

Millennial's Investment and Debt Behavior

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Abstract

This study examines the varying influences that Indonesian Millennial Generations bring to the relationship between behavior and views toward finance and their intentions for investments and debts. Financial literacy, risk perception, materialism, emotion, and religiosity are all influencing factors. 200 people participated in a quantitative method survey used in the methodology study. Using Smart-PLS version 4, SEM analysis is used to test the hypothesis. The findings of the study indicate that there is a significant relationship between financial literacy and both investment and debt intention. In addition, materialism has an impact on investment intention, while religiosity has an impact on debt investment. Aside from that, there is no influence from Religion, Emotion, or Risk Perception on Investment Intention; however, Materialism, Emotion, and Risk Perception do influence Debt Intention.

Keywords Millennial, Investment Intention, Debt Intention, Financial Literacy, Risk Perception, Materialism, Emotion, Religiosity

INTRODUCTION

Millennials are a generation born between 1980-2000 who live in the digital era with easy access to information and technology (BPS, 2018; Martin & Tulgan, 2006; Tapscott, 1998). This generation has its own way of managing its finances compared to previous generations and is supported by the sophistication of technology that currently exists (Chen, 2022). There are various options for achieving financial goals in the millennial generation, namely in managing finances with an intention in investment (Hooker, 2017; Karanam & Shenbagavalli, 2019) and intention in debt (Business Insider, 2023; CNBC, 2023; and Prakash, 2023).

According to research conducted by McKinsey (2021) in the *McKinsey report on Investing*, states that the millennial generation carries out a lot of investment activities. The report notes that millennials are the largest generation in the workforce and the generation that is starting to accumulate wealth by investing wisely and are more likely to use digital channels to invest in private equity and venture capital than previous generations.

In investing, what is reflected in the behavior of stock investors is projected through the desire or intention of individual investors to invest in stock instruments (Rahadjeng & Fiandari, 2020). Investors' intentions towards shares can be reflected in the return estimates calculated by investors using various information. Intention is the desire or intention that an investor has in behaving which arises because there is various information that drives the desire of investors who have a tendency to invest (Sashikala & Chitramani, 2018).

Apart from the behavior of intention in investing, the behavior of intention in debt is also very important and is a characteristic of the millennial generation who have strong purchasing power (Rudhiwantoro, 2018; Widjaja & Pertiwi, 2021). In Indonesia, millennials from lower middle to upper economic levels are often in debt, due to their bourgeois style



of spending money to fulfill their lifestyle (Supriyatna, 2019; Widjaja & Pertiwi, 2021) . The millennial generation's income is enough to meet a month's needs and can be set aside for investment, but millennials choose not to invest because there are still installments or debts needed for lifestyle needs (CNBC Indonesia, 2019; Rahayu, 2019) .

Of the various phenomena that occur in investment intention and debt intention among the millennial generation , there are factors that influence it. There are several factors that influence this research, namely: *Financial Literacy* (DAT, 2020; Hamka et al., 2020; Obeng-Manu, 2022; Sadiq & Khan, 2018; Waheeda et al., 2020; Wisudanto & Mubarak, 2016) , *Risk Perception* (Ademola et al., 2019; An & Dharmendra H, 2022; Aren & Zengin, 2016; Baghani & Sedaghat, 2016; Bairagi & Chakraborty, 2018; J. Jain et al., 2023; Sindhu & Kumar, 2014; Tandio, 2016; Tyas et al., 2019; Wachinger et al., 2013) , *Materialism* (Kanten et al., 2018; Lerner et al., 2015; Sashikala & Chitramani, 2018; Widayati et al., 2021) , *Emotion* (Breaban & Noussair, 2018; Duxbury, 2015; Kartini & Nugraha, 2015; Riaz & Iqbal, 2015; Yip & Schweitzer, 2016) and *Religiosity* (Asutay et al., 2023; Chircop et al., 2020; Jones et al., 2023; Mumtaz et al., 2022; Niveditasri & Sanmitha, 2020).

The differences in research variables, research subjects and analytical tools used in previous research became the author's background for research. Based on the explanation above, what is intentioning for the author in conducting research is to find out the various influences inherent in the millennial generation when looking at the relationships that influence financial behavior and attitudes in intention in investing and intention in debt, hence the title of this research.

LITERATURE REVIEW

Behavioral Finance Theory is a behavioral finance theory idea researched by Amos Tversky and Nobel Laureate Daniel Kahneman , psychologists who study human biases and cognitive errors (Bakar & Yi, 2016) . In the 1990s, behavioral finance theory was proposed to challenge modern portfolio theory that assumes efficient markets and rational investors by combining psychological factors and financial theory (Masini & Menichetti, 2012) . Behavioral finance theory emerged because it can explain financial market anomalies that cannot be explained by modern financial theory (Woo et al., 2020) .

Theory of Planned Behavior (TPB) is a further development of *Theory of Reasoned Action* (TRA). Based on research conducted by Ajzen (1991) , adding a construct that does not yet exist in TRA, namely perceived behavioral control (Perceived Behavioral Control) . Intention to carry out a behavior is a person's tendency to determine whether he will do or not do a job (Yuniningsih & Santoso, 2020) .

In this research, a sample of the Indonesian millennial generation was used . Based on several opinions of experts from various countries and professions, determining who the millennial generation is can be concluded that the millennial generation is the generation born between 1980 and 2000 (Central Statistics Agency, 2018) .

The dependent variables in this research are Investment Intention and Debt Intention. Intention basically arises from a person's experience (Fastrich & Murayama, 2020) . One of the factors that influences intention is internal drive, namely stimulation from the

environment that is in harmony with a person's desires or needs, thereby triggering that intention (Abend, 2022). A person's intentions are influenced by various internal and external factors which vary for each individual. The desire to invest is a deep desire to understand everything related to investment so that you can apply it effectively (Bebasari & Istikomah, 2020; R. Jain & Bhardwaj, 2023) . The variables that influence the dependent variable in this research are: Financial Literacy, Risk Perception, Materialism, Emotion and Religiosity .

Literacy is knowledge, skills and beliefs, which influence attitudes and behavior to improve the quality of decision making and financial management in order to achieve prosperity (Financial Services Authority, 2017) . By improving financial literacy, it becomes knowledge, skills and beliefs, which influence attitudes and behavior to improve quality. decision making and financial management in order to achieve prosperity. The higher the level of financial literacy of an investor, the better their understanding of various aspects of finance, including knowledge of the risks they may face in the future and skills in managing and utilizing their funds (Al-Hakim et al., 2023; Obeng-Manu, 2022; Primastuti Dyah Shintawati & Gusti Agung Musa Budidarma, 2023).

Risk Perception is a subjective assessment made by a person about the characteristics and severity of risk (Alquraan et al., 2016) . Risk assessment is a perception that is formed in a person when facing a risky situation, where this assessment varies between individuals because it is influenced by each individual's psychological characteristics and personal conditions (Choi & Lee, 2003) . Meanwhile, when individuals experience losses due to bad decisions they have taken, they tend to define the situation as a risky situation (Zhang et al., 2019) . When someone understands the risks associated with investing and is able to assess these risk tendencies, they will become more careful in taking investment intention. Additionally, awareness of these risks makes individuals more reluctant to take on debt, as they worry about the negative consequences that might arise if they are unable to repay the debt. As a result, a deep understanding of risk encourages a person to look for other ways to manage their financial needs, such as saving or looking for additional sources of income, thereby reducing the intention and desire to take on debt.

Materialism is described as the center of life (Acquisition Centrality) which means everything that is owned and obtained becomes the center of a person's life. such as the desire to have things that can be said to be luxurious, namely houses, cars, excessively luxurious clothes (Richins & Dawson, 1992) . In the modern era, investment has become part of a lifestyle that is associated with social status and luxury. A materialistic person tends to invest more because they see it as a way to improve their self-image and social status. Ownership of assets such as gold is not only seen as a form of financial security, but also as a symbol of class and luxury. This strong desire to fulfill their lifestyle needs often drives them to take on debt in order to quickly obtain the goods they want.

Emotions are complex psychological and physiological states that involve various feelings (Klingner & Guntinas-Lichius, 2023) . Various studies say that emotions influence decision making in investing (Duxbury, 2015; Riaz & Iqbal, 2015; Syariati et al., 2019) . Positive emotions, such as happiness, have a significant influence on a person's intention in



investing. When someone feels happy and satisfied, they tend to have a more optimistic view of the future. This happiness encourages them to maintain and prolong this feeling in the long term. This awareness makes individuals think twice before taking on debt, because they do not want to sacrifice their happiness and financial stability in the future to fulfill immediate needs or desires. Therefore, positive emotions such as happiness can act as a barrier to a person's intention in debt.

Religiosity is defined as a guideline for behaving, acting and behaving in accordance with the teachings of the religion one adheres to, for example when making decisions which serve as guidance for each individual to make choices according to their religious knowledge (Tentero et al., 2021) . Religious people tend to have a different view of money than people who are not religious. Religious people tend to believe that money is a tool that can be used for good (Elias & Malini, 2020; Fitriyani & Anwar, 2022) . For most religions, there are principles that recommend avoiding usury or intention generated from debt, because it is considered unethical and contrary to the teachings of that religion. Awareness of these prohibitions encourages religious individuals to avoid debt whenever possible, because they wish to adhere to the principles of their religion and avoid possible sins or spiritual consequences that may arise from violating these prohibitions. Therefore, a person's level of religiosity can be an inhibiting factor in their intention in taking on debt.

Thus, the following hypothesis is created:

H₁ : *Financial Literacy* influences *Investment Intention*.

H₂ : *Risk Perception* influences *Investment Intention*.

H₃ : *Materialism* influences *Investment Intention*.

H₄ : *Emotion* influences *Investment Intention*.

H₅ : *Religiosity* influences *Investment Intention*.

H₆ : *Financial Literacy* influences *Debt Intentions*.

H₇ : *Risk Perception* influences *Debt Intentions*.

H₈ : *Materialism* influences *Debt Intentions*.

H₉ : *Emotion* influences *Debt Intentions*.

H₁₀ : *Religiosity* influences *Debt Intentions*.

METHOD

The approach in this research is a quantitative approach. Based on the opinion of Sekaran & Bougie (2019) , the quantitative approach emphasizes various variables as research objects and these variables must be defined in the form of operationalization of each variable and understanding from outside. The method used in this research is the survey method . As is known, the survey method is a research method that uses a questionnaire as a data collection instrument.

The sampling technique that will be used for this research is nonprobability sampling using a purposive sampling approach because not all samples have criteria that match those determined by the researcher, therefore the sample was deliberately determined based on certain criteria in order to obtain representative results. Several criteria set to obtain samples in this study are as follows: The age range of the millennial generation is 25 to 45 years;

Millennial generation education from high school to doctoral degree; Range of types of work from students, civil servants/TNI/Polri/BUMN, private employees and entrepreneurs; The income/salary of the millennial generation is in the range below IDR 2,000,000 to above IDR 20,000,000.

The dependent variable in this research is *Investment Intention* (Y_1) and *Debt Intention* (Y_2). Indicators in *Investment Intention* (Y_1) as follows: Personal needs include confidence in investing for financial goals and confidence in getting the expected results when investing; Risks accepted when investing; Ease of access including investing online; Intention in learning more about investing from seminars and *workshops*. Meanwhile in the *Debt indicator Intention* (Y_2), as follows: Planning to consider carefully before going into debt; Individual confidence in paying bills; Individual confidence in choosing to pay in installments when purchasing an item; Social environment such as experts and influencers on social media; Intention in ease of access and service features provided.

The independent variable in this research is *Financial Literacy* (X_1), *Risk Perception* (X_2), *Materialism* (X_3), *Emotion* (X_4) and *Religiosity* (X_5). *Financial Literacy* has indicators, namely: Understanding financial terms; Follow news and information about finance; Understand and be able to manage personal finances well; Have an understanding of the sources of personal balance. *Risk Perception* has indicators, namely: Knowing the source of the risk that occurs; Following news and information; Manage personal finances well; Have an understanding of the sources of personal balance; Understand that in managing finances there are risks. *Materialism* has indicators, as follows: Trying to live simply in possessions; Having and liking things to impress others; Buying something can provide pleasure; Loves luxury life. *Emotion* has indicators, as follows: Controlling one's emotions in acting; Have high enthusiasm in seeking information; Positive beliefs and hopes for a better life; Confident in the decisions taken; Be calm and comfortable if you have a clear plan. *Religiosity* has indicators, as follows: Obedient worship; Read scriptures regularly; Belief that God will provide a safe life during hard work; Moral responsibility to use money wisely; Consider ethical and moral values when doing charity.

In this study, researchers used a five-point Likert scale measurement. The Likert scale is used to measure the attitudes, opinions and perceptions of respondents. The scale measurement variables in this study use a Likert scale, where each is made with a scale of 1-5 alternative answers, namely 1=Strongly Disagree, 2=Disagree, 3=Disagree, 4=Agree, 5=Strongly Agree (Malhotra, 2010). Data analysis techniques are used to answer problem formulations or test hypotheses that have been formulated. Data management in this research will use SMARTPLS software. Structural Equations Modeling (SEM) is a method used to cover the weaknesses found in the regression method. Evaluation of the reflective measurement model consists of Loading factor (LF) ≥ 0.70 , Composite Reliability (CR) ≥ 0.70 , Cronbach's Alpha ≥ 0.70 , Average Variance Extracted (AVE) ≥ 0.50 , and Discriminant Validity is Fornell and Larcker criteria and HTMT (Heterotrait Monotrait Ratio) below 0.90 and Cross Loading.



RESULTS AND DISCUSSION

Description Statistics

Frequency shows how often a phenomenon occurs. Central tendency meters, or also called location meters, include mean, median, and mode which measure the central values of the data distribution (Jogiyanto, 2014).

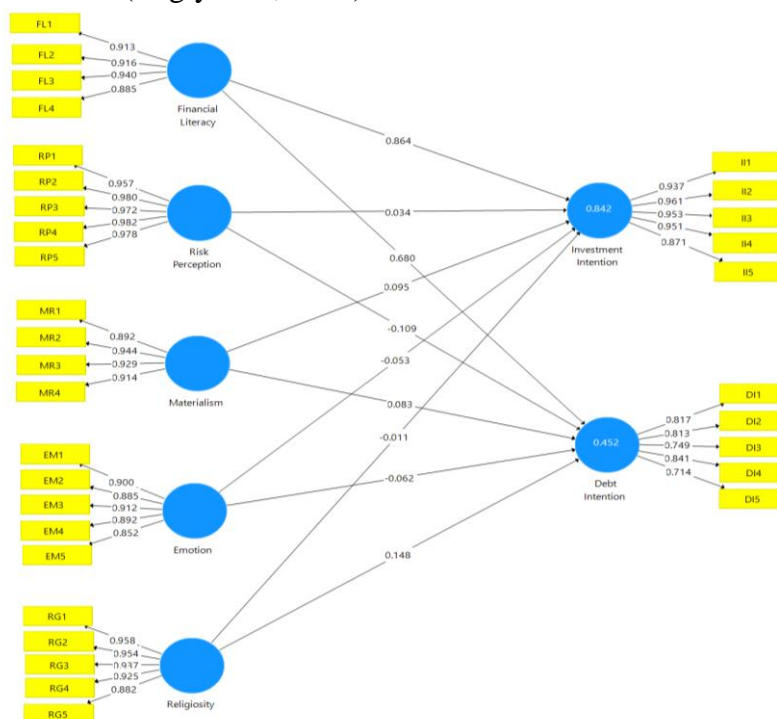


Figure 1. Framework Analysis Model

The description of the symbols in the research is as follows: II (Investment Intention), DI (Debt Intention), FL (Financial Literacy), MR (Materialism), EM (Emotion) and Religiosity (RG).

Construct Reability and Validity

Table 1. Cross Loading

	Cronbach's Alpha	rho_A	Composite Reliability	Average Variance Extracted (AVE)
Debt Intention	0.881	1,105	0.891	0.621
Emotions	0.934	0.960	0.949	0.789
Financial Literacy	0.934	0.940	0.953	0.835
Investment Intention	0.964	0.965	0.972	0.874
Materialism	0.940	0.948	0.957	0.846
Religiosity	0.962	0.999	0.971	0.868
Risk Perception	0.986	0.994	0.989	0.948

Source: SEM PLS output obtained by researcher (2024)

Show that all over variable have Composite Reliability value is above 0.70 so can said reliable. Whereas for the entire AVE value above 0.50. This matter show that the average variance of the measurement items contained by the variable the above 50%. From the results measurement the can concluded that evaluation of measurement models from aspects of Convergent Validity have fulfilled .

Discriminant Validity

Table 2. Cross Loading

	Debt Intention	Emotions	Financial Literacy	Investment Intention	Materia lism	Religiosity	Risk Perception
DI1	0.817	0.161	0.837	0.898	0.450	0.175	0.494
DI2	0.813	0.071	0.388	0.397	0.231	0.099	0.310
DI3	0.749	-0.028	0.195	0.224	0.049	0.177	-0.030
DI4	0.841	0.018	0.319	0.366	0.132	0.214	0.145
DI5	0.714	0.010	0.131	0.131	0.041	0.221	0.070
EM1	0.109	0.900	0.285	0.254	0.165	-0.053	0.292
EM2	0.072	0.885	0.240	0.138	0.100	-0.138	0.222
EM3	0.095	0.912	0.275	0.191	0.179	-0.079	0.298
EM4	0.095	0.892	0.215	0.177	0.075	-0.041	0.203
EM5	0.069	0.852	0.245	0.176	0.037	-0.042	0.243
FL1	0.438	0.261	0.913	0.893	0.445	0.057	0.648
FL2	0.729	0.186	0.916	0.893	0.474	0.160	0.522
FL3	0.552	0.302	0.940	0.805	0.374	0.077	0.592
FL4	0.616	0.315	0.885	0.728	0.303	0.069	0.577
II1	0.850	0.166	0.840	0.937	0.507	0.145	0.520
II2	0.653	0.164	0.819	0.961	0.490	0.075	0.492
II3	0.840	0.193	0.887	0.953	0.487	0.132	0.581
II4	0.573	0.262	0.897	0.951	0.428	0.075	0.654
II5	0.310	0.233	0.815	0.871	0.352	0.003	0.624
MR1	0.287	0.148	0.352	0.346	0.892	0.078	0.519
MR2	0.295	0.136	0.406	0.450	0.944	0.106	0.498
MR3	0.338	0.123	0.417	0.473	0.929	0.039	0.379
MR4	0.298	0.086	0.436	0.495	0.914	0.060	0.449
RG1	0.177	-0.098	0.086	0.079	0.033	0.958	0.110
RG2	0.266	-0.095	0.078	0.093	0.078	0.954	0.096
RG3	0.151	-0.051	0.101	0.088	0.058	0.937	0.150
RG4	0.212	-0.057	0.137	0.109	0.099	0.925	0.174
RG5	0.145	-0.033	0.073	0.054	0.076	0.882	0.090
RP1	0.360	0.271	0.697	0.704	0.483	0.086	0.957
RP2	0.410	0.290	0.614	0.574	0.486	0.178	0.980
RP3	0.413	0.280	0.636	0.614	0.483	0.178	0.972
RP4	0.312	0.289	0.567	0.533	0.486	0.125	0.982
RP5	0.272	0.273	0.557	0.536	0.474	0.075	0.978

Source: SEM PLS output obtained by researcher (2024)



Based on table 2 Cross Loading , the construct of all research variables has a construct value that is greater than the loading value of the other construct . A larger value indicates the suitability of an indicator to explain the construct compared to explaining other constructs .

Evaluation of Inner Model (Structural Model)

R- Square (R2)

R2 represents the variance explained in each endogenous construct and is a measure of the explanatory power of the model referred to as predictive power in the sample (Shmueli & Koppius , 2011). As a general guideline, R7 values are 0.75 (Strong), 0.50 (Moderate), and 0.25 (Weak) in many social science disciplines (Hair , Ringle , & Sarstedt , 2011).

Table 3. R- Square (R2)

	R Square Adjusted
Debt Intention	0.438
Investment Intention	0.838

Source: SEM PLS output obtained by researcher (2024)

Based on table 3, it can be identified that R- square is Intention of Investment = 0.838 which means that the construct ability of the variables Financial Literacy , Risk Perception , Materialism , Emotion and Religiosity in explaining Intention of Investment/investment intention of 0.838 or 83.8% (strong). The independent variables have a strong relationship in explaining Intention of Investment/investment intention.

As for R- square in Intention of Debt = 0.438 which means that the construct ability of the variables Financial Literacy , Risk Perception , Materialism , Emotion and Religiosity in explaining Intention of Investment/investment intention of 0.438 or 43.8% (medium). The independent variable tends to have a moderate relationship in explaining Intention of Debt / intention in debt.

F- SQUARE (F2)

The f- square value is used to assess how big the relative influence of the independent latent construct is on dependent latent construct , with the following criteria:

1. If the f2 value <0.02 then the relationship between constructs is weak
2. If the f2 value is > 0.15 then the relationship between constructs is moderate .
3. If the f2 value is > 0.35 then the relationship between constructs is strong

Table 4. f- Square

	Debt Intention	Emotion	Financial Literacy	Investment Intention	Materialism	Religiosity	Risk Perception
Debt Intention							

Emotions	0.006 (weak)			0.016 (weak)			
Financial Literacy	0.473 (strong)			2,657 (strong)			
Investment Intention							
Materialism	0.009 (weak)			0.041 (currently)			
Religiosity	0.039 (currently)			0.001 (weak)			
Risk Perception	0.011 (weak)			0.004 (weak)			

Source: SEM PLS output obtained by researcher (2024)

Hypothesis testing

Hypothesis testing is carried out to see the influence of an independent variable on the dependent variable. To find out whether there is an influence of each variable, the bootstrapping method is carried out in smartPLS. Bootstrapping will produce a path table coefficient (path coefficient) for testing direct influence. In path coefficient contains the original value sample, t- statistics and p- values that will be used in hypothesis testing.

Table 5. Path Coefficient (Path Coefficient)

	Original Sample (O)	Samples Mean (M)	Standard Deviation (STDEV)	T Statistics (O/STDEV)	P Values	Results
Emotions -> Debt Intention	-0.062	-0.059	0.057	1,075	0.283	No Influence
Emotions -> Investment Intention	-0.053	-0.052	0.029	1,850	0.065	No Influence
Financial Literacy -> Debt Intention	0.680	0.676	0.057	11,992	0,000	Influence
Financial Literacy -> Investment Intention	0.864	0.868	0.030	28,556	0,000	Influence
Materialism -> Debt Intention	0.083	0.079	0.073	1,134	0.257	No Influence
Materialism -> Investment Intention	0.095	0.094	0.044	2,179	0.030	Influence
Religiosity -> Debt Intention	0.148	0.153	0.049	3,047	0.002	Influence
Religiosity -> Investment Intention	-0.011	-0.010	0.027	0.416	0.678	No Influence
Risk Perception -> Debt Intention	-0.109	-0.107	0.078	1,391	0.165	No Influence
Risk Perception -> Investment Intention	0.034	0.032	0.041	0.840	0.401	No Influence

Source: SEM PLS output obtained by researcher (2024)



CONCLUSION

Based on interpretation of the Millennial's Investment And Debt Behavior research obtained a number of conclusion as following: Yes the significant influence of Financial Literacy on Investment Intention and Debt Intention, the influence of Materialism on Investment Intention and Religiosity on Debt Intention. Temporary For other variables No own significant influence on Investment Intention and Debt Intention.

When someone has more knowledge Good about finance, they can understand potency possible benefits obtained from investment (Auliana, 2024). Good understanding about drafts like management finance, information investment, market mechanisms, as well information provided by experts and colleagues make individual more believe self-motivated and motivated for invest. With see exists opportunity big profits, someone who is literate financial tend more intentioned and braver take step for invest. Apart from that, literacy finance push individual for evaluate with carefully needs and benefits from owe , as well look for more alternatives safe and effective for fulfil need financial they . With Thus, literacy good finances make somebody more reluctant for owe and more focus on management healthy and wise finances.

Materialistic people prefer to invest more because they consider it as a way to improve their social standing and self-image (Arthur et al., 2019; Verghese & Chin, 2022; Waqas & Siddiqui, 2021). A gold asset is not only viewed as a financial safeguard but also as a status and opulent symbol. Encouragement of materialism thus pushes people to invest more money as a way to accomplish and demonstrate a classy way of living.

Research indicates that religion has a favorable and significant impact on someone's intention to give. This indicates that as someone's level of religiosity rises, so does his desire to repay. This may be due to the realization that debt can be a tool for achieving lofty goals or meeting pressing needs, which is consistent with religious principles. Empirical evidence, after controlling for other pertinent variables, supports this claim by demonstrating a substantial association between the amount of religiosity and the intentions to give.

Suggestions for future research

According to study findings, the factor that has the biggest impact on intention to invest and debt is financial literacy. Initiating literacy and finance, together with the dangers and rewards of investing choices, need to be emphasized in order to raise awareness among millennials. With features like planning finance, simulation investment, and security, this development application for educational and interactive finance can help millennials become more financially literate. In addition, the use of social media to disseminate educational content and knowledge about personal finance can inspire millennials and make learning more accessible and intentional.

The Millennial generation needs to strengthen their ability to control emotional and cognitive biases when they are interested in investing or borrowing. Additionally, they are expected to actively seek information, expand references, and enhance their understanding of investment and debt, including understanding the psychological factors that influence their finances.

Study limitations the reason for this is that just 200 generations of Indonesian millennials were studied by the quantity of respondents, which may not be sufficient to accurately depict the circumstances. Furthermore, the study's coverage is overly comprehensive and broad. Every Indonesian region can more clearly demonstrate the required specification place or domicile for the characteristics of the millennial generation in managing money.

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