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Age Demographics as a Moderating Effect in the Influence of Fintech Through Financial Literacy on Financial Behavior

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Abstract

The increasingly sophisticated development of technology gave rise to the term fintech in the financial aspect; the emergence of fintech brought challenges for users that affect financial behavior. This study seeks to analyze in more depth what factors can influence financial behavior using fintech variables, financial literacy, and age demographics. The leading theory presented is planned behavior, which is related to financial behavior. This research uses a quantitative approach by collecting primary data through observation and distributing questionnaires. Based on our study, a sample size of 100 individuals was selected by purposive sampling technique. The analysis employed path analysis with moderating effects, conducted through Smart-PLS 3 software. The results revealed a statistically significant influence of financial technology and financial literacy on financial behavior. Furthermore, financial technology exhibited a significant impact on financial literacy. Additionally, we found that financial literacy was a mediator in the relationship between financial technology and financial behavior, while age demographics did not moderate this association.

Keywords: Financial Literacy, Financial Technology, Age Demographics,Financial Behavior.

1. Introduction

Recently, information technology has developed very rapidly and brought major changes to the global financial industry; this is due to the powerful globalization, which reaches all corners of the country (Lee & Shin, 2018). Globalization has driven global economic integration, accelerating technology adoption in various sectors, including the financial sector. The rapid development of technology has led to several new findings in the financial aspect. The novelty in the financial aspect certainly raises a variety of financial behaviors that will be faced later.

Financial behavior is the study of how individuals, groups, and organizations make decisions regarding their money management, investments, savings, and spending (Baker et al., 2021). It involves the analysis of psychological, emotional, and social factors that influence financial decisions and patterns of behavior that may appear irrational according to traditional economic theory. The study of behavioral finance emphasizes that not all investors have rational behavior, but there are irrational investors (Gathergood & Weber, 2017).

Advances in information technology have impacted Indonesia and led to diverse financial behaviors, posing challenges. The country is facing difficulties due to irrational financial behavior resulting from technological advancements. Irrational financial behavior can be in the form of stock purchase decisions made by an investor who is not based on fundamental aspects but on emotional aspects influenced by certain communities (Barber et al., 2021).

Despite the negative impact of behavioral finance on many individuals in Indonesia, it appears that the digital financial literacy index in Indonesian society has 5 improved. The financial literacy index in Indonesia was measured at 3.46 points in 2020. In 2021, this index increased to 3.49 points, showing an increase of 0.03 points (Dewi et al., 2020). Indonesia saw an increase of 0.05 points this year, from 3.49 to 3.54. These results show that Indonesians' digital literacy level is in the middle range. The assessment was conducted using four main criteria: digital competence, morality, safety, and habits.

Based on the findings that the financial behavior of Indonesian people in 2020-2022 has increased as measured by the digital financial literacy index, this provides a positive signal that Indonesian people have fairly good financial behavior. Financial behavior is a study that combines psychological and social aspects of how an individual makes decisions in financial aspects (Thaler, 1999).

It turns out, however, that even when Indonesians' financial conduct, as gauged by the financial literacy index, has improved, this does not imply that reasonable factors have been considered in their financial activity. According to information provided by the OJK, a large number of Indonesians are known to be stuck in online loans as a result of financial advancements that gave origin to the name fintech (Muslih & Supeno, 2022). The unfortunate problem is that the majority of Indonesians who fall victim to internet lending are Millennials and members of Generation Z, who are generally between the ages of 20 and 25. This fact's existence sends out a bad message that not everyone in Indonesia behaves sensibly when it comes to money.

The initial element that can impact financial behavior is financial technology. The significance of financial technology in shaping financial behavior is considerable. Fintech, which stands for Financial Technology, is an advancement in the financial services industry that uses contemporary technology to offer more effective and accessible financial services.. This technology involves the utilization of large-scale data, cloud computing, and distributed ledger systems to enable transactions and other financial services (Hiyanti et al., 2020). A study by Ramadhan & Ovami (2021) found that fintech has a positive and substantial impact on financial behavior, while Wiranti (2022) argues that there is no significant effect of fintech on financial behavior.

Previous research has shown by Amnas et al. (2024) stated that financial literacy includes a cognitive understanding of financial concepts and skills, including budgeting, investing, borrowing, taxation, and personal financial management. These skills empower individuals to effectively navigate financial challenges and reduce the likelihood of facing personal economic difficulties (Corporate Finance Institute, 2023). Notably, research by Wahyuni et al. (2023) underscores the substantial impact of financial literacy on financial behavior. However, Puspalita & Isnalita (2023) found that financial knowledge, one of the components of financial literacy, has an insignificant influence on financial behavior. In a study conducted by Long et. al (2023) shows that financial literacy has a mediating role in the relationship between fintech and financial behavior

Furthermore, the third factor that is no less important in influencing financial behavior is age demographics. Through the age demographic factor, the financial behavior of each individual can be reflected. Age demographics reflect the fertility and mortality history of a population, which creates a certain age structure. Changes in the age structure can affect the productive capacity of the economy and open up opportunities for rapid economic growth, besides that age demographics can also play a role in analyzing financial behavior in different age ranges (Bloom, 2020). Research conducted (Putri & Octavatiya, 2023) shows that demographics have a significant effect on financial behavior, while research conducted (Nurjanah et al., 2023) shows that demographics do not have a significant role in financial behavior. Regarding the use of demographic variables in this research, it is very broad, and can include income, gender, economic status, age, etc. However, the main focus of the demographic variable used in this research is only age, where age differences can influence the financial behavior of each individual. In addition, research conducted by (Carlin et al., 20219) shows that age demographics have a moderating effect on financial behavior. This finding is contrary to the results stated by (Parulian & Bebasari, 2022) that age is not able to moderate the relationship between fintech and financial behavior.The existence of research results that were different from the use of the moderating effect of age demographics carried out by previous researchers, gave rise to curiosity for researchers to carry out re-investigation.

Based on the phenomena that have been described regarding financial behavior and along with influencing factors such as financial technology, financial literacy, and age demographics. Then added to the gap in the empirical results of previous research, we were interested in conducting this research with the object of students at Pelita Bangsa University because this group is considered to be the generation that adapts most quickly to fintech, but often has low financial literacy and vulnerable to irrational financial behavior. It is hoped that this research will provide deeper insight into how fintech and financial literacy interact to influence financial behavior among students.

2. Literature Review

2.1. Theory of Planned Behavior

The theory of Planned Behavior was developed by Ajzen (1991) explains how a person's attitudes, subjective norms, and perceived behavioral control can influence intentions and, ultimately, influence behavior. Ajzen (1991) argues that a person's behavior is seen as the result of intentions formed through attitudes, subjective norms, and perceived behavioral control. Ajzen (1991) explains that attitude is a person's positive or negative assessment of certain behavior. The more positive a person's attitude towards a behavior, the more likely they are to intend to carry out that behavior. Furthermore, subjective norms refer to a person's perception of the views or support of other people who are considered important in their life for certain behavior. If the individual feels that the people around him (such as family or friends) support the behavior, his intentions will increase. This factor also shows social influence in forming a person's intentions. Furthermore, Perceived Behavioral Control describes the individual's perception of the extent to which they feel capable or have control to carry out the behavior.

2.2. Financial Behavior

Financial behavior involves integrating psychological concepts with economics to understand the decision-making and behavior of individuals and financial markets, which are not always rational. This theory challenges the basic assumptions of traditional finance which assume that market participants are rational and always make decisions to maximize profits

(Baker et al., 2021). Financial behavior assessment is an evaluation of various aspects or dimensions of a person's behavior in managing their finances. This assessment is carried out to identify how well a person manages and makes financial decisions, by considering factors such as habits, risk preferences, and financial understanding obtained from aspects of financial literacy (Ali et al., 2024).

2.3. Financial Technology

Fintech, also known as financial technology, refers to revolutionary technologies designed to enhance and streamline the provision and utilization of financial service (Hijir, 2022). Fintech encompasses a wide range of applications, such as digital payments, online lending, crowdfunding, and personal finance management, which aim to make financial services more accessible, efficient, and transparent. According to Rohi Bire (2023) fintech is a financial technology that enables better and more efficient financial services, often more safely and transparently. Furthermore, according to (Lee & Shin, 2018) defines fintech as the integration of information and communication technology in financial services that results in disruptive innovations in traditional financial products and services. Along with the times, of course, fintech itself will have a relationship with certain aspects. One aspect that can affect the development of fintech is digital infrastructure through the existence of a strong digital infrastructure, including broad internet access and mobile technology, is very important to support the adoption and growth of fintech services in various regions (Goldstein et al., 2019). The indicators that can be used in fintech according to (Lee & Shin, 2018) include: Use of payment services, financial management, digital investment, and adoption of security technologies.

2.4. Financial Literacy

Financial literacy, an important skill to improve the quality of one's financial understanding, should be mastered by every individual (Azizah, 2020). As described by (Sufyati & Alvi, 2022), financial literacy involves understanding financial matters, including strategic planning and effective allocation of financial resources. Sufyati & Alvi(2022) also define financial literacy as the ability to understand and confidently apply knowledge about money and finance to make wise financial decisions. In today's world, this skill is increasingly important, as it covers the basic skills needed to make wise financial choices. Furthermore, when it comes to financial literacy, there are several important aspects to consider. One key aspect of financial literacy is financial knowledge, which includes an understanding of basic economic and financial principles such as saving, investing, credit and retirement. This forms the foundation of financial literacy, which empowers individuals to make informed decisions regarding their financial resources (Culebro & Moreno, 2024). Financial attitudes are another influential aspect in shaping financial literacy, which relate to individuals' perspectives and sentiments about money and financial management. Adopting a positive attitude towards money management can encourage better financial behavior.

2.5. Age Demographics

According to Egidi & Manfredi (2021), demography is the study of human populations, which includes the structure, distribution, and dynamics of changes that occur in these populations. In the context of recent research, demography often includes analyzing factors such as age, gender, birth rates, death rates, migration, and changes in household composition. According to (Mbam et al., 2022) age demography is a branch of demography that studies the age distribution in a population and the changes that occur due to births, deaths, and migration. It includes analysis of age patterns, age structure, and projections of future age changes.

2.6. Relationship Between Concepts

The connection with the theory of planned behavior developed by Ajzen (1991) emphasizes that an individual's attitude towards specific behavior is influenced by their knowledge and experience, including understanding the benefits and risks. In fintech, a person's understanding of financial technology (such as investment applications or e-wallets) and financial literacy will influence their attitudes. Individuals with a positive attitude tend to be more open to using fintech services. Furthermore, the relationship between planned behavior theory and the influence of fintech on financial literacy can be influenced by individuals' attitudes towards financial literacy, such as interest and awareness of the importance of financial understanding, which can be influenced by their access to financial technology (fintech). Fintech often offers financial information and educational tools that can help individuals understand financial products and thereby encourage positive attitudes toward financial products. Research conducted by Ramadhan & Ovami (2021) shows that the influence of fintech has a positive and significant effect on financial behavior, also the research by (Amnas et al., 2024) shows that fintech has a positive and significant effect on financial literacy.

H_1: Fintech has a significant effect on financial behavior.
H_2: Fintech has a significant effect on financial literacy.

The planned behavior theory proposed by Ajzen (1991) can provide a correlation between financial literacy and individual attitudes toward financial behavior. The higher a person's financial literacy, the more positive their attitude toward healthy financial behavior. Understanding the benefits and risks of various financial decisions makes individuals more likely to practice responsible financial behavior. Apart from that, the relationship between the theory of planned behavior and the influence of fintech on financial behavior mediated by financial literacy provides an understanding that a person's perception of their ability to manage finances effectively can be strengthened by good financial literacy. Financial literacy plays a mediating role, as the higher a person's financial knowledge, the more confident they are in making smart financial decisions when using fintech services. Research conducted by (Wahyuni et al., 2023) shows that financial literacy has a considerable influence on financial behavior. Another study conducted by (Long et al., 2023) Shows that financial literacy has a mediating role in the relationship between fintech and financial behavior.

H_3: Financial literacy has a significant effect on financial behavior.
H_4: Financial literacy significantly mediates the influence of fintech on financial behavior.

The relationship between the theory of planned behavior proposed by Ajzen (1991) and the influence of age demographics on financial behavior can be seen from the differences in attitudes towards financial behavior based on age. Most of the younger generation, who may be just starting to become financially independent, tend to have a more optimistic attitude toward using financial technology and investment (Saksonova & Merlino, 2017). They may see using fintech applications as a modern and efficient way to manage finances. In contrast, older individuals may have a more conservative attitude, preferring traditional methods of managing their finances, due to different experiences and knowledge in financial management (Fatticia et al., 2024). In this case, age acts as a moderating factor, where attitudes towards fintech can influence financial behavior differently based on age group. The study conducted by Putri and Octavatiya (2023) shows that demographics play an important role in influencing financial behavior. In addition research conducted by (Carlin et al., 2019) shows that age demographics have a moderating effect on financial behavior.

H_5: Age demographic significantly moderate the effect of fintech on financial behavior.

3. Methods

This research employs a quantitative technique. The population utilized in this research is all students at Pelita Bangsa University, with the total sample used is 100 respondents. Purposive sampling is used in the sampling procedure. The following requirements have been established: 1) be enrolled at Pelita Bangsa University, 2) age above 18 years old, and 3) have utilized fintech applications before. Data collection by sending questionnairesto every student at Pelita Bangsa University. The questionnaire was distributed by contacting respondents through the researcher's access to campus networks, such as social media groups or student online forums. The research questionnaire was distributed via Google Form, which was distributed online through these platforms to reach more respondents.

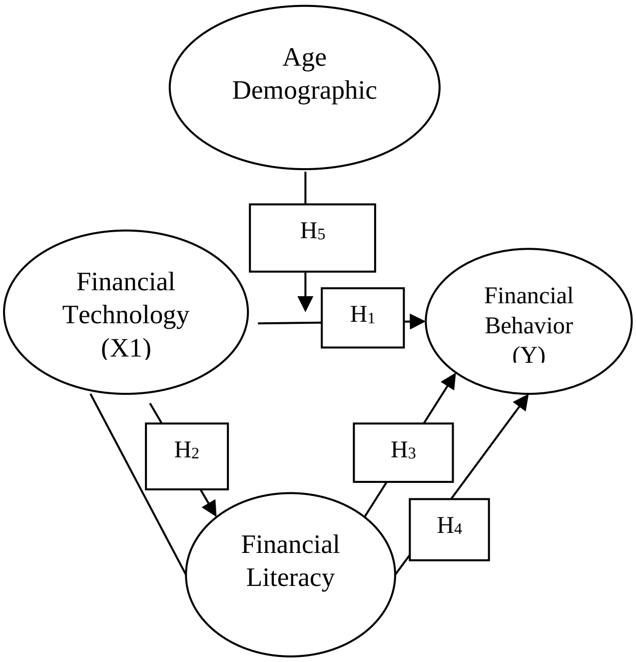

Figure 1. Research model

Researchers ensure that information about this research is conveyed clearly, so that respondents who meet the age and demographic criteria can understand the purpose and importance of their participation in this research.Every statement in the questionnaire is rated on a Likert scale from 1 to 5. Following the collection of the questionnaire data, the researcher will use SmartPLS 3 software to process the data, commencing with an examination of the validity and reliability of each statement item in the questionnaire. Following validity and reliability testing, path analysis will be used to examine all of the data. The route analysis test findings will be known, and the researcher will then analyze the data.

Table 1. Definition operational variable

No.	Variable	Definition	Indicator
1.	Financial Literacy	Sufyati & Alvi (2022) define financial literacy as the ability to understand and confidently apply knowledge about money and finance to make wise financial decisions.	1.Basic knowledge 2.Ability to create a budget 3.Debt management skills 4.Saving habbits
2.	Financial Technology	Lee & Shin (2018) defines fintech as the integration of information and communication technology in financial services that results in disruptive innovations in traditional financial products and services.	1.Technology Adoption 2.Transaction security 3.User convenience 4.Transparency 5.Service fee
3.	Financial Behavior	Financial behavior involves integrating psychological concepts with economics to understand the decision-making and behavior of individuals and financial markets, which are not always rational (Baker et al., 2021).	1.Spending management 2.Long-term financial planning 3.Income management 4.Digital transaction habits
4.	Age Demographic	According to (Mbam et al., 2022) defines that age demography is a branch of demography that studies the age distribution in a population and the changes that occur due to births, deaths, and migration.	1.Age groups 2.Age based fintech preferences 3.Age specific financial needs 4.Security perception differences

4. Result

Researchers obtained the characteristics of 100 respondents, consisting of 44 men and 56 women. The age characteristics of respondents include the relevant age groups for this research, namely 18-21 years old with 42 respondents, 22-25 years old with 57 respondents, and the age group over 25 years old with 1 respondent. These characteristics provide a demographic picture representative of the student age group, especially in understanding the influence of financial literacy and fintech on financial behavior in each age range. The selection of respondents with these characteristics is valid and relevant because most of the sample is in the Gen Z age range, namely the age group most active and vulnerable in using digital-based financial services (fintech). This age distribution also allows for an in-depth analysis of how each age group exhibits different financial behavior when influenced by financial literacy through fintech. Thus, the selected sample is considered adequate to represent the age variations among students, where age differences can illustrate differences in experience, understanding and level of maturity in financial management.

Table 2. Characteristics of respondents

Characteristics of Respondents	People	Proportion
Male	44	44%
Female	56	56%
Total	100	100%
Age 18-21	42	42%
Age 22-25	57	57%
> Age 25	1	1%
Total	100	100%

Source: Google Form Kuesioner (2024)

4.1. Outer Model Analysis

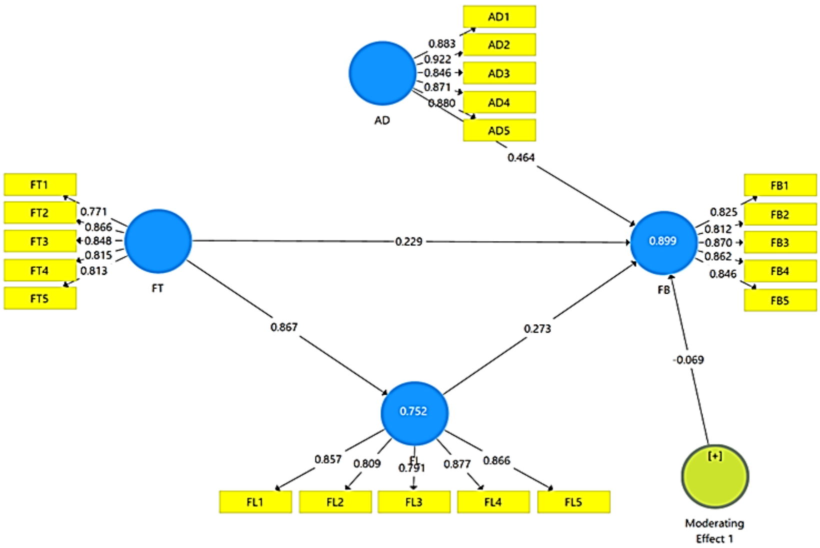

Figure 2. Research model and analysis result

4.2. Convergent Validity

Convergent validity is a form of construct validity used to assess how closely two or more indicators are related to measuring the same concept. It demonstrates that the indicators of a construct accurately represent the construct.

Table 3. Outer loading test result

Research Variables	Measurement Items	Loading Factor
Financial Technology	FT1	0,771
	FT2	0,866
	FT3	0,848
	FT4	0,815
	FT5	0,813
Financial Literacy	FL1	0,857
	FL2	0,809
	FL3	0,791
	FL4	0,877
	FL5	0,866
Age Demographics	AD1	0,883
	AD2	0,922
	AD3	0,846
	AD4	0,871
	AD5	0,880
Financial Behavior	FB1	0,825
	FB2	0,812
	FB3	0,870
	FB4	0,862
	FB5	0,846

The outer loading value of each indicator on its construct must be more than 0.70. This indicates that the indicators are significantly related to the construct. Based on the above results, it can be concluded that the outer loadingtest is accepted because the value of each indicator exceeds 0.7.

Table 4. AVE value

	Average Variance Extracted (AVE)	Explanation
AD	0,848	Valid
FT	0,770	Valid
FL	0,877	Valid
FB	0,839	Valid

AVE refers to the average variance extracted from the indicators encompassing the construct. This indicates that over 50% of the indicator's variance is accounted for by the measured construct. Looking at the aforementioned findings, it is evident that each indicator's AVE exceeds 0.5, indicating that the AVE test is validated.

Discriminant validity, which is a form of construct validity, demonstrates how well a construct in the model can be differentiated from other constructs. Essentially, the indicators of one construct should not show a high correlation with the indicators of another construct. In SmartPLS context, discriminant validity confirms that the measured construct is genuinely distinct and does not overlap with other constructs in the model. Based on the tests that have been carried out, it can be seen in table 5 that the value on the diagonal line is greater than the value on the other lines, where the AVE root value is greater than the correlation value with other constructs. Because the AVE root value is greater than the correlation value with other constructs, the conditions for testing discriminant validity in this model have been fulfilled.

Table 5. Discriminant validity

Variable	AD	FT	FL	FT*AD	FB
AD	0,921				
FT	0,814	0,878			
FL	0,887	0,771	0,937		
FT*AD	-0,417	-0,363	-0,532	1,000	
FB	0,852	0,776	0,837	-0,478	0,916

Table 6. Composite reliability

Variable	Composite Reliability	Explanation
AD	0,945	Reliable
FT	0,913	Reliable
FL	0,923	Reliable
FB	0,925	Reliable

Based on the data presented in Table 6, it can be seen that all research variables show composite reliability values above 0.7. The age demographic variable shows a reliability of 0.945, financial technology of 0.913, financial literacy of 0.923, and financial behavior of 0.925. This leads to the conclusion that each variable meets the composite reliability standard, which signifies a high level of reliability across the variables.

Table 7. Cronbach alpha value

Variable	Cronbach's Alpha
AD	0,928
FT	0,881
FL	0,896
FB	0,898

According to the information provided in Table 7, Cronbach's alpha value for all variables in this investigation surpasses 0.6. This demonstrates that Cronbach's alpha value satisfies the necessary standard, thus affirming the dependability of all the constructs.

Table 8. R-square value

Variable	R Square Adjusted
FB	0,894

A high R^2 value indicates that the independent variables used in the model have good predictive power over the dependent variable. Based on the results obtained, it is known that the R-square value of 0.894 is very high and the explanatory variables have an influence of 89.4% on the dependent variable.

4.3. Hypothesis Testing

Table 9. Hyphotesis testing

	Original Sample (O)	Sample Mean (M)	P-Values	Explanation
FT→ FL→ FB	0,237	0,243	0,029	Accepted
FT → FL	0,867	0,871	0,000	Accepted
FT → FB	0,229	0,237	0,006	Accepted
FL → FB	0,273	0,278	0,027	Accepted
FT*AD → FB	-0,069	-0,070	0,199	Rejected

After conducting path coefficient analysis to determine direct influence, the initial hypothesis regarding the impact of financial technology on financial behavior was tested. The obtained p-value for the financial technology variable was 0.006, which is lower than the significance level of 0.05, indicating a statistically significant influence of financial technology on financial behavior. Consequently, the first hypothesis is supported by the analysis and, therefore, accepted. Then, the second hypothesis examines the influence of financial technology on financial literacy. As can be seen in the table provided, the p value for the financial technology variable is 0.000, which is below 0.05, which means it has a significant impact on financial literacy. As a result, the second hypothesis was confirmed. Through conducting further tests on the third hypothesis, we are exploring the association between financial literacy and financial behavior. The findings show that the financial literacy factor has a p value of 0.027, which means significance at the 0.05 level. This shows a significant relationship between financial literacy and financial behavior, thus encouraging us to support the third hypothesis. The fourth hypothesis examines the function of financial literacy as an intermediary element between financial technology and Mofinancial behavior. Analysis of the data reveals that the p-value linked with the financial literacy mediating factor is 0.029, demonstrating statistical significance. These results indicate that the financial literacy factor serves as an effective intermediary in the correlation between financial technology and financial behavior, thereby confirming the fourth hypothesis. The study's fifth hypothesis seeks to examine if age demographics have a moderating effect on the link between financial technology and financial behavior. The table indicates that the p-value for the age demographic moderating variable is 0.199. This indicates that age demographics do not signi-ficantly moderate the relationship between financial technology and financial behavior. Thus, the fifth hypothesis is rejected based on these findings.

5. Discussion

Research findings from initial hypothesis testing indicate that fintech has a significant effect on financial behavior. This is attributed to the perceived increased transparency and control over financial management that fintech offers, as reported by study participants who are 18 years old and older. Users highlighted features such as easy expense tracking, budget creation, and transaction history monitoring. The field of financial technology (fintech) provides personalized financial guidance and suggestions based on user data and preferences. This individualized approach is designed to enable users to make better-informed financial choices and positively impact their financial patterns. This finding is supported by Ramadhan & Ovami (2021) research, although it differs from Wiranti (2022) research results.

The analysis of the second hypothesis indicates that there is a significant impact of fintech on financial literacy. The participants, particularly those aged between 22 and 25, believe that fintech offers hands-on learning in financial management, including functions like tracking expenses, creating budgets, and conducting financial analysis. This helps them understand financial concepts better and develop financial management skills. In addition, fintech apps often provide financial education content such as articles, videos, or short courses that can improve users' financial knowledge and skills. This information is digitally available and more accessible than traditional sources. This study has similar results with research conducted by Amnas et al. (2024). However, research conducted by Moreira (2024) found that the role of fintech did not have a significant impact on financial literacy, especially in people in Portugal.

From the testing of the third hypothesis, it was found that financial literacy plays a significant role on financial behavior. This is because financial literacy aids individuals in comprehending financial risks, such as inflation, fluctuations in interest rates, and market volatility. With this understanding, individuals can make wiser decisions in managing financial risks and protecting their assets, so in the presence of financial literacy, individuals with good financial literacy tend to have rational thinking about the financial behavior they will choose. Research conducted by Shusha (2017) Strengthens the findings in this study. While research conducted by Batty et al. (2015) Although financial literacy can increase individuals' knowledge about finance, this does not always lead to significant changes in their financial behavior.

The findings from testing the fourth hypothesis show that financial literacy can significantly mediate the relationship between fintech and financial behavior. This is because financial literacy provides individuals with the understanding to predict and mitigate the potential risks of utilizing fintech, such as online fraud, data breaches, and irresponsible borrowing. Individuals with high financial literacy are more careful in protecting their personal information when using fintech services and understand the steps that need to be taken in case of fraud. In addition, financial literacy encourages individuals to manage their finances better, plan for the future, and achieve their financial goals. Fintech can be a valuable tool to support these positive behaviors. Individuals with high financial literacy can use budgeting apps to track their expenses, save regularly, and invest for their future with the help of safe and trusted fintech platforms. These findings are supported by research conducted by (Long et al., 2023) which states that financial literacy is able to mediate the relationship between fintech and financial behavior.

The findings from the fifth hypothesis testing indicate that the impact of fintech on financial behavior is not significantly moderated by age demographics. This research suggests that individuals in the age categories of 18-21 years, 22-25 years, and those over 25 years believe that fintech is created to offer financial services that are readily available and can be utilized by people of all age groups. With user-friendly interfaces and simple processes, fintech can be adopted by users of various age groups. In addition, basic financial needs such as savings, investments, and payments are universal and not limited to certain age groups. Fintech offers solutions that can fulfill these needs regardless of age. This finding has not been supported by(Carlin et al., 20219) Shows that age demographics have a moderating effect on financial behavior, but these findings are strengthened by (Parulian & Bebasari, 2022) that age cannot moderate the relationship between fintech and financial behavior.

6. Conclusions

Several findings from this study demonstrate that fintech's role positively and significantly impacts financial behavior because of the transparency and control it maintains within the industry. The role of fintech has a positive and significant effect on financial literacy because it provides positive access to financial literacy. Financial literacy significantly impacts financial behavior positively, as understanding financial literacy, such as recognizing risks, can influence financial behavior. The role of fintech on financial behavior can be mediated by financial literacy. Age demographics cannot moderate the role of fintech on financial behavior; this is because fintech is designed with a user-friendly system, without distinguishing certain age groups. Financial behavior can be explained by fintech, financial literacy, and age demographics by 89.4%, of which the remaining 10.6% is explained by other variables not tested in this study. Apart from that, this research has several limitations, including the sample coverage, which only includes students from one university, so the results may not be generalized to the entire student population in Indonesia. In addition, this study uses a purposive sampling technique which emphasizes certain characteristics of respondents, namely age group, so as to limit data variations in other factors that might also influence financial behavior, such as socio-economic status or side jobs. It is recommended that further research expand the sample to several universities or regions in order to obtain more representative data from the various demographics and backgrounds of students in Indonesia. Theoretically, this research enriches the literature regarding the role of age demographics as a moderating factor in the relationship between fintech, financial literacy and financial behavior. These findings support the theory that demographic characteristics, such as age, can influence how individuals utilize fintech in the context of their financial behavior. This research also contributes to financial literature by integrating financial technology and literacy factors in one research model, which is useful for understanding how technological innovation influences the financial behavior of young age groups, and from a practical perspective, this research provides guidance for educational institutions and policy makers to designing a program to increase financial literacy specifically for the student age group. The results of this research are also useful for fintech service providers to adapt educational features and approaches that are more relevant for young users, considering the phenomenon of the use of online loan services which is still high among students. Thus, increasing understanding of financial literacy is expected to help students make wiser financial decisions, especially in the use of fintech

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.

Ali, M., Alamgir, M., & Nawaz, M. A. (2024). Emergence of the digital financial literacy, and its effect on the financial management behavior among students of Pakistan. *Pakistan Social Sciences Review*, *8*(2), 141-155.

Amnas, M. B., Selvam, M., & Parayitam, S. (2024). FinTech and financial inclusion: Exploring the mediating role of digital financial literacy and the moderating influence of perceived regulatory support. *Journal of Risk and Financial Management, 17*(3), 108. https://doi.org/10.3390/jrfm17030108.

Azizah, N. (2020). Pengaruh Literasi Keuangan, Gaya Hidup Pada Perilaku Keuangan Pada Generasi Milenial. *Prisma (Platform Riset Mahasiswa Akuntansi), 1*(2), 92-101. https://ojs.stiesa.ac.id/index.php/prisma/article/view/422.

Baker, H. K., Filbeck, G., & Ricciardi, V. (2021). Financial behavior: Players, services, products, and markets. *Oxford University Press.*

Barber, B. M., Huang, X., & Odean, T. (2021). Attention Induced Trading and Returns: Evidence from Robinhood Users. *Journal of Finance*, 77(6), 3141-3190. https://doi.org/10.1111/jofi.13183

Batty, M., Collins, J. M., & Odders-White, E. (2015). Experimental evidence on the effects of financial education on elementary school students' knowledge, behavior, and attitudes. *Journal of Consumer Affairs*, *49*(1), 69-96. https://doi.org/10.1111/joca.12058.

Bloom, D. E. (2020). Changing demographics and economic growth. *International Monetary Fund*.

Carlin, B., Olafsson, A., & Pagel, M. (2019). Generational differences in managing personal finances. In *AEA Papers and Proceedings* 109, 54-59.Broadway, Suite 305, Nashville, TN 37203: American Economic Association.

Corporate Finance Institute. (2023). Financial Literacy – Overview, Benefits, Importance. *CFI Education Inc*.

Culebro-Martínez, R., Moreno-García, E., & Hernández-Mejía, S. (2024). Financial Literacy of Entrepreneurs and Companies' Performance. *Journal of Risk and Financial Management*, 17(2), 63. https://doi.org/10.3390/jrfm17020063

Dewi, V. I., Febrian, E., Effendi, N., Anwar, M., & Nidar, S. R. (2020). Financial literacy and its variables: The evidence from Indonesia. *Economics & Sociology*, *13*(3), 133-154. https://www.economics-sociology.eu/files/9S_912_Dewi%20et%20al.pdf

Egidi, V., & Manfredi, P. (2021). Population dynamics and demography of Covid-19. Introduction. *Genus*, 77(36). https://doi.org/10.1186/s41118-021-00143-5.

Fatticia, R., Harjoni, H., Christiaan, P., Julyarman, N., & Ariyanti, R. (2024). The Influence of Fintech on Traditional Financial Management. *Journal Markcount Finance*, *2*(2), 194-204, https://journal.ypidathu.or.id/index.php/jmf/article/view/1283.

Gathergood, J. & Weber, J. (2017). Financial Literacy, present bias and alternative mortgage products'. *Journal of Banking & Finance*, 78,58–83. doi:10.1016/j.jbankfin.2017.01.022.

Goldstein, I., Jiang, W., & Karolyi, G. A. (2019). To FinTech and beyond. *The Review of Financial Studies*, 32(5), 1647-1661. https://doi.org/10.1093/rfs/hhz014.

Hijir, P. S. . (2022). Pengaruh Literasi Keuangan Terhadap Perilaku Keuangan Dengan Financial Technology (Fintech) Sebagai Variabel Intervening Pada UKM Di Kota Jambi. *Jurnal Manajemen Terapan Dan Keuangan*, *11*(01), 147-156. https://doi.org/10.22437/jmk.v11i01.17273.

Hiyanti,. H., Nugroho, L., Sukmadilaga, C., & Fitrijanti, T. (2020). Peluang dan Tantangan Fintech (Financial Technology) Syariah di Indonesia. *Jurnal Ilmiah Ekonomi Islam*, 5(3), 326-333. doi:10.29040/jiei.v5i3.578.

Lee, I., & Shin, Y. J. (2018). Fintech: Ecosystem, business models, investment decisions, and challenges. *Business Horizons*, 63(1), 35-46.

Long, T. Q., Morgan, P. J., & Yoshino, N. (2023). Financial literacy, behavioral traits, and ePayment adoption and usage in Japan. *Financial Innovation*, *9*(1), 101.

Mbam, K. C., Halvorsen, C. J., & Okoye, U. O. (2022). Aging in Nigeria: A growing population of older adults requires the implementation of national aging policies. *The Gerontologist*, 62(9), 1243–1250. https://doi.org/10.1093/geront/gnac121

Moreira, A. (2024). Fintech: Evidence of the Urgent Need to Improve Financial Literacy in Portugal. *Administrative Sciences*, 14(5), 99. https://doi.org/10.3390/admsci14050099

Muslih, M., & Supeno, S. (2022). Financial technology: digital legal challenges and Indonesia's economic prospects after Covid-19 outbreak. *Legality: Jurnal Ilmiah Hukum*, *30*(2), 255-266.

Nurjanah, R., Surhayani, S., & Asiah, N. (2022). Faktor Demografi, Literasi Keuangan, Sikap Keuangan Terhadap Perilaku Pengelolaan Keuangan Pada UMKM Di Kabupaten Bekasi. *Jurnal Akuntansi Bisnis Pelita Bangsa*, *7*(01), 1-16. https://doi.org/10.37366/akubis.v7i01.431.

Parulian, P., &Bebasari, N. (2022). Peran Demografi Sebagai Variabel Moderasi Pada Pengaruh Literasi Keuangan Dan Teknologi Informasi Terhadap Perilaku Keuangan. *Eqien Jurnal*

Ekonomi Dan Bisnis, 11(03), 764 – 773. https://doi.org/10.34308/eqien.v11i03.1111.

Puspita, G., & Isnalita, I. (2019). Financial literacy: Pengetahuan, kepercayaan diri dan perilaku keuangan mahasiswa akuntansi. *Owner*, 3(2), 117. https://doi.org/10.33395/owner.v3i2.147.

Putri, A. E., & Octavatiya, A. J. (2023). Perilaku keuangan pengguna e-wallet di Kudus: Financial technology, demografi, literasi keuangan, dan lifestyle sebagai prediktor. *Jurnal Ekonomi dan Bisnis Digital (Ekobil)*, 2(2), 8-15. https://doi.org/10.58765/ekobil.v2i2.154.

Ramadhani, N., & Ovami, D. C. (2021). Financial technology dan perilaku keuangan generasi milenial. *Seminar Nasional Sains dan Teknologi Informasi (SENSASI)*, 13(1), 13–16.

Rohi Bire, A., Maria, M., Manteiro, M. C. B., & Hamu, A. L. A. (2023). The influence of financial technology, financial literacy and financial attitudes on the financial behavior of micro, small and medium enterprises (MSMEs). *Enrichment : Journal of Management*, *13*(5), 3478-3486. https://doi.org/10.35335/enrichment.v13i5.1808.

Saksonova, S., & Kuzmina-Merlino, I. (2017). Fintech as financial innovation–The possibilities and problems of implementation. *European Research Studies Journal*, 20 (3), 961-973.

Shusha, A. A. (2017). Does financial literacy moderate the relationship among demographic characteristics and financial risk tolerance? Evidence from Egypt. *Australian Journal of Basic and Applied Sciences*, 11(13), 1-9.

Sufyati, H. S., & Lestari, A. (2022). Pengaruh literasi keuangan, inklusi keuangan dan gaya hidup terhadap perilaku keuangan pada generasi milenial. *Jurnal Multidisiplin Madani*, 2(5), 2415–2430. https://doi.org/10.55927/mudima.v2i5.396.

Thaler, R. H. (1999). *Mental AccountingMatters*. *Journal of Behavioral Decision Making*, *12*(3), 183-206.

Wahyuni, S. F., Radiman, R., & Kinanti, D. (2023). Pengaruh Literasi Keuangan, Lifestyle Hedonis dan Sikap Keuangan Pribadi Terhadap Perilaku Keuangan Mahasiswa. *Owner: Riset Dan Jurnal Akuntansi*, *7*(1), 656-671. https://doi.org/10.33395/owner.v7i1.1304

Wiranti, A. (2022). Pengaruh financial technology, financial literacy, financial knowledge, locus of control, dan income terhadap perilaku keuangan. *Jurnal Ilmu Manajemen*, 10(2), 475–488.