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Financial Literacy, Financial Technology, Personality Trait, and Personal Saving Orientation: A Comprehensive Review

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Abstract

Purpose: Education, knowledge, and awareness, known as financial literacy, financial technology (FinTech), and personal saving orientation are essential agenda in the economic discourse. This review aims at integrating current literature on these themes with the view of analyzing their connections and relevance on economic behavior.
Method: A combination of sources is evaluated in the course of the study, using literature review procedures; the research seeks to establish how financial education, technological advancement, and personal perspectives on saving are connected.
Findings: The analysis reveals a positive correlation between financial literacy and saving orientation, mediated by financial attitudes and education. Unexpectedly, some studies highlight a digital divide, where access to FinTech varies based on socioeconomic status, potentially exacerbating financial inequalities. Some implications for further research are presented, which reflect the directions that the authors found to be understudied in contemporary literature.
Novelty: This study extends financial education and financial knowledge idea by defining the financial literacy as knowledge, which allows applying the financial information to the benefit of the person to make a decision. This not only expands but also improves the evaluation of the society's financial literacy by providing a broader approach of how knowledge is leveraged into managing an individual's financial resources and the decisions affecting his or her future well-being.

Keywords: financial literacy, FinTech, financial education, saving behavior, economic behavior.

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INTRODUCTION

Heightened complexity of global financial markets therefore demands that individuals be financially more knowledgeable in order to properly manage their financial affairs. It has become evident that financial technology also known as FinTech has become central to this set up being the key tool that has disrupted conventional markets and provide solutions to ever present problems. This review is inclusive of the relationship between financial literacy, FinTech usage, financial education programs, personal finance inclinations, and personal saving trends. Financial literacy that can be simply defined as a consumer's ability to use knowledge and understanding of various financial instruments is an important determinant to enable people make right decisions on their financial transactions (Lusardi & Messy, 2023).

At the same time, FinTech integrates technological improvements in achieving better deliverance, effectiveness, and customer satisfaction of financial activities that may in turn, impact financial choices (Singh et al., 2024). Even though scholars have undertaken individual literature reviews of financial literacy, FinTech usage, and their effects separately, the literature does not give a clear picture of the interconnection between the two concepts and their overall impact on saving behavior. It is therefore important to determine the roles of financial literacy and the method of financial technology in a certain innovation and impact the saving orientation in individuals. Such programs should incorporate the use of FinTech to enhance the capacity to support proper financial literacy and proper long-term savings (Kaiser et al., 2022).

It is against this backdrop that this review underscores the pressing importance of probing the areas where financial education and technology meets with behaviour finance. In so doing, these analyses provide direction to policymakers and educators who can work to create additional, targeted approaches to build the financial literacy and, in turn, the financial capabilities of people in societies for whom handling of money concerns is becoming progressively more complicated.

LITERATURE REVIEW

Financial Literacy

It is defined in terms of the literacy whereby a person is able to use and manipulate some of the definite economic fundamental tools for instance handling of personal finances, acquisition of funds and management of money amongst others. It was assumed that higher levels of financial literacy will be accompanied with more positive financial selves, therefore, fewer regrettable decisions where the general financial planning of the whole family is concerned. This paper posited that to be financially wise and literate is a key component to economic health and its success since it allows individuals to make right and sound decisions concerning their financial information (Ratnawati et al., 2022).

Speaking of the aspects concerning financial literacy, the body of knowledge seems to be vast and rather heterogeneous; however, one of its key aspects remains unambiguous: The most crucial statutory factors identified are thus; Financial education and financial knowledge. But, it does not end with having knowledge of the financial matters as it involves the ability to use that knowledge while people make decisions about finance that they come across every day (Mehak & Dharni, 2022). I define it as the capacity to understand financial matters and, knowing about management of personal finance (García-Santillán, 2023).

Besides this, we extend this above idea by defining the financial literacy as knowledge, which allows applying the financial information to the benefit of the person. Decision making, therefore, include skills and behaviour, awareness, and knowledge as well as attitude that is required in order to make reasonable financial decisions as affirmed by (Shrestha et al., 2023). The comprehensive application of the method is needed for considering the step-by-step increase in the intricacy of the financial environment (Gustina et al., 2022). Expanding on these basic concepts, (Atkinson & Messy, 2012) created a model for evaluating financial literacy, consisting of three main components: Achieving an integrated and utilitarian understanding of finance, a financial transaction, and financial management attitude (Kasozi & Makina, 2021). This it turns out to be a comprehensive method in the technique applied in assessment of financial literacy of individuals and different groups.

The definition of financial literacy that has been gaining currency in more recent years, entails that other aspects which are deemed pertinent in the contemporary financial context should be added (Che Hassan et al., 2023). Concerns like insurance, investment before retirement, how to in case there is injuries or illnesses, and understanding the investment risks. To manage their financial position, there are specific guidelines to appreciate and observe to escape from debt traps or credit card loans; To make better investment (Nasution et al., 2023); (Ramdani et al., 2023). This not only expands but also improves the evaluation of the society's financial literacy by providing a broader approach of how knowledge is leveraged into managing an individual's financial resources and the decisions affecting his or her future well-being (OECD, 2019).

Financial Technology (Fintech)

This is what Financial Technology (Fintech) really embodies, the application of modern computer technology and software in a creative, effective manner to provide financial services. From internet-enabled lending platforms, electronic payment systems, due diligence and personal finance management tools (e.g., credit risk assessment applications); Fintech has mushroomed for one overarching reason: ICT improved and innovated cycle to reform the financial industry by ciclo implementation (J. H Yeo & Fisher, 2017; (Onyia & Tuyon, 2023).

Here, a few examples of the new development trends include shift towards digitalization of financial services, for instance; Digital payment services and Peer to Peer Lending Companies such as PayPal, Lending Club (Kohardinata et al., 2020). In addition, the convenience offered by Fintech has not only continued from the traditional role of offering convenience, but has significantly enhanced the concept of financial inclusion particularly in developing countries as presented by (Zavolokina et al., 2017). Mobile devices have made financial transactions less reliant on banks as through FinTech services clients can control their finances (Yeo & Fisher, 2017); (Kohardinata et al., 2020).

This shift is facilitated by a transaction through Fintech, through which financial products can be provided in a short time meeting the need of various customers depending on their age among other factors (Lucky Bamidele Benjamin et al., 2024). Some of the measures needed in assessing the disruption of Fintech comprise of the efficiency and productivity of the task completion, enhanced quality of the financial services, Increased functionality of the user interface, ease of use, and the jurisdiction over more users of the financial services (Amnas et al., 2024).

Besides, while they are efficient, there is a rationale for why users require efficient yet secure Fintech innovations to build user trust and compel them to adopt new financial solutions (Miah et al., 2023); (Cho & Chen, 2021). They demonstrate that Fintech is increasingly becoming an influential factor as to the formation of economic development and stability trends when implementing new technologies and meeting customers' new needs (Basdekis et al., 2022).

Personality Trait

There employers can enrich their policies, or select proper personnel by using the methods of personality assessment. Employers may initiate an equal environment with a positive focus on performance by embracing personalities of employees. (Ding et al., 2020) holds that managers can improve employee's satisfaction, output and spirit if they fit in employees in a manner to their personality because while two employees may take similar positions in an organization, the kind of career attributes they have is likely to vary. In addition, (Duchek et al., 2020) reemphasise the benefits of diversification of organisational culture by developing a multitasking orientation personality-compatible work environment. This might up the coordination efficiency in task accomplishment as a team (McCrae & Costa, 2008) (Hough et al., 2015).

However, there are some drawbacks if the stress is laid on the rather distinct personality traits; this stems from the fact that in the course of the working process some workers might feel that certain traits are valued more than others are (Ang, 2024); (von Collani & Grumm, 2009). Hence, it is reasoning that companies require fair polices or strategies for training that would acknowledge equivalent, non-bias and cultural various people-oriented systems without infringing equity (Judge, 2015). Nurdin et al., 2019 has shown high endorsement for the call to determine how personality affects financial behaviours across various settings.

For example, Sadi et al., (2011) observed that the personality dimensions of conscientiousness and extraversion are the prominent predictors of saving and borrowing.s. In fact, as much as (Brooks & Williams, 2021) has proved that some level of extraversion and neuroticism is connected with market decision. This paper also corroborated with (Brooks & Williams, 2021) that personality differences can predict stock trade activity implying that traders with certain characteristics would make different choices regarding trading. In addition, there evidence gathered by (Brooks & Williams, 2021) that reveal how aspects of personality such as extraversion and Openness to Experience relates positively to financial risk-taking behaviour.

In arguing the conclusions, the authors claim that Big Five personality dimensions play a leading role in the variation of individual investment behaviour (Campbell et al., 2023); (Harini & Subramanian, 2023). Last of all, knowing such personality traits is beneficial in determining peoples' behavior, and as a result, suitable steps could be developed to enhance work performance, compatibility among co-workers, and money management (Jirjahn & Ottenbacher, 2023). The literature of other authors proves that such components as conscientiousness and neuroticism affect the change of investment decisions and the capacity to take risks in the stock market significantly (Pak & Mahmood, 2015). Understanding how personality influences financial behavior goes a long way helping the investors and other agents in the financial market select how to invest this depends with their personality and tolerance level (Hermansson & Jonsson, 2021). In the process of using this information to plan for their personal finance, then they know what they are doing and what they are making hence improving on the financial planning and setting of goals (Ang, 2024); (Guan, 2024).

Personal Saving Orientation

People with a high save attitude can separate some of the money as a saving part like $20 hence the positive utilize of money in an emergency or for the future (Frank et al., 2023). It can therefore be seen that this regular pattern is suggestive of suitable pattern to expect a future spending but which has a long-term financial saving and spending plan that negates the short-term ones (Despard et al., 2023). On the other hand, the low saving motivation have difficulties with tempo and frequency of saving, and they save only occasionally and that when they get replenishment of their income such as bonus or tax refund or something like that (Augustin & Martin, 2022). This kind of saving can also be very risky for a number of reasons because people are saving without necessarily having an idea that they want to put together an emergency fund.

At this point, it is important to determine your saving inclinations, the framework through which a rational economic decision making would occur and/or a feasible saving target (Arif et al., 2024). For instance, aggression where a lovely who loves saving transfers a fixed amount of money every month to a saving account, this makes the individual appear as acting in anticipation of money. Ensuring savings are automated ensures that saving happens at a set frequency, and the concerned person is relieved of the burden of decision making whether to save or not which is particularly difficult for those with a poor savings attitudinally (Landman & Mthombeni, 2021).

The latter, however, may save when there is any sale on products such as electronic sales or any promotions, the characteristic portrays the PSO as more of a situational organization (Ong ViforJ et al., 2023). Such tendency takes place due to immature handling of finances and the focus on the customer's speedy satisfaction rather than considering the future consequences. Those consumers, who are prone to making wrong decisions on overspending, need to open separate accounts for different goals such as travelling, gadgets, and etc and avoid spending disposable money.

Brown and Taylor (2022) reveal that properly distributing money into different saving purposes helps people mentally separate funds which prevents impulsive spending. A psychological block occurs through this practice that eliminates all chances of spontaneous purchasing behaviors (Ang, 2024). The paper by Doda & Fortuzi (2015) demonstrates different PSO which include budgeting along with individual saving and timely bill payments for understanding personal saving ability. This financial tool helps organizations assess behavioral factors that affect savings targets of individuals as per Zainudin 2022. The tool possibly disregards substantial cultural variations in saving conduct so it does not comprehend the various saving-related activities which drive organizational saving goals (Shoham & Malul, 2012).

Interconnections and Impact

Financial technology (fintech) integration creates substantial effects on financial literacy together with personal saving behaviors according to (Amnas et al. (2024). Users benefit from educational resources on fintech platforms that boost their financial literacy foundation. Online applications and platforms feature educational budgeting tools alongside investment tutorials with financial planning elements which teach crucial financial competencies to users (Lee, 2019). Users who gain financial literacy because of fintech tools utilize them better which leads to better financial management alongside higher savings rates. Research on financial literacy conducted during recent years stems from multiple academic disciplines according to bibliometric studies. The essential nature of technology stands out as fundamental for contemporary fiscal education and saving operations according to studies (Manisha, 2024). Economics psychology and technology merge in this approach to study different kinds of financial behavior. Smith et al. (2023) explore mobile banking applications which serve as educational tools alongside features for automatic savings transfers.

However, it also demonstrates the potential drawbacks of fintech integration. Some studies suggest that over-reliance on fintech platforms may reduce face-to-face financial counseling, potentially excluding segments of the population unfamiliar with digital tools (Amnas et al., 2024); (Maleh et al., 2024); (Yu. et al., n.d.). Moreover, security concerns regarding data breaches and fraud remain pertinent, impacting trust in fintech services among certain demographics (Jan, 2018). For instance, a study by Johnson et al. (2021) found that the use of robo-advisors in investment management can lead to increased diversification and lower fees for investors. This study also found that some individuals might make hasty investment choices without guidance from a human advisor, leading to possible financial losses.

Therefore, although fintech integration improves financial literacy and encourages better saving habits with accessible educational resources, continuous research is essential to tackle related challenges (Dem et al., 2002); (Łukasz & Daw, 2024). By leveraging multidisciplinary insights, policymakers and financial institutions can maximize the benefits of fintech while mitigating risks, ensuring inclusive and secure financial services for all (Maleh et al., 2024).

METHODS

The literature review used extensive evaluations of pertinent sources coming from Scopus and other scholarly databases. The approach led to extensive examination of scholarly materials that focused on financial literacy and Fatal Tech and saving behavior research. The selection of articles focused on their connections to the studied issues while examining their financial behavioral and outcome effects. The evaluation focused on diverse research methods which different papers applied during their studies. The research methods allowed investigators to gain a complete understanding of how financial behaviors are studied. The examination included various research methods that extended from experiments to extended research and qualitative data analysis. The research studies investigated participant characteristics to understand better how these characteristics affected both educational performance and financial planning behaviors. A systematic approach during this analysis produced extensive examination of the literature which yielded important observations about current changes in financial education and literacy research.

RESULTS AND DISCUSSION

The analysis reveals a positive correlation between financial literacy and saving orientation, mediated by financial attitudes and education. FinTech tools, such as budgeting apps and online financial platforms, significantly enhance financial literacy by providing accessible, real-time financial information. Educational programs integrating FinTech demonstrate higher efficacy in improving financial attitudes and saving behaviors compared to traditional methods. Unexpectedly, some studies highlight a digital divide, where access to FinTech varies based on socioeconomic status, potentially exacerbating financial inequalities.

Correlation between Financial Literacy and Saving Orientation

Research consistently demonstrates a robust positive correlation between financial literacy and how individuals save (Ventre et al., 2024). Financial attitudes and the extent of financial education play a significant role in shaping this correlation (García-Santillán, 2023). Financially literate individuals tend to exhibit more prudent financial behaviors, such as increased savings and investing for the future (Doddy et al., 2021). This is because individuals with higher financial literacy have a better understanding of financial concepts, are skilled at managing risks, and know how to plan for their future financial goals (Remund, 2010); (Christianto & Asandimitra, 2023) and (Bhargava et al., 2022).

Furthermore, individuals with higher financial literacy tend to engage in long-term financial planning by creating retirement savings plans, making wise investments in diversified portfolios, and handling debt responsibly (Olivia, 2007); (Mutlu & Özer, 2021);(Governance, 2024) and (Y. Li et al., 2020).

These behaviors not only improve the financial well-being of individuals but also have a positive effect on overall economic stability and growth (Agus Eko Sujianto et al., 2024). For example, a person with high financial literacy may choose to invest in a diversified portfolio of stocks and bonds to grow their wealth over time, rather than simply relying on a savings account with low interest rates (Che Hassan et al., 2023); (R. Li et al., 2023). Additionally, they may choose to pay off high-interest debts first to save money on interest payments and improve their overall financial health (Kang'aru & Tirimba, 2018).

Therefore, promoting financial literacy among individuals is crucial for fostering a financially savvy population that can make informed decisions about their money. By nurturing the growth of these skills, governments and organizations can empower individuals to manage their financial futures, thereby fostering a more stable and prosperous economy. Moreover, improved financial literacy can reduce financial stress, boost financial well-being, and enhance the overall quality of life for individuals and families (Lusardi & Messy, 2023); (Wann & Burke-Smalley, 2023) and (Denkers et al., 2024).

Impact of FinTech Tools on Financial Literacy

The financial sector has experienced a complete transformation through FinTech management tools. Two budgeting apps called Quicken Simplifi and YNAB (You Need A Budget) enable users to track spending and establish financial goals and provide instant notifications about their financial standing (Sulistyowati et al., 2024); (Warchlewska et al., 2021). The simplified definition of complex financial rules through these apps helps users better understand their finances and take control of them which leads to improved literacy in financial matters. Studies demonstrate that people who use these mobile applications achieve better financial knowledge leading to more intelligent financial choices (Suzanne, 2019).

The implementation of FinTech tools by users does not always result in improved financial literacy knowledge. Many users feel confused by these tools because they cannot navigate them properly which produces disempowering frustration instead of empowering results (Amnas et al., 2024). Users might develop an excessive dependence on technology which causes them to automatically follow suggestions although they do not grasp the fundamental financial principles (James & Pengfei, 2022). Such errors or inaccuracies in technological information can lead users to make wrong financial choices. Research shows that FinTech tools deliver unequal benefits to the general population because less tech-literate individuals along with those with lower income find such tools either unattainable or minimally helpful (Matthew et al., 2023).

Efficacy of Educational Programs Integrating FinTech

The combination of educational programs that integrate FinTech tools generates improved results in building positive financial attitudes among users as well as fostering good saving behaviors (Moenjak et al., 2020). These programs succeed because they provide hands-on experiences along with real-time feedback which traditional methods cannot duplicate by using technology to create interactive simulations and real-time budgeting tools which enhance student learning regarding financial concepts (Harsono & Suprapti, 2024). A FinTech application served as a platform in high school educational research through which students could learn financial management skills through virtual budgeting and saving management simulation. The project used virtual accounts to simulate financial management within a specified time period according to ZL et al. (2019); and Banthia et al. (2022). The study demonstrated that students gained significant knowledge of financial principles while simultaneously showing better capabilities to use these concepts in practical situations (Amagir et al., 2018). The implementation of interactive practical methods allowed students to stay engaged for better retention of material while creating positive attitudes toward saving (Haleem et al., 2022).

The standard traditional financial education method used textbooks alongside lectures yet proved ineffective at engaging students hence leading to unimpressive results (Hafeez, 2022). The students demonstrated they were uninterested and struggled to see how theoretical concepts matched up with practical applications in real life according to Zaini Miftach, (2018). Students showed minimal shifts in their financial management perspectives because their saving behavior did not substantially improve according to (Azlan et al. (2015). Educational programs that include FinTech tools become more effective through interactive features like budgeting apps and investment simulations because these tools bring financial education to life with real-world relevance according to Menberu (2024). The method boosts financial perceptions while developing beneficial saving actions which serve as vital factors for both long-term financial fitness and long-lasting financial success (Fauzi et al., 2024).

Digital Divide in Access to FinTech

The digital divide in access to FinTech tools persists despite their potential benefits, primarily due to socioeconomic disparities. Research shows that individuals from lower-income groups often lack access to necessary technology like smartphones or reliable internet connectivity, which are essential for utilizing FinTech services (Sunwoo, 2023). This lack of access to FinTech tools worsens current financial inequalities, impacting those who could benefit the most from these services disproportionately (Nathalie, 2021). (Darnida et al., 2024); and (Lucky Bamidele Benjamin et al., 2024).

Policymakers alongside financial institutions need to establish affordable technology access with internet connectivity for underserved communities according to Comfort & lenges, (2023) and Liu et al. (2024). The equitable access and use of FinTech services depends heavily on raising digital literacy levels coupled with awareness about FinTech services among the marginalized populations (Basdekis et al., 2022). Mobile banking applications lose value to users who do not have affordable smartphone devices or dependable internet connection (Morgan, 2021). Financial technology offers advantages primarily to individuals who possess economic resources compared to people who lack such resources which demonstrates a digital stratification system. The fundamental financial services including banking and lending continue to remain inaccessible to numerous underprivileged populations according to Beck et al. (2009) and Tay et al. (2022). The improvement of digital literacy remains vital but the exclusive focus on awareness and education fail to resolve the entrenched barriers which limit financial service opportunities for underserved communities (Prema et al., 2018). The barriers forming from incomes gaps combined with insufficient banking systems and discriminatory behaviors work together to sustain financial exclusion within underserved demographic groups (Adegoke et al., 2024).

Surprisingly financial inequalities tend to grow worse because of this separation. The current economic gap becomes wider when lower-income groups fail to access benefits provided by FinTech technology according to Nathalie (2021). This situation shows why we need to develop strategies that unite FinTech tools and digital access between population groups. Government institutions and technological organizations need to team up with financial companies to build financially inclusive solutions. We must address problems with internet availability as well as the absence of financial education and discriminatory behavior to complement FinTech opportunities for everybody who wants to use the technology. Targeted collaborative initiatives need to be undertaken to produce effective digital bridge building and financial inclusion success for underrepresented communities.

CONCLUSION

The analysis proves that financial literacy and advanced financial technologies known as FinTech significantly affect individual savings practices and economic stability. New research analysis shows successful correlations between individual financial training knowledge levels and their capacity to practice wise savings habits (Fauzi et al., 2024) People who have financial literacy education better grasp financial principles and master risk management while planning ahead for the long-term which establishes financial security in their personal lives and benefits economic expansion (Disney et al., 2015). Educational institutions are now incorporating FinTech tools to develop effective approaches which increase financial literacy of students. Modern financial tools support immediate financial operations and create productive educational scenarios while increasing financial understanding better than conventional methods (Harsono & Suprapti, 2024). The digital divide continues to inhibit lower-income people along with marginalized groups from utilizing FinTech tools as noted in Friedline et al. (2020). The equitable access to financial innovation depends on solving the current disparities between different groups of society.

Future researchers need to work on creating FinTech solutions that are inclusive and developing educational programs which cater to different socioeconomic backgrounds. The process should both elevate digital literacy while providing affordable technology access in order to enhance general financial inclusion efforts. Policymakers together with educators and financial institutions can create a prosperous economy when they work to bridge these gaps through which individuals gain knowledge to make smart financial choices and build better financial health. The review supports serial collaboration between experts for maximizing financial literacy and FinTech implementation through focused strategies. Professional cooperation plays a vital role to help users handle intricate financial situations and achieve economic strength both among individuals and society.

REFERENCES

Adegoke, T. I., Ofodile, O. C., Ochuba, N. A., & Akinrinola, O. (2024). *Data analytics in finance and mortgage: A catalyst for addressing inequities faced by under-reserved populations in the USA.*

Agus Eko Sujianto, Jani, & Timbul. (2024). Correlation of financial literacy with saving. World *Journal of Advanced Research and Reviews, 22*(2), 215–221. https://doi.org/10.30574/wjarr.2024.22.2.1338

Amagir, A., Groot, W., Maassen van den Brink, H., & Wilschut, A. (2018). A review of financial-literacy education programs for children and adolescents. *Citizenship, Social and Economic Education, 17*(1), 56–80. https://doi.org/10.1177/2047173417719555

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). https://doi.org/10.3390/jrfm17030108

Ang, K. G. (2024). The Study of the Impact of Financial Goal Setting on Personal Investment Performance. *SSRN Electronic Journal, June.* https://doi.org/10.2139/ssrn.4844639

Arif, I., Khan, L., & Irshad, N. (2024). Does Time Matter? Impact of Financial Decision-making Abilities on Financial Choices Mediated By Time Perspective. *Serbian Journal of Management, 19*(1), 117–131. https://doi.org/10.5937/sjm19-44038

Atkinson, A., & Messy, F.-A. (2012). Measuring financial literacy: results of the OECD infe pilot study. *OECD Working Papers on Finance, Insurance and Private Pensions, 15*(15), 1–73.

Augustin, L. A. V, & Martin, T. K. (2022). Financial literacy and the level of financial planning individuals use. *Financial Services Review.* https://search.ebscohost.com/login.aspx?direct=true&profile=ehost&scope=site&authtype=crawler&jrnl=10570810&AN=163770548&h=HHJDCPfqV0aBVP9EiFCkltyLXYdtNLsTIjPu4HCxvoG%2BDmCEvwGAs2%2BSJFX6uxZtkjWI36uw3Qe3jPXNsiHZ%2Fw%3D%3D&crl=c

Azlan, A., Jamal, A., Kamal, W., Mohdrahimie, R., Roslemohidin, A. K., & Osman, Z. (2015). The Effects of Social Influence and Financial Literacy on Savings Behavior: A Study on Students of Higher Learning Institutions in Kota Kinabalu, Sabah. *International Journal of Business and Social Science, 6(*111), 110–119.

Banthia, D., Dey, S. K., Rindivenessia, A., Fikri, muhammad ali, Rahmanita, N. D., Kusnendi, K., Utami, S. A., Yanto, H., Ismail, N., Kiswanto, K., Rahim, N. M., Baroroh, N., Lavrinenko, O., Čižo, E., Ignatjeva, S., Danileviča, A., Krukowski, K., Goulart, M. A. de O. V., da Costa, N. C. A., … Waring, J. (2022). Pengaruh Locus of Control, Perencanaan dan Literasi Keuangan terhadap Perilaku Keuangan UMKM. *International Journal of Bank Marketing, 8*(1), 51–60. https://doi.org/10.1177/2319714519826651

Basdekis, C., Christopoulos, A., Katsampoxakis, I., & Vlachou, A. (2022). FinTech's rapid growth and its effect on the banking sector. *Journal of Banking and Financial Technology, 6(*2), 159–176. https://doi.org/10.1007/s42786-022-00045-w

Beck, T., Demirgüç-Kunt, A., & Honohan, P. (2009). Access to financial services: Measurement, impact, and policies. *World Bank Research Observer, 24*(1), 119–145. https://doi.org/10.1093/wbro/lkn008

Bhargava, M., Sharma, A., Mohanty, B., & Lahiri, M. M. (2022). Moderating Role of Personality in Relationship to Financial Attitude, Financial Behaviour, Financial Knowledge and Financial Capability. *International Journal of Sustainable Development and Planning, 17*(6), 1997–2006. https://doi.org/10.18280/ijsdp.170635

Brooks, C., & Williams, L. (2021). The impact of personality traits on attitude to financial risk. *Research in International Business and Finance, 58*(July). https://doi.org/10.1016/j.ribaf.2021.101501

Campbell, W. K., Exley, J., & Doyle, P. C. (2023). The Big Five Personality Traits (OCEAN) and Financial Planning: A Narrative Review and Recommendations for Advisors. *Financial Services Review, 31*(4), 31.

Che Hassan, N., Abdul-Rahman, A., Mohd Amin, S. I., & Ab Hamid, S. N. (2023). Investment Intention and Decision Making: A Systematic Literature Review and Future Research Agenda. *Sustainability (Switzerland), 15*(5), 1–22. https://doi.org/10.3390/su15053949

Cho, T. Y., & Chen, Y. S. (2021). The impact of financial technology on China's banking industry: An application of the metafrontier cost Malmquist productivity index. *The North American Journal of Economics and Finance.* https://www.sciencedirect.com/science/article/pii/S1062940821000486

Christianto, J. A., & Asandimitra, N. (2023). Analysis of Factors Influencing Saving Behavior among the Millennial Generation in Surabaya with Saving Intention as a Mediating Variable. *International Journal of Academic Research in Business and Social Sciences, 13*(11), 495–509. https://doi.org/10.6007/ijarbss/v13-i11/19286

Darnida, Y. C., Haryono, A., & Nurriqli, A. (2024). *The Role of Financial Technology in Increasing Financial Access. 3*(2), 474–493.

Dem, L., Enst, M., & Anab, L. (2002). *F i̇ nansal planlamada öngörü metodu olarak rasyolarin kullanilmasi ve tekst i̇ l sektörü i̇ş letmeler i̇ nde b i̇ r uygulama*. September.
Denkers, A., Uhl, F. ., De Jager, L. ., Nijkamp, R., & Vlaming, D. (2024). *A behaviour-based look at money matters Insights from experience & from science*. April.
Despard, M., Roll, S., Grinstein-Weiss, M., Hardy, B., & Oliphant, J. (2023). Can behavioral nudges and incentives help lower-income households build emergency savings with tax refunds? Evidence from field and survey experiments. *Journal of Consumer Affairs, 57*(1), 245–263. https://doi.org/10.1111/joca.12498
Ding, H., Yu, E., & Li, Y. (2020). Strengths-based leadership and its impact on task performance: A preliminary study. *South African Journal of Business Management, 51*(1), 1–9. https://doi.org/10.4102/sajbm.v51i1.1832
Disney, R., Gathergood, J., & Weber, J. (2015). Credit counseling: A substitute for consumer financial literacy? *Journal of Pension Economics and Finance, 14*(4), 466–491. https://doi.org/10.1017/S1474747215000219
Doda, S., & Fortuzi, S. (2015). The Impact of Saving in Personal Finance. *European Journal of Economics and Business Studies, 2*(1), 108. https://doi.org/10.26417/ejes.v2i1.p108-112
Duchek, S., Raetze, S., & Scheuch, I. (2020). The role of diversity in organizational resilience: a theoretical framework. *Business Research, 13*(2), 387–423. https://doi.org/10.1007/s40685-019-0084-8
Fauzi, A., Fauziah, N. T., & Rahayu, S. (2024). The Psychology of Saving: How Mindset Impacts Financial Competence. *Coopetition: Jurnal Ilmiah Manajemen, 15*(2), 367–376. https://doi.org/10.32670/coopetition.v15i2.4455
Frank, D., Singh, R. R., & G, V. B. (2023). Relevance of Employee Saving Attitude Towards Retirement Planning and Satisfaction. *International Journal of Professional Business Review, 8*(5), e01290. https://doi.org/10.26668/businessreview/2023.v8i5.1290
Friedline, T., Naraharisetti, S., & Weaver, A. (2020). Digital Redlining: Poor Rural Communities' Access to Fintech and Implications for Financial Inclusion. *Journal of Poverty, 24*(5–6), 517–541. https://doi.org/10.1080/10875549.2019.1695162
García-Santillán, A. (2023). Between Income, Savings and Investment, How Do College Students Perceive Money Management? *European Journal of Contemporary Education, 12*(3), 849–861. https://doi.org/10.13187/ejced.2023.3.849
Governance, J. O. F. (2024). Examining Factors of Savings Behaviour Among Malaysian Youth. *Journal of Governance and Integrity, 7*(1), 650–667.
Guan, A. K. (2024). *The Study of Achieving Personal Investment Success Through Financial Goal Setting*. June. https://doi.org/10.13140/RG.2.2.23835.89125
Gustina, G., Yenida, Y., & Novadilastri, N. (2022). The Influence of Financial Knowledge, Financial Skills, and Financial Attitudes on the Financial Behavior of MSME Entrepreneurs in West Sumatra. *Journal of Economics, Finance and Management Studies, 05*(12), 3455–3462. https://doi.org/10.47191/jefms/v5-i12-02
Hafeez, M. (2022). Effects of game-based learning in comparison to traditional learning to provide an effective learning environment—A comparative review. *Contemporary Educational Researches Journal, 12*(2), 89–105. https://doi.org/10.18844/cerj.v12i2.6374
Haleem, A., Javaid, M., Qadri, M. A., & Suman, R. (2022). Understanding the role of digital technologies in education: A review. *Sustainable Operations and Computers, 3(May)*, 275–285. https://doi.org/10.1016/j.susoc.2022.05.004
Harini, B., & Subramanian, S. (2023). Influence of Big Five Personality Traits on the Investment Decisions of Investors-Empirical Approach. *Atlantis Press International BV*. https://doi.org/10.2991/978-94-6463-162-3_36
Harsono, I., & Suprapti, I. A. P. (2024). The Role of Fintech in Transforming Traditional Financial Services. *Accounting Studies and Tax Journal (COUNT), 1*(1), 81–91. https://doi.org/10.62207/gfzvtd24
Jirjahn, U., & Ottenbacher, M. (2023). Big Five personality traits and sex. *Journal of Population Economics, 36*(2), 549–580. https://doi.org/10.1007/s00148-022-00893-2

Judge, T. A. (2015). Situation Strength and Trait Activation on the Person-Situation Debate Revisited: Effect of Situation Strength and Trait Activation on the Validity of the Big Five Personality Traits in Predicting Job Performance. *Mendoza College of. Amj, 58*(4), 1149–1179.

Kaiser, T., Lusardi, A., Menkhoff, L., & Urban, C. (2022). Financial education affects financial knowledge and downstream behaviors. *Journal of Financial Economics, 145*(2), 255–272. https://doi.org/10.1016/j.jfineco.2021.09.022

Kang'aru, P. N., & Tirimba, I. (2018). *Effect of Financial Planning Practices on the Financial Performance of Non-Profit Making Health Organizations in Kiambu County, Kenya. In International Journal of Scientific and ….* researchgate.net. https://www.researchgate.net/profile/Ibrahim-Ondabu/publication/325759522_Effect_of_Financial_Planning_Practices_on_the_Financial_Performance_of_Non_Profit_Making_Health_Organizations_in_Kiambu_County_Kenya/links/63ea1e1b6425237563ad4456/Effect-of-Financi

Kasozi, J., & Makina, D. (2021). Analysis of financial literacy and its effects on financial inclusion in Uganda. *International Journal of Finance & Banking Studies (2147-4486), 10*(3), 67–83. https://doi.org/10.20525/ijfbs.v10i3.1294

Kohardinata, C., Suhardianto, N., & Tjahjadi, B. (2020). Peer-to-peer lending platform: From substitution to complementary for rural banks. *Business: Theory and Practice, 21*(2), 713–722. https://doi.org/10.3846/btp.2020.12606

Landman, M., & Mthombeni, M. (2021). Determining the potential of informal savings groups as a model for formal commitment saving devices. *South African Journal of Economic and Management Sciences, 24*(1), 1–12. https://doi.org/10.4102/sajems.v24i1.3940

Li, R., Wu, J., Zhang, S., Zhang, S., & Wu, Y. (2023). Social Endowment Insurance and Inequality of the Household Portfolio Choice: The Moderating Effect of Financial Literacy. *SAGE Open, 13*(1), 1–13. https://doi.org/10.1177/21582440231152399

Li, Y., Li, Z., Su, F., Wang, Q., & Wang, Q. (2020). Fintech Penetration, Financial Literacy, and Financial Decision-Making: Empirical Analysis Based on Tar. *Complexity, 2020*. https://doi.org/10.1155/2020/6696312

Liu, Q., Chan, K. C., & Chimhundu, R. (2024). Fintech research: systematic mapping, classification, and future directions. *Financial Innovation, 10*(1). https://doi.org/10.1186/s40854-023-00524-z

Lucky Bamidele Benjamin, Prisca Amajuoyi, & Kudirat Bukola Adeusi. (2024). Marketing, communication, banking, and Fintech: personalization in Fintech marketing, enhancing customer communication for financial inclusion. *International Journal of Management & Entrepreneurship Research, 6*(5), 1687–1701. https://doi.org/10.51594/ijmer.v6i5.1142

Łukasz, G., & Daw, G. (2024). *Households ' Financial Literacy in Central European Countries – a Recent Survey in Poland*. https://doi.org/10.20944/preprints202406.1314.v1

Lusardi, A., & Messy, F.-A. (2023). The importance of financial literacy and its impact on financial wellbeing. *Journal of Financial Literacy and Wellbeing, 1*(1), 1–11. https://doi.org/10.1017/flw.2023.8

Maleh, Y., Zhang, J., & Hansali, A. (2024). Advances in Emerging Financial Technology and Digital Money. *In Advances in Emerging Financial Technology and Digital Money (Issue March)*. https://doi.org/10.1201/9781032667478

Mehak & Dharni, K. (2022). A Study on Financial Inclusion in India and Its Relation with Financial Literacy. *Journal of Economics, Management and Trade, 28*(1), 49–66. https://doi.org/10.9734/jemt/2022/v28i130388

Menberu, A. W. (2024). Technology-mediated financial education in developing countries: a systematic literature review. *Cogent Business & Management, 11(*1). https://doi.org/10.1080/23311975.2023.2294879

Miah, A., Rahouti, M., Jagatheesaperumal, S. K., Ayyash, M., Xiong, K., Fernandez, F., & Lekena, M. (2023). Blockchain in Financial Services: Current Status, Adoption Challenges, and Future Vision. *International Journal of Innovation and Technology Management, 20*(8). https://doi.org/10.1142/S0219877023300045

Moenjak, T., Kongprajya, A., & Monchaitrakul, C. (2020). Fintech, Financial Literacy, and Consumer Saving and Borrowing: The Case of Thailand. *In ADBI Working Paper Series (Issue 1100).*

Mutlu, Ü., & Özer, G. (2021). The moderator effect of financial literacy on the relationship between locus of control and financial behavior. Kybernetes. https://doi.org/10.1108/K-01-2021-0062

Nasution, A. A., Harahap, D., & Uula, M. M. (2023). Environmental, Social, Governance (ESG) and Islamic Finance: A Review. *Management and Sustainability, 1*(1). https://doi.org/10.58968/ms.v1i1.285

Nurdin, H., Hasanuddin, Waskito, & Saddikin, M. (2019). Characteristics of Particleboard from Waste Nypa Fruticans Wurmb. *Journal of Physics: Conference Series, 1387*(1). https://doi.org/10.1088/1742-6596/1387/1/012103

OECD. (2019). *PISA 2018 Assessment and Analytical Framework*. In OECD Publishing.

Ong ViforJ, R., Suenaga, H., & Brierty, R. (2023). Homeownership and subjective well-being: Are the links heterogeneous across location, age and income? *Urban Studies.* https://doi.org/10.1177/00420980231190479

Onyia, O. P., & Tuyon, J. (2023). Disruptions, innovations and transformations in the global financial services market: the impacts of emerging cybersecurity, geopolitical and sustainability risks. *Journal of Financial Services Marketing, 28*(4), 627–630. https://doi.org/10.1057/s41264-023-00260-6

Pak, O., & Mahmood, M. (2015). Impact of personality on risk tolerance and investment decisions *International Journal of Commerce and Management Article information: November*. https://doi.org/10.1108/IJCoMA-01-2013-0002

Ramdani, R., Mawardi, I., & Sulaeman, S. (2023). Impact of Green Banking Implementation, Financial Performance, and Covid-19 Crisis on Islamic Bank Profitability in Indonesia. *International Journal of Islamic Economics and Finance (IJIEF), 6*(2), 225–246. https://doi.org/10.18196/ijief.v6i2.16802

Ratnawati, K., Prabandari, S. P., & Kurniasari, I. (2022). The impact of financial inclusion on national development and national financial system stability. *HOLISTICA – Journal of Business and Public Administration, 13*(2), 63–82. https://doi.org/10.2478/hjbpa-2022-0015

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

Sadi, R., Asl, H. G., Rostami, M. R., Gholipour, A., & Gholipour, F. (2011). Behavioral Finance: The Explanation of Investors' Personality and Perceptual Biases Effects on Financial Decisions. *International Journal of Economics and Finance, 3*(5), 234–241. https://doi.org/10.5539/ijef.v3n5p234

Shoham, A., & Malul, M. (2012). The role of cultural attributes in savings rates. *Cross Cultural Management, 19*(3), 304–314. https://doi.org/10.1108/13527601211247062

Shrestha, S. K., Manandhar, B., Bhattarai, P., & Shrestha, N. (2023). Intelligence Journal of Multidisciplinary Research Impact of Financial Literacy on Personal Investment Decisions in Kathmandu Valley. *Research Management Cell, 2*(1), 25–34.

Singh, S., Jaiswal, D. A., Rai, P. A. K., & Kumar, P. A. (2024). Moderating Role of Fintech Adoption on Relationship between Financial Literacy and Financial Well-being. *Educational Administration: Theory and Practice, 30*(4), 7597–7607. https://doi.org/10.53555/kuey.v30i4.1351

Sulistyowati, S. N., Pranoto, A. J., & Mas'adah, N. (2024). The Impact of Fintech and Financial Literacy on MSME Development through Access to Finance. *DiE: Jurnal Ilmu Ekonomi dan Manajemen, 15*(1), 79–87. https://doi.org/10.30996/die.v15i1.10594

Tay, L. Y., Tai, H. T., & Tan, G. S. (2022). Digital financial inclusion: A gateway to sustainable development. *Heliyon, 8*(6), e09766. https://doi.org/10.1016/j.heliyon.2022.e09766

Ventre, V., Martino, R., & Muñoz Torrecillas, M. J. (2024). Relationship between an inconsistent degree of financial literacy and inconsistent decision-making in intertemporal choices. *Heliyon, 10*(5). https://doi.org/10.1016/j.heliyon.2024.e27253

Von Collani, G., & Grumm, M. (2009). On the Dimensional Structure of Personality, Ideological Beliefs, Social Attitudes, and Personal Values. *Journal of Individual Differences, 30*(2), 107–119. https://doi.org/10.1027/1614-0001.30.2.107

Wann, C. R., & Burke-Smalley, L. A. (2023). Attributes of Households that Engage in Higher Levels of Family Financial Planning. *Journal of Family and Economic Issues*. https://doi.org/10.1007/s10834-021-09805-0

Warchlewska, A. J., Janc, A., & Iwański, R. (2021). Personal Finances in the Era of Modern Technological Solutions. *Finanse i Prawo Finansowe, 1*(29), 155–174. https://doi.org/10.18778/2391-6478.1.29.09

Yeo, J. H., & Fisher, P. J. (2017). Mobile financial technology and consumers' financial capability in the United States. In *Journal of Education &Social Policy*. researchgate.net. https://www.researchgate.net/profile/Patti-Fisher/publication/341574984_Mobile_financial_technology_and_consumers'_financial_capability_in_the_United_States/links/640f33c0315dfb4cce78c3bd/Mobile-financial-technology-and-consumers-financial-capability-in-t

Zaini Miftach. (2018). *済無No Title No Title No Title*. September, 53–54.

Zainudin, N. (2022). *Factors Affecting Individual Saving Behavior: A Review of Literature*. August.

Zavolokina, L., Dolata, M., & Schwabe, G. (2017). FinTech transformation: How IT-enabled innovations shape the financial sector. *Lecture Notes in Business Information Processing, 276(January)*, 75–88. https://doi.org/10.1007/978-3-319-52764-2_6

ZL, A., C, R., & FW, S. (2019). the Influence of Parental Financial Socialisation Techniques on Student Financial Behaviour. *International Journal of Economics and Finance Studies, 11*(2), 72–88. https://medium.com/@arifwicaksanaa/pengertian-use-case-a7e576e1b6bf