of 0.387. As the p-value  $< 0.05$  and CR  $> 1.96$  with a positively signed path coefficient, it is concluded that religiosity has a positive and significant impact on investment decisions.

### Indirect Influence Testing

To determine indirect effects/mediation, the Sobel test is utilized. The Sobel test evaluates the strength of the indirect influence of exogenous variables on endogenous variables through mediating variables. This test assumes a large sample size and normally distributed coefficient values (Ghozali, 2014). To conduct the Sobel test for indirect effects, calculations for the Sobel test using the estimates and standard errors (S.E.) on the regression weights can be done through the Sobel test calculator in the following table

**Table 9.** Regression Weights

|    |      |    | Estimate | S.E. | C.R.  | P    |
|----|------|----|----------|------|-------|------|
| R  | <--- | LD | ,075     | ,072 | 1,051 | ,293 |
| R  | <--- | P  | ,048     | ,047 | 1,024 | ,306 |
| R  | <--- | LK | ,338     | ,090 | 3,747 | ***  |
| KI | <--- | R  | ,387     | ,122 | 3,188 | ,001 |

Source: Data analysis (2023)

The results of the Sobel test calculator to determine indirect effects/mediation are as follows:

**1. Sobel test result (FL - R - ID)**

| Input:         |       | Test statistic:                          | Std. Error:                              | p-value:   |
|----------------|-------|--|--|------------|
| a              | 0.338 | Sobel test: 2.42335716                   | 0.05397719                               | 0.0153778  |
| b              | 0.387 | Aroian test: 2.37472287                  | 0.05508264                               | 0.01756213 |
| s <sub>a</sub> | 0.090 | Goodman test: 2.4751074                  | 0.05284862                               | 0.01331961 |
| s <sub>b</sub> | 0.122 | <input type="button" value="Reset all"/> | <input type="button" value="Calculate"/> |            |

**Figure 6.** Sobel Test Results (LK - R - KI)

Source: Data analysis (2023)

The results of the Sobel calculator calculations obtained a Sobel statistical test value of 2.42335716 > 1.96 or a p-value of 0.0153778 < 0.05, so the R variable influences the KI variable through Z.

**2. Sobel test results (LD - R - KI)**

| Input:         |       | Test statistic:                          | Std. Error:                              | p-value:   |
|----------------|-------|--|--|------------|
| a              | 0.075 | Sobel test: 0.98967237                   | 0.02932789                               | 0.32233428 |
| b              | 0.387 | Aroian test: 0.94806193                  | 0.03061509                               | 0.34309793 |
| s <sub>a</sub> | 0.072 | Goodman test: 1.03729117                 | 0.02798154                               | 0.29960018 |
| s <sub>b</sub> | 0.122 | <input type="button" value="Reset all"/> | <input type="button" value="Calculate"/> |            |

**Figure 7.** Sobel Test Result (LD - R - KI)

Source: Data analysis (2023)

The results of the Sobel calculator calculations obtained a Sobel statistical test value of 0.98967237 < 1.96 or a p-value of 0.32233428 > 0.05, so the LD variable has no effect on the KI variable through Z.

**3. Sobel test results (P - R - KI)**

| Input:         |       | Test statistic:                          | Std. Error:                              | p-value:   |
|----------------|-------|--|--|------------|
| a              | 0.048 | Sobel test: 0.9721359                    | 0.01910844                               | 0.33098294 |
| b              | 0.387 | Aroian test: 0.93111763                  | 0.01995022                               | 0.35179272 |
| s <sub>a</sub> | 0.047 | Goodman test: 1.01910114                 | 0.01822783                               | 0.30815495 |
| s <sub>b</sub> | 0.122 | <input type="button" value="Reset all"/> | <input type="button" value="Calculate"/> |            |

**Figure 8.** Sobel Test Results (P - R - KI)

Source: Data analysis (2023)

The results of the Sobel calculator calculations obtained a Sobel statistical test value of 0.9721359 < 1.96 or a p-value of 0.33098294 > 0.05, so the P variable has no effect on the KI variable through Z.

## DISCUSSION

### The Impact of Financial Literacy on Investment Decisions

Digital literacy entails the ability to read, write, and interact with information using contemporary technology and formats (Ahmadi & Ibda, 2018). Individuals with strong digital literacy efficiently manage their lives, benefiting from enhanced convenience in daily activities. We are presently in the digital age, where aspects of education, finance, investment, entertainment, services, and more are readily accessible via smartphones or other digital devices. The Structural Equation Modeling (SEM) test of the digital literacy variable against investment decisions indicates the acceptance of the research hypothesis. This signifies that digital literacy significantly and positively impacts investment decisions among Muslim millennials in the Yogyakarta. Hence, higher digital literacy corresponds to a greater contribution to investment decisions. The research reveals that a significant portion of Yogyakarta's populace possesses commendable digital literacy, displaying adeptness in digital media. In applying digital literacy, the society in Yogyakarta maintains ethical standards and cultural values while emphasizing security in social media usage.

Yogyakarta's population exhibits high levels of digital literacy, and it's evident that income significantly and positively influences investment decisions. This outcome is in line with previous studies; for instance, Kumar et al. (2023) suggested that digital literacy influences financial decision-making. Furthermore, Ranatunga et al. (2020) found that digital literacy significantly minimizes uncertainty in businesses, thereby enhancing the performance of SMEs in Sri Lanka.

### The Influence of Income on Investment Decisions

According to the Central Statistics Agency (BPS, 2023), income comprises wages for working hours, overtime pay, all bonuses and allowances, leave calculations, paid bonuses, and similar payments for completed work. The SEM test of the income variable against investment decisions supports the acceptance of the research hypothesis. This signifies that income significantly and positively impacts investment decisions among Muslim millennials in the Yogyakarta. Thus, higher income corresponds to a greater contribution to investment decisions. The research reveals that some members of the Yogyakarta community have high incomes, enabling them to allocate their earnings for investment purposes. The types of investments vary, with individuals earning below Rp 4,500,000 tending to choose gold investments due to their accessibility in smaller, affordable amounts. Those with higher incomes opt for diverse investments such as property, stocks, mutual funds, and deposits, facilitated by the ease of access through smartphones and other digital devices.

Yogyakarta's populace has sufficient income for investment, and it's evident that income positively and significantly influences investment decisions. This aligns with the findings of previous studies. For instance, Safryani et al. (2020) asserted that income significantly influences investment decisions, with higher incomes leading to more responsible and sound investment choices. Additionally, Nara (2021) concluded that income significantly affects investment decisions.

### The Influence of Religiosity on Investment Decisions

Religiosity, as per Saputra et al. (2020), represents an individual's comprehension of their beliefs, motivating specific behaviors. The SEM test of the religiosity variable against investment decisions supports the acceptance of the research hypothesis. This signifies that religiosity significantly and positively influences investment decisions among Muslim millennials in the Yogyakarta. Thus, higher religiosity corresponds to a greater contribution to investment decisions. The research indicates that a considerable portion of Yogyakarta's populace possesses a strong level of religiosity. As most of Yogyakarta's population adheres to Islam, religious values are deeply ingrained. Aspects of religiosity, including belief, religious practices, experience, knowledge, and consequences, are largely followed by the majority. Generally, higher levels of religiosity lead to considering religious compliance in making investment decisions. For instance, Muslims abstain from investing in prohibited ventures like alcohol and usury.

Yogyakarta's populace has high religiosity, and it's evident that religiosity positively and significantly influences investment decisions. This resonates with research conducted by Ariyadi (2023),

indicating that religiosity significantly affects investment decisions. Furthermore, Zuhirsyan & Nurlinda (2018) found that religiosity significantly influences the choice of Shariah-compliant banks.

### **The Influence of Digital Literacy on Investment Decisions with Religiosity as an Intervening Variable**

Previous research on this topic, according to my references, remains scarce. Consequently, I have drawn references from prior studies that closely align with the theme, either in terms of variables or research methodologies. The findings of Syazana (2022) suggest that digital literacy positively affects the religious attitudes of high school students at IT Abu Bakar Yogyakarta. Moreover, the research conducted by Syawaluddin & Ispriyahadi (2023) indicates that religiosity significantly influences investment decisions. The Structural Equation Modeling (SEM) test for the digital literacy variable against investment decisions yielded positive but nonsignificant results. The Sobel test examining the indirect influence of digital literacy on investment decisions with religiosity as an intervening variable indicates the rejection of the hypothesis. This suggests that religiosity does not mediate the relationship between digital literacy and investment decisions among Muslim millennials in the Yogyakarta. Despite the high levels of digital literacy and religiosity in Yogyakarta's populace, it remains unverified that religiosity can mediate digital literacy's impact on investment decisions. A comprehensive analysis is warranted, considering various aspects, including respondent numbers and indicators employed.

### **The Influence of Income on Investment Decisions with Religiosity as an Intervening Variable**

Similarly, existing literature on this particular topic is limited, as per my references. Thus, I have referred to prior studies that closely align with the subject, whether in terms of variables or research methodologies. According to Safryani et al. (2020), income significantly and positively influences investment decisions, with higher incomes leading to more responsible investment decisions. Moreover, research by Rusnah & Devi (2006) indicates that religiosity significantly affects the investment behavior of Muslims in Malaysia. Nithin (2001) states that religion positively influences investment behavior. The SEM test for the income variable against investment decisions yielded positive but nonsignificant results. The Sobel test examining the indirect influence of income on investment decisions with religiosity as an intervening variable suggests the rejection of the hypothesis. This indicates that religiosity cannot mediate the relationship between income and investment decisions among Muslim millennials in the Yogyakarta, despite sufficient income levels and high religiosity in Yogyakarta's populace. Further investigation is necessary, encompassing various aspects such as respondent numbers and utilized indicators.

## **CONCLUSION**

Financial literacy has a direct, positive, and significant impact on investment decisions. This implies that better financial literacy leads to higher investment decisions, while poor financial literacy has the potential to decrease investment decisions. Similarly, digital literacy also directly affects investment decisions positively and significantly. A higher level of digital literacy correlates with higher investment decisions, whereas poor digital literacy might reduce investment decisions.

Income has a direct, positive, and significant effect on investment decisions. A higher income level is associated with higher investment decisions, whereas lower income levels might diminish investment decisions. Additionally, religiosity also has a direct, positive, and significant impact on investment decisions. Stronger religiosity tends to lead to higher investment decisions, whereas weaker religiosity may lower investment decisions.

Religiosity can mediate the influence of financial literacy on investment decisions. This suggests that when mediated by religiosity, the impact of financial literacy on investment decisions becomes more substantial. Therefore, religiosity serves as a significant mediator in the relationship between financial literacy and investment decisions. However, religiosity does not mediate the impact of digital literacy or income on investment decisions. This indicates that, despite religiosity, the effects of digital literacy and income on investment decisions do not amplify. Thus, religiosity does not act as a mediator in the relationship between digital literacy or income and investment decisions.

As for recommendations, the researchers suggest that while the levels of financial literacy, digital literacy, and income in Yogyakarta's society are relatively good, there is room for improvement. It would be advantageous for the community to continuously enhance their knowledge and awareness, particularly regarding financial and digital literacy, given the increasing prevalence of technology-based financial and investment applications. Additionally, in data processing using SEM Amos, caution should be exercised in formulating statements regarding indicators to obtain valid results.

## REFERENCE

- Ahmadi, F., & Ibda, H. (2018). *Media literasi sekolah (Teori dan praktik)*. Pilar Nusantara.
- Ancok, D., & Suroso, F. (2008). *Psikologi Islam*. Pustaka Belajar.
- Annisah, R. (2022). *Pengaruh literasi keuangan syariah dan pengetahuan terhadap keputusan nasabah menabung pada bank syariah dengan religiusitas sebagai variabel intervening*. UIN Raden Patah Palembang.
- Ariyadi, I. (2023). *Pengaruh literasi digital, religiusitas dan literasi keuangan terhadap keputusan investasi saham generasi z dalam perspektif ekonomi Islam*. UIN Raden Intan Lampung.
- Awais, M., Laber, M., Rasheed, N., & Khursheed, A. (2016). Impact of financial literacy and investment experience on risk tolerance and investment decisions: Empirical evidence from pakistan. *International Journal of Economics and Financial Issues*, 6(1).
- Badan Pusat Statistik. <https://www.bps.go.id/id>
- Boon, T. H., Yee, H. S., & Ting, W. H. (2011). Financial literacy and personal financial planning in Klang Valley, Malaysia. *International Journal of Economics and Management*, 5(1), 149–168.
- Chen, H., & Volpe, R. (1998). An analysis of personal financial literacy among college students. *Financial Service Review*, 7(2).
- Ferdinand, A. (2014). *Structural equation modeling*. Badan Penerbit Universitas Negeri Semarang.
- Ghozali, I. (2014). *Structural Equation Modeling, Metode Alternatif dengan Partial Least Square (PLS)*. Badan Penerbit Universitas Diponegoro.
- Hair, J., Black, W., Babin, B., & Anderson, R. (2006). *Multivariate data analysis pearson*. New Jersey.
- Halim, A. (2005). *Manajemen investasi*. Salemba Empat.
- Hasanah, F. (2019). Pengaruh tingkat religiusitas, pengetahuan, kualitas produk dan kualitas pelayanan terhadap preferensi menabung mahasiswa universitas muhammadiyah palembang pada bank syariah. *Jurnal AKuntansi Dan Bisnis*, 4(1).
- Ida, & Dwinta, C. (2010). Pengaruh locus of control, financial knowledge, income terhadap financial management behavior. *Jurnal Bisnis Dan Akuntansi*, 12(3).
- Julita, J., Jufrizen, J., & Sitohang, I. . (2014). *Penganggaran perusahaan pedoman, pengkoordinasian dan pengawasan kerja*. Citapustaka Media.
- Khanif, M. F. (2022). *Pengaruh literasi keuangan dan pengetahuan investasi terhadap keputusan berinvestasi dengan perilaku keuangan sebagai variabel intervening: Studi pada Mahasiswa Fakultas Ekonomi UIN Maulana Malik Ibrahim Malang Tahun 2022*. Universitas Islam Negeri Maulana Malik Ibrahim.
- Kumar, P., Pillai, R., Kumar, N., & Tabash, M. (2023). The interplay of skills, digital financial literacy, capability, and autonomy in financial decision making and well-being. *Borsa Istanbul Review*, 23(1), 169–183.
- Nara, R. (2021). *Pengaruh literasi keuangan perilaku keuangan dan pendapatan terhadap keputusan berinvestasi (Studi kasus mahasiswa prodi manajemen Universitas Muhammadiyah Sumatera Utara)*. Universitas Muhammadiyah Sumatera Utara.
- Nithin, E. (2001). *A study of cultural influences on consumer behaviour in a small island economy: Religious influences*

*on purchasing behaviour in mauritius*. University of Warwick.

- Pajar, R. C., & Pustikaningsih, A. (2017). Pengaruh motivasi investasi dan pengetahuan investasi terhadap minat investasi di pasar modal pada mahasiswa Fakultas Ekonomi UNY. *Jurnal Profita*, 5(1).
- Pritazahara, R., & Sriwidodo, U. (2015). Pengaruh pengetahuan keuangan dan pengalaman keuangan terhadap perilaku perencanaan investasi. *Jurnal Ekonomi Kewirausahaan*, 15(1), 28–37.
- Ranatunga, R., Priyanath, H., & Megama, R. (2020). Digital literacy, business uncertainty & economic performance: An empirical study of small businesses in Sri Lanka. *International Journal of Academic Research in Business & Social Science*, 10(5), 50–76. <https://doi.org/http://dx.doi.org/10.6007/IJARBS/v10-i5/7171>
- Rusnah, M., & Devi, S. (2006). Religiosity and the Malay muslim investors in Malaysia: An analysis on some aspects of ethical nvestment decision. In *Paper of University of Malaya*.
- Safryani, U., Azis, A., & Triwahyuningtyas, N. (2020). Analisis literasi keuangan, perilaku keuangan, dan pendapatan terhadap keputusan investasi. *Jurnal Ilmiah Akuntansi Kesatuan*, 8(3).
- Salsabila, N. . (2021). Analisis faktor motivasi, kemajuan teknologi, dan literasi keuangan terhadap minat generasi milenial dalam berinvestasi saham. *Prosiding Bisma: Jurnal Manajemen*, 8(2).
- Saputra, S. E., Natassia, R., & Utami, H. Y. (2020). The effect of religiosity moderation with loss aversion on the investment decision of personal investors kind of stock security in Padang City. *Andalas Management Review*, 4(1). <https://doi.org/https://doi.org/10.25077/amar.4.1.40-55.2020>
- Septiana, R. (2021). *Penerapan literasi digital sebagai upaya guru pai dalam meningkatkan karakter religius pada peserta didik kelas X di SMKN 1 Ponorogo*. IAIN Ponorogo.
- Solusindojitu. (2023). *Mau beli properti di Jogja? Kamu Wajib Baca ini Dulu*. Solusindojitu. <https://solusindojitu.com/strategi-investasi-properti-di-jogja/>
- Syawaluddin, F., & Ispriyahadi, H. (2023). The influence of financial literacy level, perception of return and technological progress on investment interest of millennial generation in Central Jakarta. *Fintech: Indonesian Journal of Banking and Financial Technology*, 1(4). <https://doi.org/10.55927/fintech.v1i4.6248>
- Syazana, A. (2022). *Pengaruh literasi digital pada sikap religiusitas remaja di SMA IT Abu Bakar Yogyakarta*. Universitas Muhammadiyah Yogyakarta.
- Taendelilin. (2010). *Portofolio dan investasi: Teori dan aplikasi*. Kanisius.
- Zuhirsyah, M., & Nurlinda. (2018). Pengaruh religiusitas dan persepsi nasabah terhadap keputusan memilih bank syariah. *Jurnal Kajian Ekonomi Dan Perbankan Syari'ah*, 10(1).