Conceptualizing of Financial Resilient: Building Money Management Behavior

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Abstract. This study aims to formulate a model of household financial resilience focusing on the formation of money management behavior with an asset-based approach. This proposed model determines saving and investment as critical factors to manage personal financial management. Based on the Theory of Planned Behavior, how people behave is stimulated by the intention accumulated from people's attitude, subjective norm and controlled by the perceived behavior. Moreover, dealing with digitalization as a response to an economic shock, this model integrates the importance of household digital financial literacy. The proposed model could be tested for future research in any population and specific region.

Keywords: Financial Resilience · Money Management Behavior · Digital Financial Literacy

1 Introduction

The COVID-19 pandemic has given shock and brought many impacts not only on health but also on other sectors, including the economy. The economy is slowing down significantly, almost in all countries, and as a result, decrease in consumption from households. A contraction in income caused this decrease due to job losses, a reduction in revenue, a decline in operating profits, and limited consumption space due to restrictions on social mobility [1]. Economically, many households that previously had secure incomes are now at risk of becoming poor. Losing income is not the only challenge, for many households. Family expenses have also increased. The increase in the price of foodstuffs and other necessities was the main contributor to this increase in expenditure [2].

The Covid-19 pandemic, in the end, gives us a new picture of the need to focus on household financial resilience. Financial resilience is a readiness to face economic shocks caused by various unexpected events, including those related to work, health, changes in family composition, damage to household property, or other unanticipated significant expenses [3, 4]. The shock of household finances during the COVID-19 pandemic is an opportunity to transform towards better financial management. The lesson from this crisis is how to strive for financial resilience, not limited to maintaining or

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rebuilding previous circumstances but encouraging transformation towards increased financial resilience, which ultimately aims to support better financial well-being. Despite the fiscal and regulatory measures issued by the government to support society in the face of financial difficulties, household financial management remains an essential element of any financial strategy to deal with the consequences of future crises [3].

Financial resilience, which is currently on the agenda and goals of world organizations, can be pursued through resilience-building financial behaviors. One is having financial management skills and getting used to money management behavior [5]. Money management behavior is an effort to manage income, expenses, savings, and investments or long-term planning [6–11]. But in particular, what behaviors are more necessary in the context of resilience-building financial behaviors can be identified by looking at potential vulnerabilities arising from financial shocks [12]. Financial shocks directly result from a decrease in financial well-being [13]. Adequate economic resources play an essential role in financial shocks. How many resources are at hand to meet their basic needs and to anticipate and respond to change and disruption is a core factor of this problem [4]. Ideally, households will use their savings or sell investment assets [4, 13, 14]. However, what often happens, especially in Indonesia, is low savings [15] and limited activity in purchasing investment instruments [16], a common reason most households cannot cope with this situation.

Low savings and investment in Indonesia are the main focus of researchers, so it needs to be studied to form household financial resilience with an asset-based approach [4]. The formation of these two behaviors is essential considering saving. Investment behavior is a way to create a financial buffer for individuals and households, both for emergencies and the long term because it affects the level of living and emergency reserves. Anong & DeVaney, 2010, Hira, 1987, Lee et al., 2000 in state that investment behavior also affects the ability to meet financial goals and expectations [17]. Both are dimensions of the money management behavior variables that researchers will discuss.

Knowing how money management behavior focuses on saving behavior and investment behavior by adopting the Theory of Planned Behavior is how the author formulated the concept model of this study. The TPB, which Ajzen proposed in 1991, reviews how a person's behavior is formed through relationships of attitudes, subjective norms, perceived behavior control, and one's intention. This theory is widely used in explaining patterns of behavior and providing a better understanding of how individuals make decisions in behaving [18, 19].

During the Covid-19 pandemic, a shift toward digitalization in financial services occurred. Changes in financial activity that lead to contactless payments increase the portion of the economy carried out online. This means that the pandemic has accelerated and become a catalyst for human change in adopting digital financial services (DFS) [20]. Along with the increasing adoption of DFS, the contribution of Digital Financial Literacy (DFL) has an essential role in the formation of financial resilience [3, 12, 14]. The DFL gives directions to users to behave better financially. DFL guides so one can enjoy the convenience offered by DFS further to increase saving and investment behavior [21].

Adopt empirical evidence stating that financial behavior is influenced by financial literacy [22–25]. Then, it is also essential to know the influence of DFL on money management behavior. Likewise, the effect of the DFL on intention towards money management, as researched [26]. This is done considering that studies related to DFL are still minimal, and their measurements are rarely found in the scientific literature. On the other hand, the policies issued by governments throughout the country focus on strengthening the DFL, since the DFL is considered to influence a person's financial behavior [27] positively.

Based on the description above, this paper is written to formulate a conceptual model for the formation of household financial resilience through money management behavior, focused on saving and investment behavior by adopting the TPB and adding DFL as one of the possible determinants can also form money management behavior, as well as provide novelty and answer the gaps of previous research. This is important to rebuild financial resilience from the last pandemic and increase household financial resilience because it is undeniable that economic shocks and unforeseen adverse situations will still arise in the future. Furthermore, the shift in financial activities towards digitalization allows DFL to contribute and can be utilized in encouraging money management behavior that forms resilience-building financial behaviors.

2 Literature Review

2.1 Theory of Planned Behavior (TPB)

TPB is a development of the Theory of Reasoned Action (TRA). Fishben and Ajzen first put forward this theory in 1967. TRA reviews how attitudes and behaviors relate. Individual behavior is formed from a person's will or intention. Intention is influenced by attitude, which means how a person responds to a behavior, which can also be interpreted as a belief about the consequences of behavior or a person's perception of behavior. Second, Subjective norms are individual perceptions or thoughts on the expectations desired by people who are considered influential in their lives, for a behavior that will be carried out or not carried out [27]. In the TPB, perceived behavioral control is another factor affecting a person's intention. Perceived behavioral control is the perception of behavioral control. Behavioral control refers to a person's belief to realize a behavior. This behavioral control is based on the situations and circumstances that favor a behavior. Ajzen said that the availability of resources such as equipment, compatibility, competence, and opportunities both support and hinder a behavior (Fig. 1) [27].

2.2 Social Cognitive Theory

In 1986, Social Cognitive Theory (SCT) was put forward by Bandura. SCT is a development of the previous theory, the Social Learning Theory (SLT), and complements Miller and Dollard's 1941, thinking on social learning and imitation. According to Bandura, personal factors consisting of cognitive, affective, and biological events can lead to a behavior. Bandura's process of choosing which behaviors to select and which to discard is expressed as cognitive. Bandura states that cognitive processes are contributed by the knowledge that provides substance and thinking operations as cognitive tools to solve cognitive problems [28, 29].

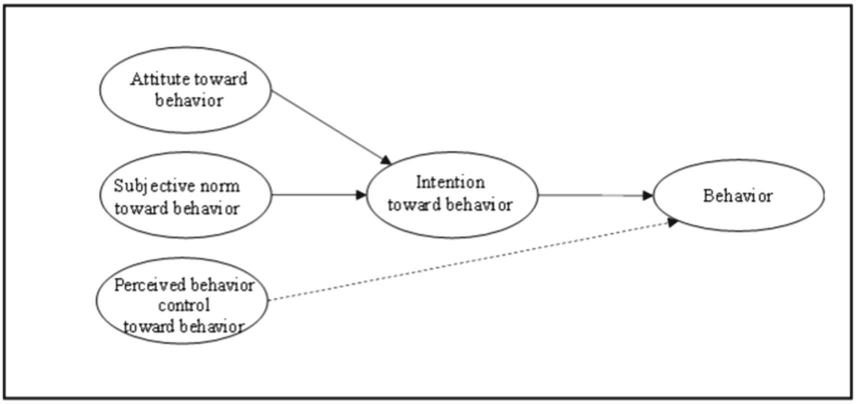

Fig. 1. Theory of planned behavior.

2.3 Financial Resilience

Schoon and Bynner in Salignac states that resilience is how humans are able to survive in the face of extreme adversity and show positive responsiveness or adaptation in the face of adversity [4]. Financial resilience means readiness to deal with financial shocks resulting from various unforeseen events, including work, health, changes in family composition, damage to household property, or other significant unexpected expenses [3, 4].

Financial resilience depends on the availability of appropriate resources and the ability to mobilize those resources to deal with negative financial shocks [3]. Have enough savings to cope with unexpected financial shocks and emergencies [3]. Salignac also refers to the asset-based financial resilience approach, which encompasses the economic resources aspect, including savings [4]. Meanwhile, it is generally recognized that savings and investment assets in households lacking an economy play an essential role in building financial resilience [30]. Therefore, resilience-building financial behaviors focus on saving behavior and investment behavior, expressed in the variable money management behavior.

2.4 Money Management Behavior

Money management is budgeting, saving, investing, spending, or other things to supervise the use of money in individuals [6]. It is generally known that money management behavior is a shield against overspending and personal debt, which includes savings, spending, budgeting, and investing. Investments are included in money management [7], and it is considered the goal of money management to plan long-term savings regularly [31]. Money management behaviors are related to saving behaviors for old age and investing in pension funds [8].

Money management is a form of financial awareness, financial knowledge, financial skills, and decision making in the context of financial literacy. The skills in question are techniques to maximize the value obtained on an expense, including investing and saving[10]. Widyastuti [9], mentioned money management, including savings and short-term and long-term financial planning [9]. Money management is closely related to overcoming predictable shocks [5].

By some researchers, money management is expressed by financial behavior, namely positive financial behavior, including financial planning, readiness for the future, budgeting, savings and investment [11]. Financial behavior also refers to individual saving behavior and behavior in selecting instruments for savings and investments, savings barriers (…) [32].

2.5 Digital Financial Literacy

DFL has become the concern of various groups, not only financial service providers or the public as users but also the government. This attention has been given since the rise of digital financial services in society [12]. DFL is a multi-dimensional concept, both financial and digital knowledge [33]. DFL is financial literacy coupled with digital aspects [34]. The OECD in Morgan noted that DFL includes digital products and services, digital financial risk awareness, and digital knowledge [35]. Setiawan [21], mentioned that DFL provides knowledge related to DFS, experience using DFS, awareness of potential risks in using DFS, and managing financial activities using DFS [21].

3 Methodology

This research is a conceptual framework that describes how theories and logical relationships between variables are identified from a problem. The conceptual framework is an attempt to describe problems that are built on theory. This overview will be the purpose of analysis and a series of content analysis processes. The conceptual framework has three functions, namely, prescriptive, analytical, and methodological, which aid in the conceptualization and design of research practice and content analysis. The analytical function helps in facilitating the process of critical inquiry and comparative analysis of content. On the other hand, the methodological function aims to illustrate the performance criteria and prudential standards utilized by researchers to evaluate ongoing content analysis [36].

The stages of this study include mapping selected literature, identifying and deconstructing concepts, and identifying attributes according to the features and role of the methodology. Furthermore, concept integration is carried out, namely integrating and grouping concepts into one new image. Finally, synthesize the idea into a conceptual framework.

4 Proposed Conceptual Model and Hypothesis

This research framework is based on TPB, which Ajzen proposed. The TPB has been considered one of the most influential models in various research fields. They are used to explain the behavior of different domains [19, 37], among them saving behavior [26, 38], investment behavior [37, 39], money management behavior [10, 19], etc. Since the TPB show individual behavioral decision-making mechanisms, applying this theory to explain the behaviors the authors want to discuss in this study is very relevant.

Money management behavior is a behavior that the authors want to examine in this study. This behavior was chosen for problems arising from the Covid-19 crisis, where households experienced financial shocks due to income contraction due to job losses, reduced income, or decreased operating profits. Susenas in March 2019 showed that 25 million (9.4 percent of the population) in Indonesia live below the poverty line, and 20.6 percent of the population lives slightly above the poverty line, which is vulnerable to becoming poor. Due to the Covid-19 pandemic, the number of Indonesians living in poverty is now 30 percent. A survey conducted on households from October to November 2020 found that they earned less than before January 2020. Households in all income groups experienced a percentage decline in income. They run the risk of becoming economically poor. For many households, losing income is not the only challenge. Family expenses have also increased. The increase in the price of foodstuffs and other necessities was the main contributor to the increase in expenditure [2].

Based on this, it is considered necessary to maintain or rebuild household financial resilience while encouraging transformation toward increasing household financial resilience. Building financial resilience requires individuals to have positive financial behavior and implement good financial management practices. These behaviors and practices will, in turn, lead to financial security and resilience [12]. We define these behaviors and practices as money management behavior. The approach used in explaining money management behavior is the asset approach, which includes saving and investing behaviors. These two things are still very far from ideal for the Indonesian people to do. Gross Saving data from the percentage of Indonesia's GDP decreased in 2019. Although it increased until the end of 2021 to 33%, this value is still low compared to Brunei Darussalam, Singapore, and China [15]. Meanwhile, although the number of retail investors at the end of the pandemic increased by 15.96%, one of which was due to the ease of investment through digital services, the total number of Indonesian investors compared to the population was still relatively low [16, 40].

Money management behavior as the output of targeted behavior, identified using the grand theory, namely TPB. As with the formation of behavior in the TPB, money management behavior is formed by intention toward money management, whereas intention toward money management is formed by attitude toward money management, subjective norms, and perceived behavioral control.

One of how financial resilience is realized is through improving financial inclusion strategies. One of them is financial literacy, a vital instrument for growing financial awareness, financial knowledge, financial skills, financial attitudes, and financial behaviors needed for individuals. As a result, almost all national strategies for financial inclusion include a crucial component, financial literacy [32]. Financial resilience can also be formed through digital financial literacy [14, 41].

Based on empirical studies, adopting the same pattern as the relationship of financial literacy to behavior [22–24], digital financial literacy is also alleged to affect intention and behavior. Theoretically, the literacy and behavior relationship is based on Bandura's SCT. In SCT, it is explained that behavior is influenced by personal factors, one of which is the cognitive aspect. In this case, literacy provides substance and thinking operations as a tool to solve problems cognitively which is one of the determinants of personal factors.

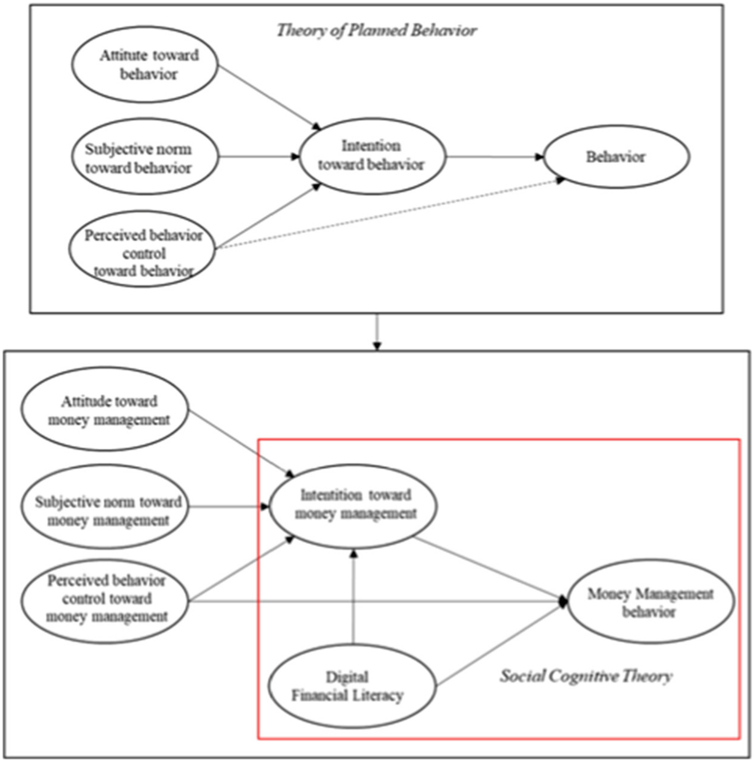

Fig. 2. Proposed research framework.

Based on this, the conceptual framework proposed is (Fig. 2):

4.1 Attitude Toward Money Management and Intention Toward Money Management

Attitude is essential in TRA [42] and TPB [27]. Eagly and Chaiken, 1993 in Kisaka [43], attitude is defined as a psychological tendency that is expressed by liking or disliking, positive or negative, agreeing or disagreeing [43]. Ajzen states that attitudes develop reasonably from the beliefs people hold about something. The appearance of a liking attitude towards certain behaviors is due to the presence of a large part of the expected constituency. And vice versa, the appearance of dislike towards certain behaviors is due to the fact of most of the undesirable consequences. Attitudes eventually accumulate, form an intention for behavior, and indirectly predict behavior [27]. Attitudes in this study are related to how a person responds to money management behavior, beliefs about the consequences of money management behavior, or a person's perception of money management behavior.

Intention is defined by Triandis, 1980 in Habibah, 2018 as instructions that people give themselves to behave in a certain way [43]. The intention is assumed to capture behavior's motivational factors [28]. In this study, intention was directed towards money management.

Ajzen proposes a model of the relationship of influence between attitude and intention in his theory. Based on the previous studies, it was found that this influence relationship has a greater value compared to other components [10]. Other empirical findings that support the relationship of influence between attitude and intention include Widyastuti et al. [9], Satsios and Hadjidakis [17], who examine the influence of attitude on intention in the context of saving behavior. The influence of attitude and intention in investment behavior was carried out by Warsame and Ireri [44], Akhtar and Das [45], Bongini and Cucinelli [8], Raut [37]. Meanwhile, test the influence of attitudes and intentions in shaping mental budgeting behavior.

4.2 Subjective Norm Toward Money Management and Intention Toward Money Management

Subjective norm refers to perceived social pressure, the perception that most people are important to him thinking about doing or not doing behavior [27]. The subjective norm in this study is related to the belief in household financial management. This belief can be obtained from the social environment or referrals or people and groups that are influential to the individual.

Kisaka [43], stated that subjective norms affect intention by focusing on intention toward saving, borrowing, and investment. Widyastuti [9] and Satsios and Hadjidakis [17], state the same and emphasize more on saving behavior. Akhtar and Das [45], Raut [37], and Yoopetch and Chaithanapat [46], state that subjective norm is one of the determinants of investment intention.

4.3 Perceived Behavior Control Toward Money Management and Intention Toward Money Management

Perceived behavior control leads to a perception of ease or difficulty felt in carrying out behavior and is assumed to reflect the experience of obstacles and obstacles that can be anticipated [27]. Some of the most recent studies were carried out, for example, by Warsame and Ireri [44], Satsios and Hadjidakis [17], and Raut [37], which stated that perceived behavior control had a positive and significant effect on intention.

4.4 Intention Toward Money Management and Money Management Behavior

A lot of literature discusses why individuals are encouraged to do money management, especially when it comes to investing and saving. According to the TPB, the intention is considered one of the determinants of money management behavior. Intention is considered as a motivation that influences behavior. This drive ultimately determines the level of exertion or the amount of energy individuals are willing to expend in performing a particular behavior [28]. Intention is seen as a predictor of behavior; hence there is a positive relationship between intention and behavior.

In the literature, some studies adopt the relationship between intention and money management behavior, although each researcher defines money management differently.

Meanwhile, the relationship between the two is also studied in studies focusing on financial behavior, including saving and investment behavior. Widyastuti et al. [9], Satsios and Hadjidakis [17], and Widjaja et al. [26] stated that intention has a positive effect on saving behavior. Concluded that mental budgeting intention positively affects mental budgeting behavior. Stated that intention positively affects investment behavior.

4.5 Perceived Behavior Control Toward Money Management and Money Management Behavior

Several researchers, Warsame and Ireri [44], studied the relationship between perceived behavior control and behavior, where perceived behavior control has a positive and significant effect on investment behavior. However, the results of this study are contrary to the findings of a study conducted by Satsios and Hadjidakis [17], which states that perceived behavior control negatively affects saving behavior in testing the direct influence between perceived behavior control and saving behavior.

4.6 Digital Financial Literacy and Intention Toward Money Management

The relationship between digital financial literacy and intention toward money management was raised by adopting research conducted by Lajuni et al. [46], Widjaja et al. [26], that financial literacy affects intention. Widjaja et al. [26], state that financial literacy affects intention towards saving behavior. Meanwhile, Lajuni et al. [46], stated that financial literacy affects the intention to change financial behavior. Another study conducted by 1. The last two studies, raised the context of saving and investment.

4.7 Digital Financial Literacy and Money Management Behavior

According to Chen and Volpe, someone with high financial literacy will make good investment decisions, manage savings and debt well too. Conversely, someone with low financial literacy tends to make inappropriate financial decisions [22]. Meanwhile, Perry and Morris stated that financial literacy significantly affected financial behavior. Overall financial literacy makes people more responsible for their financial behavior. A number of prior research works have recognized financial literacy as a significant determinant in promoting positive financial conduct [24]. According to Robb and Woodyard, every individual needs financial literacy to make good financial decisions and to deal with financial problems. Improvements in financial behavior can occur when a person gains additional knowledge related to finance [23].

The research that focuses on DFL is conducted by Setiawan et al. [21], which examines the influence of DFL on saving behavior. DFL as a determinant of behavior was added based on studies conducted by Widjaja et al. [26], Nguyen and Doan [47], Alshebami and Seraj [48], which tested the direct influence of financial literacy on saving behavior. Meanwhile, Adil et al. [49], examined the direct effect of financial literacy on investment behavior. This relationship of influence is proposed to strengthen empirical evidence of the influence of digital financial literacy on a person's financial behavior, considering that digital financial literacy studies are still limited (Fig. 3).

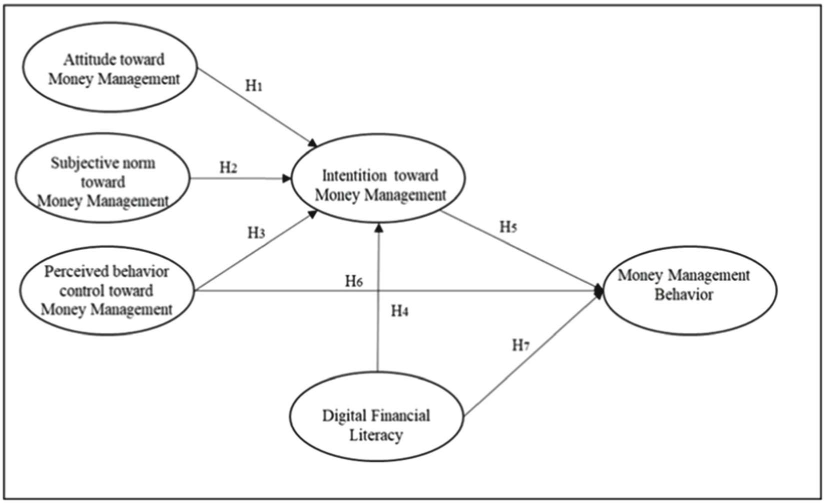

Fig. 3. Proposed hypothesis.

5 Limitation, Future Research of Study and Conclusion

The purpose of this conceptual paper is to construct a research framework that can be utilized in future investigations. Through the TPB approach, a research model was obtained related to the formation of money management behavior, with determinants forming these behaviors, including intention, attitude, subjective norm, perceived behavior control, and digital financial literacy. So far, researchers have not found any previous studies examining money management behavior behaviors associated with DFL, given the current rise of DFS enabling the use and habituation of behavior through DFS.

The proposed research model is aimed at household research objects, considering that households more feel financial shocks during the pandemic. However, the very limited research that specifically focuses on money management behavior which refers to the saving and investment behavior obtained by the author, is an obstacle in building this concept model. So how to form financial management-oriented behavior to increase financial resilience needs to be studied more deeply.

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References

1. LIPI: Survei Dampak Pandemi COVID-19 terhadap Ekonomi Rumah Tangga Indonesia | Lembaga Ilmu Pengetahuan Indonesia (2020).
2. Unicef, UNDP, Prospera, SMERU: Analisis Dampak Sosial dan Ekonomi COVID-19 pada Rumah Tangga dan Rekomendasi Kebijakan Strategis untuk Indonesia. SMERU Res. Inst. 1–7 (2021)

3. OECD: supporting financial resilience and transformation through digital financial literacy. (2021).
4. Salignac, F., Marjolin, A., Reeve, R., Muir, K.: Conceptualizing and Measuring Financial Resilience : Soc. Indic. Res. (2019).
5. Sanchez, A., Sparreboom, P., Laufer, H.: Savings at the Frontier Building Financial Resilience : 1–19 (2021).
6. Bamforth, J., Jebarajakirthy, C., Geursen, G.: Understanding undergraduates' money management behaviour: a study beyond financial literacy. Int. J. Bank Mark. 36, 1285–1310 (2018).
7. Sachitra, V., Wijesinghe, D., Gunasena, W.: Exploring undergraduates' money-management life: insight from an emerging economy. Young Consum. 20, 167–189 (2019).
8. Bongini, P., Cucinelli, D.: University students and retirement planning: never too early. Int. J. Bank Mark. 37, 775–797 (2019).
9. Widyastuti, U., Suhud, U., Sumiati, A.: The Impact of Financial Literacy on Student Teachers' Saving Intention and Saving Behaviour. Mediterr. J. Soc. Sci. (2016).
10. Boonroungrut, C., Huang, F.: Reforming theory of planned behavior to measure money management intention: a validation study among student debtors. RAUSP Manag. J. 56, (2021).
11. Khawar, S., Sarwar, A.: Financial literacy and financial behavior with the mediating effect of family financial socialization in the financial institutions of Lahore, Pakistan. Futur. Bus. J. 7, 1–11 (2021).
12. Lyons, A., Kass-Hanna, J., Liu, F., Greenlee, A., Zeng, L.: Building Financial Resilience Through Financial and Digital Literacy in South Asia and Sub-Saharan Africa. (2019).
13. Sun, L., Small, G., Huang, Y.H., Ger, T. Bin: Financial Shocks, Financial Stress and Financial Resilience of Australian Households during COVID-19. Sustain. 14, 1–13 (2022).
14. Kass-Hanna, J., Lyons, A.C., Liu, F.: Building financial resilience through financial and digital literacy in South Asia and Sub-Saharan Africa. Emerg. Mark. Rev. 51, 100846 (2022).
15. Worldbank: No Title. [Online]. Available: https://data.worldbank.org/indicator/NY.GNS.ICTR.ZS (2021).
16. Uly, Y.A.: No Title, Kompas, (2020).
17. Satsios, N., Hadjidakis, S.: Applying the Theory of Planned Behaviour (TPB) in saving behaviour of Pomak households. Int. J. Financ. Res. 9, 122–133 (2018).
18. Jian Xiao, J., Wu, J.: Human Development and Family Studies Faculty Publications Human Development and Family Studies Completing Debt Management Plans in Credit Counseling: An Application of the Theory of Planned Behavior Citation/Publisher Attribution. Financ. Couns. Plan. 19, 29–45 (2008).
19. Onofrei, N. et al: Understanding Money Management Behavior Through the Theory of Planned Behavior : Int. J. Appl. Behav. Econ. 11, 1–17 (2022).
20. The Institute of International Finance, Deloitte: COVID-19 catalyzes and accelerates transformation. Realiz. Digit. Promise COVID-19 Catalyzes Accel. Transform. Financ. Serv. 14 (2020).
21. Setiawan et al, M.: Digital financial literacy, current behavior of saving and spending and its future foresight. Econ. Innov. New Technol. (2020).
22. Saurabh, K., Nandan, T.: Role of financial risk attitude and financial behavior as mediators in financial satisfaction Empirical evidence from India. South Asian J. Bus. Stud. 7, 207–224 (2018).
23. Co, S.: Understanding Factors Affecting Financial Satisfaction : The Influence of Financial Behavior , Financial Knowledge and Demographics. Imp. J. Interdiscip. Res. 2, 377–385 (2016).

24. Falahati, L., Sabri, M.F., Paim, L.H.J.: Assessment a model of financial satisfaction predictors: Examining the mediate effect of financial behaviour and financial strain. World Appl. Sci. J. 20, 190–197 (2012).
25. Lusardi, A., Mitchell, O.S.: The economic importance of financial literacy: Theory and evidence. J. Econ. Lit. 52, 5–44 (2014).
26. Widjaja, I. et al: Management Science Letters. Manag. Sci. Lett. 10, 1–12 (2020).
27. Ajzen, I.: The theory of planned behavior. Organ. Behav. Hum. Decis. Process. 50, 179–211 (1991).
28. Bandura, A.: A social cognitive theory of personality. Handb. Personal. Theory Res. 154–196 (1999).
29. Handayani, L.: the Role of Social Support, Knowledge, Attitude, and Self-Efficacy in Breastfeeding: Social Cognitive Perspective. Bul. Psikol. 18, 13–18 (2016).
30. Research Officer Eco-Developmen: The savings and investment behavior of extreme poor Marma community households in resilience building : a case study on Green Hill village savings and loan association intervention in the Chittagong Hill Tracts. (2013).
31. Topa, G., Hernández-Solís, M., Zappalà, S.: Financial management behavior among young adults: The role of need for cognitive closure in a three-wave moderated mediation model, (2018).
32. Nițoi, M., Clichici, D., Zeldea, C., Pochea, M., Ciocîrlan, C.: Financial well-being and financial literacy in Romania: A survey dataset. Data Br. 43, 108413 (2022).
33. OECD: G20/OECD INFE Policy Guidance on Digitalisation and Financial Literacy. 1–25 (2018).
34. Tony, N., Desai, K.: Impact of digital financial literacy on digital financial inclusion. Int. J. Sci. Technol. Res. 9, 1911–1915 (2020).
35. Morgan, P.J., Huang, B., Trinh, L.Q.: The Need to Promote Digital Financial Literacy for the Digital Age. Adb.Org. 40–46 (2019).
36. Krippendorff, K.: Content-analysis: An-Introduction to its Methodology, (2004).
37. Raut, R.K.: Past behaviour, financial literacy and investment decision-making process of individual investors. Int. J. Emerg. Mark. 15, 1243–1263 (2020).
38. Peiris, T.U.I.: Effect of Financial Literacy on Individual Savings Behavior; the Mediation Role of Intention to Saving. Eur. J. Bus. Manag. Res. 6, 94–99 (2021).
39. Sashikala, V., Chitramani, P.: The Impact of Behavioural Factors on Investment Intention of Equity Investors. Asian J. Manag. 9, 183 (2018).
40. KSEI: Didominasi Milenial dan Gen Z , Jumlah Investor Saham Tembus 4 Juta. (2022)
41. Lyons, A.C., Kass-hanna, J., Liu, F., Greenlee, A.J.: Building Financial Resilience Through Financial And Digital Literacy In South Asia And Sub-Saharan Africa. (2020).
42. Ajzen, I., & F.: Belief, Attitude, Intention, and Behavior: An Introduction to Theory and Research.129–385. Addison-Wesley, Reading, MA. (1975).
43. Kisaka, S.E.: The Impact of Attitudes towards Saving, Borrowing and Investment on the Capital Accumulation Process in Kenya: An Application of the Theory of Planned Behavior. Res. J. Financ. Account. 5, 140–152 (2014).
44. Warsame, M.H., Ireri, E.M.: Does the theory of planned behaviour (TPB) matter in Sukuk investment decisions? J. Behav. Exp. Financ. 12, 93–100 (2016).
45. Akhtar, F., Das, N.: Predictors of investment intention in Indian stock markets: Extending the theory of planned behaviour. Int. J. bank Mark. 37, 97–119 (2019).
46. Lajuni, N., Abdullah, N., Bujang, I., Yacob, Y.: Examining the predictive power of financial literacy and theory of planned behavior on intention to change financial behavior. Int. J. Bus. Manag. Invent. 7, 60–66 (2018).
47. Doan, M.D.: The correlation between financial literacy and personal saving behavior in Vietnam. Asian Econ. Financ. Rev. 10, 590–603 (2020).

48. Alshebami, A.S., Seraj, A.H.A.: The antecedents of saving behavior and entrepreneurial intention of Saudi Arabia University students. Educ. Sci. Theory Pract. 21, 67–84 (2021).
49. Adil, M., Singh, Y., Ansari, M.S.: How financial literacy moderate the association between behaviour biases and investment decision? Asian J. Account. Res. 7, 17–30 (2022).