

INFLUENCE OF SOCIO-ECONOMIC, FINANCIAL LITERACY, AND DIGITAL FINANCIAL LITERACY ON GEN Z'S INVESTMENT BEHAVIOR

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Abstract: This study aims to analyze the impact of income and financial literacy on investment behavior through digital financial literacy as a mediation. The rise of information technology has brought significant changes in all sectors, financial sector is one of them. The rise of fintech can ease the process of doing investment activity but, on the other side, harm the users if they are not aware of the platform they are using. Gen Z in Surabaya is the population in this research since Gen Z dominates the number of investors in the capital market. The research method used is quantitative, where the data was collected from questionnaires that were analyzed statistically using SEM-PLS in the SmartPLS 3 program. The sampling method used is purposive sampling involving 172 Gen Z respondents from Surabaya. The results indicate that income has a significant effect on investment behavior, while financial literacy does not have a significant effect on investment behavior. However, digital financial literacy has a significant effect on investment behavior. Income has a significant effect on investment behavior when digital financial literacy serves as the mediation variable, partially mediating the relation. As well as financial literacy also has a significant effect on investment behavior when digital financial literacy serves as the mediator. Research suggests Gen Z actively enhances their financial literacy through self-learning from online courses or similar platforms. On the other hand, financial institutions can provide an accessible platform that can be easily accessed by Gen Z to improve their digital financial literacy.

Keywords: digital financial literacy, financial literacy, income, investment behavior

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INTRODUCTION

The current development of information technology has brought significant changes in all sectors, the financial sector is one of the main sectors. The rise of financial technology (fintech) demonstrates how digital technology has permeated the financial sector. The word "fintech" refers to a broad category of technical advancements that facilitate or enhance the delivery of financial services. The public can now swiftly and easily obtain financial services because of this fintech. Fintech includes services like investment apps, robo-advisors, peer-to-peer lending, cryptocurrency, e-payment, and crowdfunding (Kagan, 2024). According to the 2022/2023 AFTECH (Fintech Association) Annual Members Summary Report summary, as of Q3 2022, Indonesia's fintech sector accounted for approximately 33% of all funding for fintech startups in Southeast Asia, making it the second largest after Singapore, which received 43% of all funding (Databoks, 2023). This fact supports that there is a huge rise of fintech in Indonesia. The emergence of financial platforms makes it easier for many people to carry out financial activities, especially in terms of investing. Investment operations can be conducted through the use of a variety of programs, including Ajaib, Stockbit, IPOT, and numerous more. One of the users of fintech is Gen Z.

Gen Z, the generation known as digital natives, is the one who is influenced the most by the development of information technology. According to Parker & Igelnik (2020) from Pew Research Center, Generation Z consists of those who were born between 1997 and 2012. Based on the 2020 Population Census, Generation Z made up 27.94% of Indonesia's total population of 270.2 million people. The data shows that Gen Z is dominating the population followed by Millennials and Gen X. Even more, at Indonesia's 100th golden age, Generation Z is projected to contribute quite a large number of productive age workers in 2045. The National Development Planning Agency predicts that at the demographic peak in 2030-2040, the number of Gen Z in Indonesia will reach 64% of the total population (Katingka, 2023).

The rise of financial technology has resulted in the emergence of many new Gen Z investors. From Figure 1, KSEI (Indonesia Central Securities Depository) data shows from 2020 to February 2023, on average, the growth of the number of investors is around 125%. Based on the OJK (Indonesian Financial Services Authority) report, in July 2023, as many as 80.44% of investors in the capital market are dominated by the Millennial Generation and Gen Z. The majority of investments made by Gen Z are high-risk and high-return. However, according to Asikin Ashar, a professional trainer for PT BEI, Gen Zers nowadays are always demanding things immediately, and technological advancements have made it

simpler for us to obtain things quickly but improperly (Indonesia Stock Exchange, 2023). This bad investment behavior can easily lead Gen Z to investment scams that currently trending in Indonesia. The OJK estimates that by 2022, illegal investment in Indonesia is expected to cost IDR 120.79 trillion. This loss had the highest recorded value in the last ten years. In comparison to the previous year's period (year-over-year), which totaled IDR 2.54 trillion, the number of investment losses in 2022 even increased to 4,655.51% (Annur, 2023). This number of losses reflected the investment behavior of Gen Z which dominated the percentage amount of investors. This fact can be dangerous for the nation in the future because if the investment behavior of the society is lacking, it can influence the economy of a nation especially Indonesia in this case. It can cause several problems, such as asset bubbles, market crashes, and financial crises that will lead to economic instability. Gen Z is becoming the main concern in this research regarding their investment behavior. Because if their investment behavior is not being resolved, it can endanger the nation in the future.

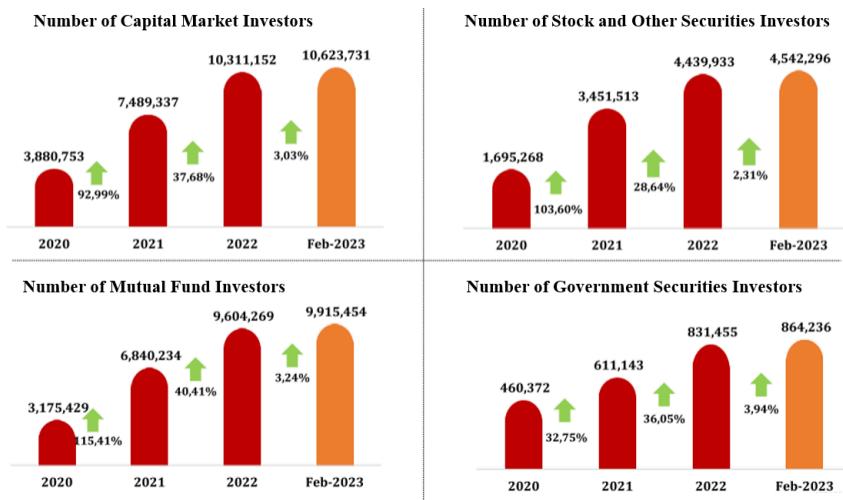


Figure 1 Growth of Investors in Indonesia from 2020 to Feb 2023

Source: *Kustodian Sentral Efek Indonesia* (2023)

Theory Planned Behavior (TPB) by Ajzen (1991) is used to explain human behavior, namely investment behavior in this research. One of the famous predictors of investment behavior is financial literacy. This theory states that one's behavior can be predicted by identifying their attitudes, subjective norms, and perceived behavioral control. It is aligned with the variable used in this research named socio-economic factors because the higher

someone's socio-economic factors the different behavior will be taken toward an event. It is caused by different generations' culture, circles, and awareness that are caused by three factors namely, age, income, and education. Following this view, people use their financial knowledge to make strategic decisions and take into account all relevant knowledge when acting deliberately. It denotes the ability to reason utilizing all available data and carry out computations, either directly or indirectly.

Financial literacy is defined as the ability of people to properly use and manage their financial resources as well as apply their knowledge and abilities to achieve long-term financial well-being (Yıldırım et al., 2017). This is because people with high financial literacy will have good investment behavior since the knowledge will lead to the right action in investing. This statement aligns with research from Van Rooij et al. (2011) that states people with high financial literacy are more likely to have good investment behavior by participating in the stock market. It is also supported by Chawla et al. (2022) found that young adults who possess financial literacy exhibit positive investment behaviors. However, the researcher found a gap regarding the result of financial literacy toward investment behavior because in some research in another place, that result is not significant. Research from Grohmann (2018) found that financial literacy does not have a significant effect on investment behavior, such as stock market participation in an Asian emerging country namely Thailand. Another research conducted in India by Singh (2018) found that financial literacy does not have a significant effect on investment behavior. Singh (2018) found that another factor that predicts investment behavior through stock market participation is income. However, these findings contradict research conducted by Asmara & Wiagustini (2021) that found income does not have a significant effect on investment behavior. According to Setiawan et al. (2020), income is one of the socio-economic factors besides age and income. Income is defined as the amount of money an individual earns every month. This result inconsistency needs to be mediated by digital financial literacy.

Digital financial literacy (DFL) is the degree to which an individual understands all aspects of financial literacy through the use of digital technology (Prasad et al., 2018). Digital financial literacy is very important because most of the investment activity is done through the digital platform. Thorough digital financial literacy is crucial because, similar to other technological advancements in the financial sector, digital innovations present potential risks such as data theft, financial loss, and others, in addition to benefits for users such as speed, convenience, and economy. Kass-Hanna et al. (2022) emphasize in their research the need to integrate digital financial literacy into traditional financial literacy to

bring it into line with global fintech development. Furthermore, Morgan et al. (2019) mentioned that digital financial literacy is now seen as a mediator between financial inclusion and financial literacy that enhances the efficacy of both, and there is an increasing need to strengthen it. According to Rahayu et al. (2022), the financial behavior of millennials in Indonesia is significantly influenced by their level of digital financial literacy. Therefore, increasing digital financial literacy can help Gen Z to improve their investment behavior by hindering illegal investments that can bring losses and choosing the most suitable investment according to their preferences that later on can bring a positive impact on the nation's economy.

According to previous research by Setiawan et al. (2020), digital financial literacy is influenced by socioeconomic factors such as age, education, and income. The study revealed that an individual's digital financial literacy is significantly influenced by their income and educational attainment. Rahayu et al. (2022) found that the only socioeconomic factor, namely income has a significant effect on digital financial literacy that can affect the investment behavior of millennials. Therefore digital financial literacy variable is perceived as the mediator because it is unique in mediating the effect of financial literacy and income on investment behavior. The novelty of this research will be testing the relationship of financial literacy toward investment behavior with digital financial literacy since there are only a few researchers that conduct this research. Based on the previous explanation, this research will try to find out the relationship between income and financial literacy to the investment behavior of Gen Z with digital financial literacy as the mediating variable. The model of analysis in this research is as follows:

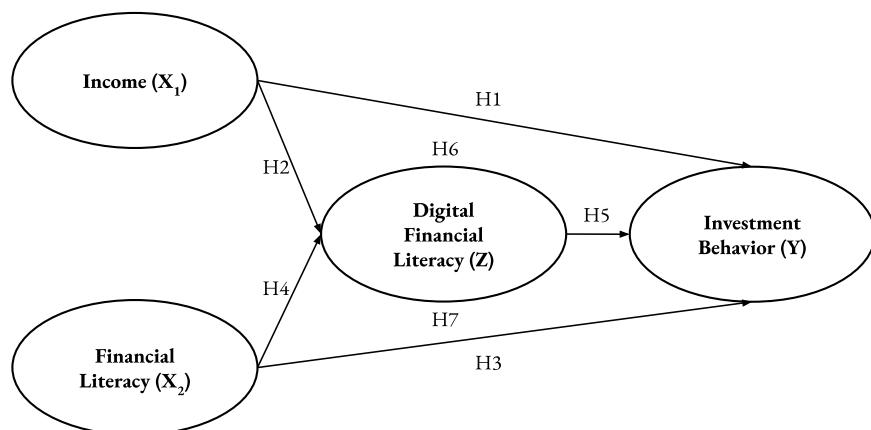


Figure 2 Analysis Model

Along with the analysis model, the author proposed these seven hypotheses that are to be tested in this research:

- H1: Income has a significant effect on investment behavior.
- H2: Income has a significant effect on digital financial literacy.
- H3: Financial literacy has a significant effect on investment behavior.
- H4: Financial literacy has a significant effect on digital financial literacy.
- H5: Digital financial literacy has a significant effect on investment behavior.
- H6: Digital financial literacy mediates the relationship between income and investment behavior.
- H7: Digital financial literacy mediates the relationship between financial literacy and investment behavior.

METHOD

The method used is quantitative, and the information obtained from questionnaires will be statistically analyzed using the Structural Equation Modelling Partial Least Square (SEM-PLS) tool from SmartPLS. SmartPLS is suitable for small sample sizes but high-impact results with more tolerance to non-normality and skewness of data (Hair et al., 2021). The researcher shared a questionnaire containing questions in which answers are in the form of a Likert scale: ranging from 1 (strongly disagree), 2 (disagree), 3 (somewhat agree), 4 (agree), and 5 (strongly agree). The choice was made to get exact responses from the respondents.

Metrics to assess validity were taken from convergent and discriminant validity. Convergent validity is measured using the average variance extracted (AVE) value, and discriminant validity is done by evaluating the heterotrait-monotrait (HTMT) ratio of correlation, cross-loading of the indicator, and the Fornell and Larcker criterion. Reliability is assessed using internal consistency measured by Cronbach's alpha value and indicator reliability measured by outer loadings value.

Some research tests done to test the inner model include R-square to calculate the structural model's overall effect size, F-square to describe how numerous different factors could affect a structural model, Q-square to show the precision of prediction of the structural framework corresponding to that construct, t-test to examines the significance of variations in path coefficients between segments, and mediation effect test to calculate the independent variable's and mediation variable's effects on the dependent variable.

Socio-economics is measured by three indicators (Setiawan et al., 2020), namely age, income, and education, but since the population in this research is Gen Z, age and education will act as the control variables. Financial literacy (FL) is measured by five indicators (Remund, 2010), digital financial literacy (DFL) is measured by four indicators (Rahayu et al., 2022), and investment behavior (IB) is measured by four indicators (Clarence & Pertiwi, 2023). All questionnaires use a 5-point Likert scale that ranges from 1 (strongly disagree), 2 (disagree), 3 (somewhat agree), 4 (agree), and 5 (strongly agree).

RESULTS

Table 1 Descriptive Statistic Analysis

Indicators	N	Mean	Std. Deviation	Evaluation
FL1	172	3.663	0.801	Agree
FL2	172	3.529	0.924	Agree
FL3	172	3.703	0.869	Agree
FL4	172	3.692	0.904	Agree
FL5	172	3.762	0.925	Agree
DFL1	172	4.250	0.822	Strongly Agree
DFL2	172	2.733	1.271	Somewhat Agree
DFL3	172	2.570	1.290	Disagree
DFL4	172	2.355	1.223	Disagree
DFL5	172	2.936	1.225	Somewhat Agree
DFL6	172	4.605	0.751	Strongly Agree
DFL7	172	2.203	1.368	Disagree
DFL8	172	2.256	1.412	Disagree
DFL9	172	3.012	1.381	Somewhat Agree
DFL10	172	3.506	1.118	Agree
DFL11	172	3.442	1.152	Agree
IB1	172	3.355	1.319	Somewhat Agree
IB2	172	2.901	1.417	Somewhat Agree
IB3	172	2.512	1.480	Disagree
IB4	172	2.686	1.457	Somewhat Agree
IB5	172	3.198	1.371	Somewhat Agree

As shown in Table 1, descriptive statistic analysis was done to analyze the data in this research. Based on the descriptive statistic table, DFL1 has the highest mean indicates that most of the respondents agree with this statement. Meanwhile, IB3 has the highest standard deviation, which indicates that the respondents' answers are more heterogeneous for this

statement.

Table 2 Average Variance Extracted

Variable	Average Variance Extracted (AVE)
Digital Financial Literacy (DFL)	0.601
Financial Literacy (FL)	0.682
Income (INC)	1.000
Investment Behavior (IB)	0.743

Convergent validity assesses the degree of agreement between associated indicators of a particular construct. Convergent validity is determined using the indicator's factor loading, composite reliability (CR), and average variance extracted (AVE). For convergent validity, the AVE value must be more than 0.50 (Hair et al., 2017). Table 2 shows that all variables have met the minimum permissible AVE value of 0.5. This signifies that all variables utilized in this study are valid.

Table 3 Cross Loading

Indicators	Digital Financial Literacy (DFL)	Financial Literacy (FL)	Income (INC)	Investment Behavior (IB)
DFL10	0.686	0.572	0.296	0.357
DFL11	0.760	0.582	0.282	0.453
DFL2	0.828	0.499	0.276	0.602
DFL3	0.808	0.449	0.276	0.530
DFL4	0.809	0.419	0.220	0.515
DFL5	0.760	0.460	0.202	0.446
DFL7	0.744	0.333	0.215	0.526
DFL8	0.779	0.443	0.234	0.495
DFL9	0.792	0.477	0.243	0.507
FL1	0.532	0.858	0.322	0.401
FL2	0.548	0.858	0.263	0.390
FL3	0.456	0.774	0.095	0.208
FL4	0.453	0.794	0.126	0.286
FL5	0.518	0.843	0.184	0.358
IB1	0.494	0.389	0.352	0.790
IB2	0.533	0.354	0.375	0.895
IB3	0.598	0.322	0.370	0.871
IB4	0.612	0.368	0.333	0.892
IB5	0.497	0.321	0.331	0.857
INC	0.324	0.250	1.000	0.409

In discriminant validity, it is necessary to evaluate the heterotrait-monotrait (HTMT) ratio of correlation, cross-loading of the indicator, and the Fornell and Larcker criterion. As long as the factor loading cut-off value is larger than 0.70, the factor loading indicators on the designated constructs must be above all other loading indicators when considering the cross-loading of indicators (Hair et al., 2017). The assigned construct has stronger factor loading indicators than all other constructions. According to the cross-loading results, as shown in Table 3, discriminant validity has already been demonstrated. These findings confirm that the indicators employed in this study are valid.

The Fornell-Larcker criterion was used to assess discriminant validity. Based on the statistics shown in Table 4, it is clear that the correlation between comparable variables is greater than that of distinct variables. These findings indicate that the variables employed in this study are valid.

Table 4 Fornell-Larcker Criterion

Variable	Digital Financial Literacy (DFL)	Financial Literacy (FL)	Income (INC)	Investment Behavior (IB)
Digital Financial Literacy (DFL)	0.775			
Financial Literacy (FL)	0.610	0.826		
Income (INC)	0.324	0.250	1.000	
Investment Behavior (IB)	0.638	0.406	0.409	0.862

Heterotrait-Monotrait Ratio (HTMT) is used to test the discriminant validity. Table 5 shows that all correlations between variable HTMT are lower than 0.9; therefore, discriminant validity is established. These findings confirm that the variables employed in this study are valid.

Table 5 Heterotrait-Monotrait Ratio (HTMT)

Variable	Digital Financial Literacy (DFL)	Financial Literacy (FL)	Income (INC)	Investment Behavior (IB)
Digital Financial Literacy (DFL)				
Financial Literacy (FL)	0.672			
Income (INC)	0.337	0.255		
Investment Behavior (IB)	0.692	0.444	0.428	

The results of Cronbach's alpha are used to assess internal consistency. The scores of composite reliability for each one of the variables in Table 6 exceed the threshold of 0.7. This implies that all of the variables utilized are dependable, as they meet the minimum threshold of 0.7.

Table 6 Cronbach's Alpha

Variable	Cronbach's Alpha
Digital Financial Literacy (DFL)	0.916
Financial Literacy (FL)	0.884
Income (INC)	1.000
Investment Behavior (IB)	0.913

Table 7 R-Squared Test

Variable	R-squared	Adjusted R-squared
Digital Financial Literacy (DFL)	0.403	0.396
Investment Behavior (IB)	0.452	0.443

As shown in Table 7, the R-squared value of digital financial literacy is 0.403, while the R-squared value of investment behavior is 0.452. This suggests that the three variables listed above, income, financial literacy, and digital financial literacy, can explain 45.2% of investment behavior. The remaining 54.8% could be explained by factors not included in this study. Based on these findings, the R-squared values for both variables are low since neither the digital financial literacy variable nor the investment behavior variable exceeded the value of 0.50. This suggests that the number of variables used in this research is very limited and that other variables are more effective than the variables used in this research.

F-square effect sizes of the variables are being tested in this research study, as shown in Table 8. With this being said, it can be affirmed that the F-square effect size of the first independent variable (income) with the mediation variable (digital financial literacy) is considered small since the score is more than 0.02 but below 0.15. This shows that the relationship between these variables is fairly significant. Meanwhile, the F-square effect size of the second independent variable (financial literacy) with the mediation variable (digital financial literacy) is considered large since the value has exceeded 0.35. This implies a significant link between these variables.

The F-square effect size on the association between income and investment behavior is deemed small because it is greater than 0.02 but less than 0.15. This suggests that the

association between these factors is regarded as substantial but has few practical implications. On the other hand, the F-square impact size on the association between financial literacy and investment behavior is regarded as zero because the values are less than 0.02. This means that the association between these factors is not considered significant. Finally, the F-square impact size on the association between digital financial literacy and investment behavior is regarded as medium, with values greater than 0.15 but less than 0.35. This means that the association between these factors is deemed substantial.

Table 8 F-Square Test

Variable	Digital Financial Literacy (DFL)	Investment Behavior (IB)
Digital Financial Literacy (DFL)		0.341
Financial Literacy (FL)	0.501	0.000
Income (INC)	0.052	0.083
Investment Behavior (IB)		

In Table 9, the Q-square predictive relevance of both digital financial literacy and investment behavior variables are 0.234 and 0.329, respectively. This indicates that both variables have medium predictive importance since their values are greater than 0.15 but less than 0.35. These independent variables are said to be accurate and valid to predict the Y variable since the Q-square values have all surpassed the minimum required value of 0.

Table 9 Q-Square Test

Variable	Q-square
Digital Financial Literacy (DFL)	0.234
Investment Behavior (IB)	0.329

In Table 10, the t-statistic value effect of income towards investment behavior is positive and significant in this study, as presented by the t-statistic value of 3.705 and p-values of 0.000 (≤ 0.05). The result of this research indicates that H1, "income has a significant effect on investment behavior," is accepted. The relationship between income and digital financial literacy has also proven to be positive and significant as the t-statistic value exceeds 1.96 with a value of 2.450, and the p-value is equivalent to 0.015 (≤ 0.05). This proves that H2, "income has a significant effect on digital financial literacy," is accepted. On the other hand, the relationship between financial literacy and investment behavior has proven to be positive but not significant as the t-statistic value does not exceed

1.96 with a value of 0.126, and the p-values are equivalent to 0.900 (>0.05). The result of this research indicates that H3, “financial literacy has a significant effect on investment behavior,” is rejected. Additionally, the t-statistic values between FL and DFL, as well as DFL and IB, are 9.783 and 7.543, respectively. These show that H4, “financial literacy has a significant effect towards digital financial literacy,” and H5, “digital financial literacy has a significant effect towards investment behavior,” are all accepted since their t-value are all >1.96 and their p-values are all 0.000 (≤ 0.05).

Table 10 Path Coefficients

Hypothesis	Path	Path Coefficients (Beta)	T Statistics	P-values	Statement
1	INC → IB	0.226	3.705	0.000	Hypothesis accepted
2	INC → DFL	0.183	2.450	0.015	Hypothesis accepted
3	FL → IB	0.009	0.126	0.900	Hypothesis rejected
4	FL → DFL	0.564	9.783	0.000	Hypothesis accepted
5	DFL → IB	0.559	7.543	0.000	Hypothesis accepted

According to the data shown in Table 11, it can be stated that the relationship between income towards investment behavior through digital financial literacy as mediation is positive and significant as the t-statistic value is 2.322 (> 1.96) and the p-value is 0.021 (≤ 0.05), thus H6 “digital financial literacy mediates the relationship between income and investment behavior” is accepted. Similarly, the relationship between financial literacy towards investment behavior through digital financial literacy as mediation is also positive and significant as the t-statistic value is 5.257 (> 1.96) and the p-value is 0.000 (≤ 0.05), thus H7 “digital financial literacy mediates the relationship between financial literacy and investment behavior” is accepted. These indicate that digital financial literacy used in this research model acts as a mediation variable that mediates the relationship between family income and investment behavior as well as the relationship between financial literacy and investment behavior,

Table 11 Specific Indirect Effects

Hypothesis	Path	Path Coefficients (Beta)	T Statistics	P-values	Statement
6	INC → DFL → IB	0.102	2.322	0.021	Hypothesis Accepted
7	FL → DFL → IB	0.316	5.257	0.000	Hypothesis Accepted

DISCUSSION

The study's findings indicate that there is a significant and positive correlation between income and investment, as indicated by the t-statistics values exceeding 1.96 and the p-values being less than 0.05. These values imply that both variables move in the same direction; thus, the higher the income a person has, the higher their investment behavior will be. These results align with the planned behavior theory by Ajzen (1991) that people with higher incomes might feel more in control of their financial circumstances, which would boost their confidence and perception that they can make profitable investments. Related to the respondents of this study whose last education attained was senior high school and a bachelor's degree, the greater the chance that respondents still study in university or are still in their early career. It means they can have more disposable income or spare money that can be used since most of them most likely do not have to cover all of the essential living costs, which can lead them to have better investment behavior with the disposable income they have. This finding aligns with research conducted by Singh (2018) that found income as the predictor of investment behavior. People with higher incomes most likely have a higher chance to participate in the stock market to invest. This is because people with higher incomes will have more spare money after they pay for essential things that can be used in investing activities. So, the investor will have more confidence and a positive attitude toward its investment actions. In this research, the population is Gen Z, who are still studying in educational institutions, which leads to the low number of income earned monthly; this can be the reason the effect of income toward investment behavior is significant but does not have a strong effect. This entails the effect of income on investment behavior.

The findings of this study indicate that income and digital financial literacy have a positive and substantial association, suggesting a proportionate link between these factors.

Their t-statistics values of > 1.96 and p-values < 0.05 demonstrate this. Higher income will lead to higher digital financial literacy because people with higher income can have more access and chances toward digital financial platforms, which can lead to more experience and knowledge regarding digital financial platforms. This is also consistent with the premise of planned behavior theory by Ajzen (1991); the higher the income, the more positive attitude someone has toward learning tools to increase and manage their wealth, which is digital financial literacy. Also, the higher someone's income, the higher the social level they will have where the society encourages or promotes learning use of digital platforms since the society has enough access and knowledge to digital financial platforms. Lastly, more financially literate people might feel more assured about their capacity to obtain and apply digital tools, which could impact how in control they perceive themselves when it comes to participating in digital financial activities.

Looking at the respondents' criteria where most of the respondents' highest education attained was senior high school and a bachelor's degree, which supports the argument that the respondents that have more disposable income can have more chances of exploring digital financial services that can help increase digital financial literacy. These research findings are consistent with prior research conducted by Setiawan et al. (2020) that discovered a substantial effect of income on digital financial literacy among millennials on Java Island. As a result of their increasing earnings, millennials will be more knowledgeable about digital financial activities. In another study conducted by Rahayu et al. (2022), Income and other socioeconomic characteristics were found to have a substantial impact on millennials' digital financial literacy on Sumatra Island. Meanwhile, other factors such as age and education show no substantial impact on digital financial literacy. This includes the impact of income on digital financial literacy.

This study found a positive and non-significant association between financial literacy and investment behavior, with t-statistic values of < 1.96 and p-values > 0.05 . This indicates that financial literacy and investment behavior are not proportionally correlated. The findings contradict the premise of planned behavior by Ajzen (1991) that proposed in this research where one of the variables namely, perceived behavioral control explains when people have higher financial literacy, an individual can deal with the complexity of investment that can enhance the performance of an individual on dealing with different investment instrument. Looking at the population of this research where Gen Z is still in the studying period at the university level or the early period of their career, people that have financial literacy do not necessarily have good investment behavior because they might have

the knowledge that they got from school or any education institution but they lack in the practical on how to relate the knowledge with making good investment behavior.

Examining the phenomenon of Gen Z behavior as described by Sentosa & Gosal (2023) where Gen Z has the habit of imitating the investment actions of others, such as friends, social media influencers, trends, and news sentiment. This tendency results in the abandoning of financial literacy in molding an individual's investment behavior. This result aligned with research conducted by Grohmann (2018) that discovered that financial knowledge has no substantial impact on investment behavior such as stock market participation in an Asian emerging country namely Thailand. This research finds that factors that affect investment behavior, in this case, stock market participation, are the amount of assets and level of income. This factor might occur because the higher knowledge someone has about finance will increase their awareness and decrease their confidence level to invest (in the stock market) since people with higher financial literacy know the system and risk of investing; therefore, they avoid making investment decisions. Another factor that can lead to this result is the researcher's argument that now, in the digital world era, every financial activity is done through the digital platform. So, financial literacy is not enough since it will not be relevant if the Gen Z investor does not have digital financial literacy. This refers to the connection between financial literacy and investment behavior.

Conclusion, Limitations, and Suggestions

Based on the results from the research that has been conducted previously, the conclusions are income has a significant effect on investment behavior, income has a significant effect on digital financial literacy, financial literacy does not have a significant effect on investment behavior, financial literacy has a significant effect on the digital financial literacy, digital financial literacy has a significant effect on the investment behavior, the mediation effect of digital financial literacy on income towards investment behavior is significant (partially mediates the relationship), and the mediation effect of digital financial literacy on financial literacy towards the investment behavior is significant (fully mediated the relationship).

The results denote that both independent variables directly affect the mediation variable significantly. However, only one independent variable, namely income, has a significant effect on the dependent variable. This implies that an individual's investment behavior can be enhanced through the role of income. The indirect effect test shows that when digital financial literacy mediates the relationship, both independent variables have a

significant impact on the dependent variable. Digital financial literacy partially helps to mediate the relationship between income and investment behavior. However, because the direct effect is negligible, digital financial literacy fully mediates the link between financial literacy and investment behavior.

Digital financial literacy has a greater indirect effect on mediating the correlation between financial literacy and investment behavior than on the correlation between income and investment behavior. This suggests that if an individual, especially Gen Z, has financial literacy, it must be supported by digital financial literacy that equips an individual with the literacy needed to use digital financial platforms that can lead to better investment behavior. Therefore, public education institutions such as universities and governments should pay attention to the curriculum and socialization that is done to the society, mainly Gen Z. Adding digital financial literacy to the curriculum can enhance Gen Z investment behavior that in the future can help to keep the nation's economy. A unique finding in this research is that financial literacy is no longer relevant, especially for Gen Z, and the most important one is digital financial literacy in shaping their investment behavior. There is a big shift with the rise of technology development, especially fintech development, that shaping new behavior for the current and upcoming generation. Therefore, there is an urgency to increase national digital financial literacy to improve investment behavior.

To enhance Indonesians' digital financial literacy, especially among Generation Z, various stakeholders must take active roles. The government should integrate digital financial literacy into the national curriculum and launch awareness campaigns to emphasize its importance. As fintech platforms continue to grow, equipping Gen Z with essential financial skills can help prevent negative investment experiences. Educational institutions also play a crucial role by incorporating digital financial literacy into their curriculum, offering both theoretical knowledge and practical applications. Since many Gen Z individuals are still in school or university, this approach can significantly shape their investment behavior from an early stage. Other than that, students must act proactive in independently seeking knowledge regarding digital financial literacy and have practical engagement in their daily lives so they can have a clear perception of the digital finance world. Beyond education, financial institutions must adapt to the digital era by transforming their products into user-friendly digital solutions tailored to Gen Z's needs. Financial institutions can provide an engaging learning platform for Gen Z to increase their digital financial literacy and have a chance to be hands-on with the digital finance world. Banks and financial securities can offer experiential learning opportunities and free webinars

to improve digital financial literacy.

It is important to note that the study research has some limitations. First, this research only focused on Gen Z in Surabaya, which might not represent the factors affecting other places due to different education, culture, etc. In addition, the majority of results of questionnaires from Gen Z in West Surabaya can be reached by the researcher, since from the spread of the questionnaire, not all questionnaires got replied; therefore, the result might not represent the whole population. Moreover, the questionnaires are spread using online forms that might generate different perspectives from each respondent. From this, future researchers should explore additional factors influencing investment behavior, such as parental financial habits, peer influence, and herding behavior. Expanding the study to larger populations across different regions or countries can provide more comprehensive insights. Additionally, refining research methodologies, such as questionnaire design, can help ensure accurate and meaningful results in understanding the financial habits of the next generation.

REFERENCES

Ajzen, I. (1991). The Theory of Planned Behavior. *Organizational Behavior and Human Decision Processes*, 50(2), 179–211. [https://doi.org/10.1016/0749-5978\(91\)90020-T](https://doi.org/10.1016/0749-5978(91)90020-T)

Annur, C. M. (2023, August 30). Kerugian Investasi Ilegal RI Capai Rp120,79 Triliun, Rekor Tertinggi Sedekade. Databoks. Retrieved 31 Desember, 2024, from: <https://databoks.katadata.co.id/datapublish/2023/08/30/kerugian-investasi-illegal-ri-capai-rp12079-triliun-rekor-tertinggi-sedekade>

Asmara, I. P. W. P., & Wiagustini, L. P. (2021). The Role of Financial Literacy in Mediation of Sociodemographic Effects on Investment Decisions. *International Journal of Business Management and Economic Review*, 4(4), 133–152. <https://doi.org/10.35409/ijbmer.2021.3289>

Chawla, D., Bhatia, S., & Singh, S. (2022). Parental Influence, Financial Literacy and Investment Behaviour of Young Adults. *Journal of Indian Business Research*, 14(4), 520–539. <https://doi.org/10.1108/JIBR-10-2021-0357>

Clarence, J., & Pertiwi, D. (2023). Financial Management Behavior Among Students: The Influence of Digital Financial Literacy. *International Journal of Financial and Investment Studies*, 4(1), 9-16. <https://doi.org/10.9744/ijfis.4.1.9-16>

Databoks. (2023, July 27). Fintech Indonesia Annual Members Survey 2022/2023.

Retrieved 31 Desember, 2024, from:
<https://databoks.katadata.co.id/publikasi/2023/07/27/fintech-indonesia-annual-members-survey-20222023>

Grohmann, A. (2018). Financial Literacy and Financial Behavior: Evidence from the Emerging Asian Middle Class. *Pacific-Basin Finance Journal*, 48, 129–143. <https://doi.org/10.1016/j.pacfin.2018.01.007>

Hair, J. F., Hult, G. T. M., Ringle, C. M., & Sartedt, M. (2017). *A Primer on Partial Least Squares Structural Equation Modeling (PLS-SEM)* (2nd ed.). SAGE Publications, Inc

Hair, J. S., Hult, G. T. M., Ringle, C. M., Sarstedt, M., Danks, N. P., & Ray, S. (2021). *Partial Least Squares Structural Equation Modeling (PLS-SEM) Using R: A Workbook (Classroom Companion: Business)* (1st ed.). Springer Nature

Indonesia Stock Exchange. (2023, January 18). Gen – Z Melek Investasi ‘How To Invest Your Money Properly’. Retrieved 31 Desember, 2024, from:
<https://rdis.idx.co.id/id/news/gen-z-melek-investasi-how-to-invest-your-money-properly>

Kagan, J. (2024, March 25). Financial Technology (Fintech): Its Uses and Impact on Our Lives. Investopedia. Retrieved 31 Desember, 2024, from:
<https://www.investopedia.com/terms/f/fintech.asp>

Kass-Hanna, J., Lyons, A. C., & Liu, F. (2022). Building Financial Resilience Through Financial and Digital Literacy in South Asia and Sub-Saharan Africa. *Emerging Markets Review*, 51, 1-28. <https://doi.org/10.1016/j.ememar.2021.100846>

Katingka, N. (2023, July 8). Persiapkan Generasi Z Mengisi Puncak Bonus Demografi. Kompas. Retrieved 31 Desember, 2024, from:
<https://www.kompas.id/baca/humaniora/2023/07/08/persiapkan-generasi-z-mengisi-puncak-bonus-demografi>

Kustodian Sentral Efek Indonesia. (2023). *Statistik Pasar Modal Indonesia*. Retrieved 31 Desember, 2024, from:
https://www.ksei.co.id/files/Statistik_Publik - Februari_2023_v3.pdf

Morgan, P. J., Huang, B., & Trinh, L. Q. (2019). *The Need to Promote Digital Financial Literacy for the Digital Age*. In The Future of Work and Education for the Digital Age (1st ed.). ADBI Press.

Parker, K., & Igielnik, R. (2020). On the Cusp of Adulthood and Facing an Uncertain Future: What We Know About Gen Z So Far. Pew Research Center. Retrieved, 31

December, 2024, from:

<https://www.pewresearch.org/social-trends/2020/05/14/on-the-cusp-of-adulthood-and-facing-an-uncertain-future-what-we-know-about-gen-z-so-far-2/>

Prasad, H., Meghwal, D., & Dayama, V. (2018). Digital Financial Literacy: A Study of Households of Udaipur. *Journal of Business and Management*, 5, 23-32. <http://dx.doi.org/10.3126/jbm.v5i0.27385>

Rahayu, R., Ali, S., Aulia, A., & Hidayah, R. (2022). The Current Digital Financial Literacy and Financial Behavior in Indonesian Millennial Generation. *Journal of Accounting and Investment*, 23(1), 78-94. <https://doi.org/10.18196/jai.v23i1.13205>

Remund, D. L. (2010). Financial Literacy Explicated: The Case for a Clearer Definition in an Increasingly Complex Economy. *Journal of Consumer Affairs*, 44(2), 276-295. <https://doi.org/10.1111/j.1745-6606.2010.01169.x>

Sentosa, K. Y. K., & Gosal, G. G. (2023). Exploring the Influence of Parental Financial Behavior, Financial Literacy, and Herding Behavior on Investment Behavior Among Generation Z Investors. *Soedirman Accounting Review (SAR): Journal of Accounting and Business*, 8(2), 192-205. <https://doi.org/10.32424/1.sar.2023.8.2.10241>.

Setiawan, M., Effendi, N., Santoso, T., Dewi, V. I., & Sapulette, M. S. (2020). Digital Financial Literacy, Current Behavior of Saving and Spending and Its Future Foresight. *Economics of Innovation and New Technology*, 31(4), 320-338. <https://doi.org/10.1080/10438599.2020.1799142>

Singh, R. (2018). Analyzing Factors Affecting Financial Literacy and its Impact on Investment Behavior among Adults in India. *SSRN*, 1-24. <http://dx.doi.org/10.2139/ssrn.3266655>

Van Rooij, M., Lusardi, A., & Alessie, R. (2011). Financial Literacy and Stock Market Participation. *Journal of Financial Economics*, 101(2), 449-472. <https://doi.org/10.1016/j.jfineco.2011.03.006>

Yıldırım, M., Bayram, F., Oğuz, A., & Günay, G. (2017). Financial Literacy Level of Individuals and Its Relationships to Demographic Variables. *Mediterranean Journal of Social Sciences*, 8(3), 19-26. <https://doi.org/10.5901/mjss.2017.v8n3p19>

