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Impact of FinTech Applications on Spending and Saving Behaviour of Young Adults: A Primary Study

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Abstract

In the existing financial environment, the saving and spending practices of younger population group play a crucial role in determining their long-term financial stability and economic well-being. This study intends to analyse how digital financial literacy influence the financial behaviour among young individuals, along with examining the mediating role of digital financial planning. In the present study, primary data were gathered from 193 young adults using a formal questionnaire, and Partial Least Squares-Structural Equation Modelling (PLS-SEM) was applied to analyse the relationships between the variables. The outcome indicate that digital financial literacy demonstrates a significant positive effect on the saving and spending behaviour of young adults with digital financial planning has indirect influence in this relationship. The study determines that improving digital financial literacy reinforced by effective digital financial planning, crucial for promoting rational saving and spending behaviour of young individuals in the developing digital economy.

Keywords: Future financial stability, Digital Financial Literacy, PLS-SEM, Saving and Spending practices, Digital Financial Planning.

Introduction

The significant increase of digital technologies has notably transformed the framework and operations of the worldwide financial industry, leading to tech-based financial services as main factor of advancements. Fintech is widely considered as a combination of advanced tech-based solution into financial services to boost productivity, availability, and customer experience (Gomber et al., 2018). It reflects the convergence of finance, information technology, and innovation aimed at redesigning traditional financial intermediation processes (Takeda & Ito, 2021).

FinTech applications-including mobile banking, digital wallets, peer-to-peer(P2P) transaction systems, internet-based credit platforms and investment

application have significantly altered the way individual conduct monetary transactions and manage personal finances. By reducing transactions expenses, improving speed, and allowing instant financial access, these systems improved inclusion in financial system. Although, apart from performance efficiency Fintech innovation has a major impact on behaviour especially affecting saving and spending habits.

While past academic work mainly explored tech development, regulatory framework and structural changes in institution within the FinTech ecosystem. Minimal emphasis has been given to its behavioural effects as at the individual level. The expanding usage of digital financial tools affects the way people make saving and spending decisions, especially, among young individuals with tech-savvy behaviour. Even though FinTech boosts accessibility and performance efficiency, positive financial outcomes are influenced by financial literacy and structured financial planning. Tech based financial planning serves as a psychological mechanism by which financial knowledge is converted into consistent saving and careful spending behaviour in digital financial environment.

To analyse practically the relationship, the present study collected primary data from 193 young individual using an organized set of questions. The study analyses the effect of Digital Financial Literacy as the independent variable on saving and spending behaviour as dependent variable, while analysing the mediating effect of digital financial planning. Through the use of PLS-SEM, the study adds to increasing discussion on digital financial behaviour by redirecting attention from institutional FinTech innovation to individual level financial decision-making.

Even though the increase of academic research in the field of FinTech, few data-based studies analysed the way in which digital financial literacy transformed into actual financial behaviour via digital financial planning process. Therefore, this study intends to address the gap in existing research by presenting data-driven analysis on the behaviour-related aspects of financial management within the context of the current technology- driven environment.

Literature Review

Financial Behaviour in the Digital Era

Financial awareness is continuously being considered as a major determinant of financial habits. Lusardi & Mitchell (2014) indicates that individuals having better financial awareness are more likely to engage in post-retirement planning, follow consistent saving habits, and make wise financial decisions. A proper understanding of financial principles increases a person's ability to evaluate financial tools, deal with uncertainty and use resource effectively.

In-depth analysis, Dewi (2025) highlights that digital financial literacy greatly influences in guiding the saving behaviour of Gen Z, as it gives the ability to youth to

efficiently use digital budget tools, automatic saving system and digital investing apps. The finding reveal that digital understanding strengthens consistent saving behaviour of more transactional engagement.

Similarly, Aoun et al. (2026) find that financial literacy has a positive impact on overall financial behaviour among millennials, particularly in relation to budgeting and saving practices. Their research suggests that although FinTech adoption improves financial management, its behavioural outcomes are considerably enhanced when supported by financial literacy. These finding imply that Digital Financial Literacy serve as fundamental factor of responsible Financial behaviour in contemporary digital environment.

FinTech and Spending Behaviour

- **Reduced “Pain of Payment” and increased spending**

Behavioural economics proposes that digital payment methods diminish the psychological “Pain of Payment”, thereby resulting in greater expenditure compared to cash-based transactions (Prelec & Loewenstein, 1998). When payment become less physically tangible-such as through mobile wallets or contactless payments-individual have a higher tendency to indulge in impulsive buying behaviour.

Runnemark et al., (2015) observed that electronic payment instruments are linked to larger transactions values relative to cash-based payments. In a similar vein, Soman(2003) showed that payment methods with lower transparency reduce consumer’s ability to regulate their spending. These conclusions are especially pertinent to young adults, who regularly rely on UPI, debit cards, and digital wallets for routine financial transaction.

However, certain studies contend that fintech applications equipped with transaction monitoring and spending alerts may increase awareness and potentially reduce excessive spending (Thakor, 2020).

FinTech and Saving Behaviour

- **Access and Automation in Saving**

FinTech platform offers automated saving functionalities, goal-oriented saving tools, and micro-investment opportunities, all of which can favourably affect saving behaviour. Thakor (2020) notes that fintech promotes financial inclusion and fosters disciplined saving habits by increasing accessibility and reducing transaction costs.

Demirguc-kunt et al., (2018), utilizing the World Bank Global Findex Dataset, identified that online financial services substantially enhance formal saving practices, especially among young individual and previously unbaked populations. These digital platforms lower obstacle to saving by allowing for small, recurring deposit.

In addition, Karlan et al. (2016) emphasize that commitment savings products, frequently integrated into fintech platforms, enhance saving discipline by limiting impulsive withdrawals.

Role of Financial Literacy

Financial Literacy functions as a key intermediary in influencing whether the adoption of fintech leads to positive financial outcomes.

Research indicates that fintech tools by themselves do not ensure enhanced financial behaviour, rather their impact relies on individual's ability to interpret financial information and maintain self-discipline (Xiao & O'Neill, 2018). Among young adults, those possessing higher Financial Literacy are more inclined to utilize budgeting applications properly and exhibit greater savings.

Theoretical Foundations

- **Behavioural Finance Theory**

This research is based on Theory of Behavioural Finance, which explains that economic decisions are affected by cognitive limitations and psychological factors rather than complete rationality (Kahneman & Tversky, 1979). Individuals do not consistently make optimal economic choices, as their actions are influenced by financial knowledge and self-regulatory process (Richard Thaler, 1985). Within this perspective, financial literacy improves individual's comprehension of financial concepts; however, its effect on spending and saving patterns is realized through financial planning activities such as budgeting and setting financial objectives. Therefore, financial planning functions as a mediating variable connecting financial literacy with spending and saving behaviour.

- **Research Gap's**

Although various research has examined the effect of Financial Technology platforms on financial behaviour, most prior research concentrates on either general financial literacy or individual financial tools such as digital payment systems or saving applications. Few research works have deeply analysed how the combined use of Financial Technology services including online transaction systems, automatic saving system, trading applications and budgeting apps influence both spending and saving habits among young individuals. Moreover, there is a lack of data-based evidence from tech savvy groups, especially Gen Z and young Millennials, regarding how these platforms relate to financial literacy, self-control, and behavioural habits. Therefore, the present study intends to address this research gap through obtaining primary data through a structured questionnaire, providing modern insights into the impact of FinTech apps in shaping financial decisions and behaviours in the current tech-driven economy.

Hypothesis Development

Financial awareness additionally acts as a significant factor in strengthening Financial Planning abilities. Young adults possessing enough financial knowledge are more capable of establishing financial objectives, preparing budgets efficiently, and organizing for future financial requirements (Xiao & O'Neill, 2016). Empirical evidence indicates that financial literacy substantially enhances individual's participation in financial technologies and FinTech platforms (OECD, 2018; Rahayu et al., 2023). Among individual's financial literacy is anticipated to support systematic financial planning through digital channels.

H1: Digital Financial Literacy positively influence the Digital Financial Planning

Financial Planning is understood as the structured process of establishing financial objectives, tracking income and expenses, and distributing monetary resources to achieve both immediate and future goals. Sound Financial Planning strengthens financial discipline and encourages individuals to adopt consistent saving practices.

Existing literature indicates that individuals who actively engage in organized financial planning tend to accumulate greater savings and achieve higher levels of financial stability (Xiao & O'Neill, 2016). Planning fosters a future oriented mindset and enhances control over financial decision, thereby minimizing impulsive actions and promoting sustained saving behaviour.

H2: Digital Financial Planning positively influence the Saving Behaviour

Financial Planning enhances not only saving behaviour but also disciplined spending practices. Individuals who engage in systematic financial planning develop greater awareness of their financial boundaries and are less prone to unnecessary or impulsive expenditures (Hilgert et al., 2003). By facilitating continuous expense monitoring and strengthening financial self-control, planning promotes rational and responsible spending decision.

H3: Digital Financial planning positively influences Spending behaviour

In addition to its influence on Financial Planning, Financial knowledge additionally exerts a direct influence on saving habits. People who possess higher financial awareness are more proficient in understanding the importance of emergency savings and long-term wealth formation (Lusardi & Mitchell, 2007). Data-based research further shows that financial literacy acts as a significant determinant of saving practices and investment participation (Van Rooji et al., 2011). As a result, individuals with greater financial skills have a higher tendency to build consistent saving habits and sustain greater financial stability,

H4: Digital Financial literacy positively influences Saving Behaviour

Financial Literacy acts as a significant factor in determining individuals spending habits by strengthening their ability to examine financial alternatives and identify the long-term effect of their buying decisions. People who hold greater financial understanding is more proficient in evaluating options and managing current spending with future financial stability. Greater financial knowledge decreases impulsive purchasing behaviour and reduces heavy dependence on credit services (Lusardi & Mitchell, 2014). As a result, informed individuals are more efficient in making reasonable and purpose driven expenditure alternatives.

H5: Digital Financial Literacy positively influence Spending Behaviour

Although financial knowledge provides individuals with fundamental financial understanding, its impact on saving habits often influenced by the existence of organised financial planning. Knowledge independently may not immediately lead into better saving habits unless it applied through organised budgeting, objective setting, and financial planning strategies. Earlier research indicates that financial planning acts as a practical link that translates financial literacy into actual financial practices (Hilgert et al., 2003). Therefore, financial planning enhances the influence of financial knowledge on saving patterns.

Empirical findings indicate that individuals with greater financial awareness are more likely to participate in structured planning practices, which later improve their saving habits and long-term financial stability (Xiao & O'Neill, 2016). Thus, financial planning is anticipated to operate as a mediating factor between Financial Literacy and Saving Behaviour.

H6: Digital Financial Planning Mediates the relationship between Digital Financial Literacy and Saving Behaviour.

Financial literacy may indirectly affect spending habits through the process of financial planning. Even financial understanding increase awareness for responsible spending, steady financial discipline is usually attained through organized planning method. As per behavioural finance theory, planning decreases impulsive spending behaviour by fostering structured assessment of expenses and financial goals (Lusardi & Mitchell, 2014).

Individual who are financially literate are more likely to adopt budgeting and expense tracking, which helps in controlling their consumption behaviour. Financial planning promotes self-discipline and matches expenditure decisions with future financial goals (Xiao & O'Neill, 2016).

H7: Digital Financial Planning Mediates relationship between Digital Financial Literacy and Spending Behaviour.

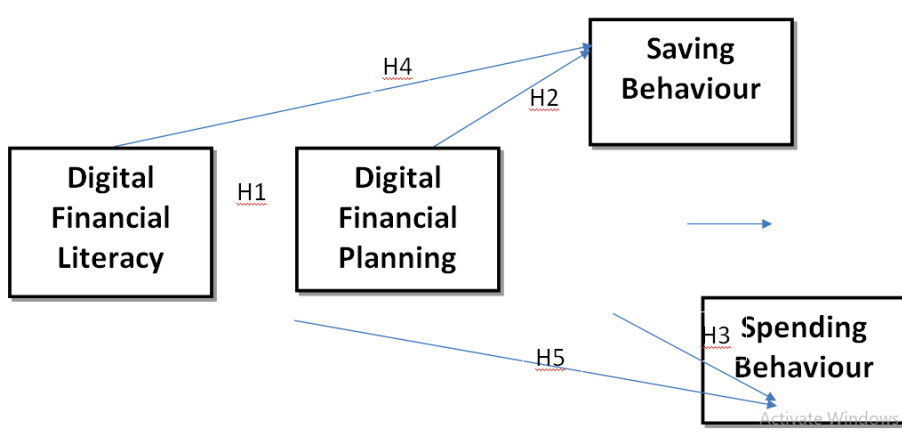


Fig.: 1 Conceptual Framework of the Study

Research Methodology

• **Research Design**

The current research follows a statistical, explanatory method of analyse the influence of financial literacy on the personal finance behaviour of Early adults' individuals, especially regarding their saving and spending behaviour, along with financial planning Serving as an intermediary variable. The study is placed within the wider context of FinTech usage which is regarded as major determinant in enhancing financial ability among young individuals. The proposed variable relationships were analysed using PLS-SEM technique.

Primary data was collected using a respondent-completed survey created using Google Forms. The questionnaire consisted of multiple-choice question including background details and variable-related statements evaluated through a five -point Likert scale varying between 5(strongly Agree) to 1(Strongly disagree). This method enabled the structured unbiased investigation of participant opinions and responses regarding FinTech applications.

The Research questionnaire was structured into four key segments. The first segment obtained information including age, gender, educational qualification and occupation. The second segment focused on FinTech application usage, such as the kind of apps used, how often they are used and primary purposes. The third segment analysed digital financial literacy, emphasizing on users understanding and skills to use online financial tools efficiently. The fourth segment evaluated individual financial planning habits, while last segment evaluated saving and spending behaviour, identifying participant saving patterns ad spending behaviour in online financial systems.

• **Study Population and Sample Group**

The sample group for our research is made up of young individuals, especially students and early-career professionals, who actively use digital financial tools for carrying out financial transactions. This group is highly relevant due to its rising dependence on digital finance systems for payments, saving activities, and money manage A convenience sampling technique was used, as the study aimed to obtain from easily reachable respondents who met the required criteria. The online s was circulated online through educational networks and social media sites to achieve greater coverage among young users of digital financial services. An aggregate of 193 usable responses was gathered and analysed. Participation was completely voluntary. participants were told about privacy and anonymity to encourage honest and unbiased answers.

Only respondents who used at least one digital financial apps were included in the study which confirmed the accuracy and dependability of the gathered information.

Data Analysis

The formulated hypothesis was analysed using SEM (Structural Equation Modelling) technique to examine the association between Financial Literacy, Financial Planning. and Saving & Spending habits. The analytical procedure was carried out in two stages: evaluation of the measurement model succeeded by assessment of the structural model.

Social-demographic factors were maintained only in order to explanatory goals to maintain theoretical clarity and model parsimony.

Measurement Model

The measurement model evaluates the reliability and validity of latent variables before testing the structural relationships (Hair et al., 2022). Inner uniformity was examined through Cronbach's Alpha coefficient as well as Composite Reliability, whereas convergent validity was evaluated with the help of the (AVE) Average Variance Extracted.

All constructs demonstrated adequate internal consistency, with Cronbach's Alpha coefficient varying between 0.833 and 0.939 and composite reliability estimates ranging from 0.781 to 0.951, both exceeding the recommended threshold of 0.70 (Hair et al., 2022). Evidence of convergent validity was demonstrated for Digital financial literacy (AVE = 0.639), Digital financial planning (AVE = 0.601) and Saving behaviour (AVE = 0.734).

Although, the convergent validity for Spending behaviour (AVE 0.493) falling slightly below the recommended 0.50 threshold, the construct was maintained in the model due to its satisfactory composite reliability (0.871) and Cronbach's Alpha

(0.833). According to Hair et al. (2022), an AVE marginally under 0.50 can still indicate acceptable convergent validity when composite reliability exceeds 0.60. Additionally, Spending behaviour is a complex and multidimensional concept psychological and situational influence, which may result in greater dispersion among indicators (Xiao, 2008). Therefore, retaining the construct is both statistically acceptable and theoretically justified.

Structural Model

The structural model was assessed to test the proposed hypothesis and determine the model's explanatory capacity (Hair et al., 2022). The evaluation included this determination coefficient (R^2), effect size (f^2) and forecast relevance (Q^2).

The R^2 was 0.386 for DFL (Digital Financial Planning), 0.711 for SAV (Saving Behaviour) and 0.479 for SPE (Spending Behaviour). Following Chin (1998) findings indicate average explanatory power for DFP and SPE and substantial explained power regarding SAV.

Based on Cohen's (1998) thresholds, Digital Financial Literacy has a substantial effect size (f^2) on Digital Financial Planning (0.629) and Saving Behaviour (0.870), whereas its effect on Spending Behaviour (0.087) is minimal. Additionally, Digital Financial Planning reflects a medium effect on spending Behaviour (0.282) and a small-to-medium effect on Saving Behaviour.

The positive Q^2 predict values for DFP (0.369), SAV (0.653) and SPE (0.316) confirm the model's predictive relevance, indicating acceptable predictive performance (Hair et al., 2022).

Hypothesis Testing

The structural model was assessed through bootstrapping to examine the proposed relationships among the study constructs. The result indicates that digital financial literacy has a significant positive effect on digital financial planning ($H1: \beta = 0.627, t = 9.974, p < 0.001$). Digital Financial Planning was found to positively influence saving behaviour ($H2: \beta = 0.279, t = 3.770, p < 0.001$) and spending behaviour ($H3: \beta = 0.497, t = 6.631, p < 0.001$). In addition, digital financial literacy directly and significantly affects saving behaviour ($H4: \beta = 0.640, t = 9.999, p < 0.001$) as well as spending behaviour ($H5: \beta = 0.270, t = 3.368, p = 0.001$).

Further analysis confirmed the mediating role of digital financial planning in relationship between digital financial literacy and saving behaviour ($H6$) and spending behaviour ($H7$). Since, all path coefficients are positive and statistically significant, all seven hypotheses ($H1-H7$) are supported.

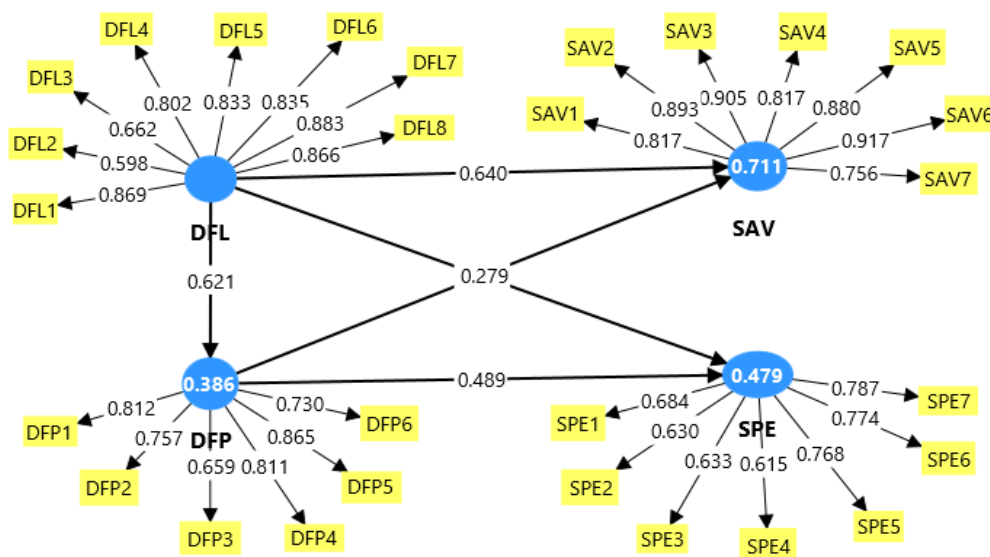


Fig 2: Result

Table 1: Path coefficient and results

Hypothesis	Relationship	β value	T statistics	P value	Result
H1	DFL $\rightarrow$ DFP	0.621	9.974	0.000	Supported
H2	DFP $\rightarrow$ SAV	0.279	3.770	0.000	Supported
H3	DFP $\rightarrow$ SPE	0.489	6.631	0.000	Supported
H4	DFL $\rightarrow$ SAV	0.640	9.999	0.000	Supported
H5	DFL $\rightarrow$ SPE	0.279	3.368	0.001	Supported
H6	DFP $\rightarrow$ DFP $\rightarrow$ SAV	0.174	3.345	0.001	Supported
H7	DFL $\rightarrow$ DFP $\rightarrow$ SPE	0.304	5.387	0.000	supported

Discussion

• Association Between Digital Financial Literacy and Digital Financial Planning

Digital financial literacy demonstrates positively and significantly correlated to digital financial planning ($\beta = 0.621$, $p < 0.001$), supporting H1, indicating that higher financial knowledge leads to more systematic financial planning behaviour. Prior research has also highlighted that financial literacy enables better budgeting, forecasting, and goal setting (Lusardi & Mitchell, 2014; Hilgert et al., 2003).

• Association between Digital Financial Planning and Saving behaviour

Digital Financial Planning shows a favourable and substantial influence on saving behaviour ($\beta = 0.279$, $p < 0.001$), thus supporting H2. Individuals engaged in financial planning are prone to follow disciplined saving behaviour. The research

highlights that financial planning encourages allocating money to savings and long-term financial well-being (Bareket-Bojmel et al., 2016; Shim et al., 2010).

- **Association between Digital Financial planning and Spending Behaviour**

Digital financial planning has a strong and meaningful effect on spending behaviour ($\beta = 0.489$, $p < 0.001$) confirming hypothesis 3. Individuals who effectively handle their finances tend to spend wisely and deliberately. This finding aligns with earlier studies showing that financial planning enables people to track their spending and reduce impulsive buying (Clark et al., 2017; Xiao et al. 2009).

- **Direct Association between Digital financial literacy and saving behaviour**

Digital financial literacy greatly impacts saving behaviour ($\beta = 0.640$, $p < 0.001$) confirming H4. This suggests that financially literate persons are better able to make choices that improve their saving habits. Prior research indicates that higher financial literacy is strongly connected with disciplined saving habits (OECD, 2016; (Klapper et al., 2013).

- **Direct Association between Digital Financial Literacy and Spending Behaviour**

Digital financial literacy has a positive effect on spending behaviour ($\beta = 0.279$, $p < 0.001$), confirming H5. Financially literate people take more well-informed financial decisions and are less inclined to indulge in unnecessary spending. This is consistent with the research indicating that financial literacy strengthens overall Financial decisions and spending discipline (Shim et al., 2009; Xiao & O'Neill, 2016).

- **Mediation of Financial Planning Between Digital Financial Literacy and Saving Behaviour**

Digital financial planning serves as a mediator between financial literacy and saving behaviour, validating H6. This indicates that the influence of financial literacy on savings is partially carried through systematic planning, which improves saving habits. Similar results have been observed in studies pointing out the role of planning as a mediator in turning financial knowledge into outcomes. (Tang et al., 2015).

- **Mediation of Digital Financial Planning between digital financial literacy and Spending behaviour**

Digital financial planning also serves as a mediator between digital financial literacy and spending behaviour, validating H7. This indicates that people with greater financial knowledge handle expenses more efficiently mainly through careful planning. This finding aligns with research highlighting that planning converts financial understanding into real-life spending practices. (Luhmann & Serra, 2016).

Conclusion

This research analysed how FinTech implementation, digital financial literacy, and digital financial planning affects the saving and spending behaviour of young generations. The findings indicate that greater digital financial knowledge considerably enhances saving as well as spending patterns, and digital financial management act as crucial linking factor in this relationship. Young people who are highly knowledgeable about digital financial systems are likely to organize their money matters in an organized manner, which enables them save regularly and make well informed, target-driven expenditure decisions. These outcomes emphasize that financial understanding is highly effective when integrated with systematic financial planning, especially in digital financial context.

- **Theoretical Implication**

The investigation contributes to behavioural finance research by indicating that digital financial awareness by itself is inefficient to form efficient financial habits. online financial planning translates financial understanding into real-life action, strengthening systematic saving and logical spending. The study also emphasizes the relationship of mental, behavioural, and technological elements, illustrating FinTech tools can improve financial habits not just offering access but also by facilitating planning and self-control. This framework enhances our knowledge of how digital platforms can allow young individuals to implement financial understanding properly.

- **Practical Implication**

The outcomes have strong significance for government authorities, educators, and financial organization. schemes focused on enhancing financial literacy should be integrated with programs that encourage systematic financial structuring. FinTech providers can help responsible financial habits by including features such as automated saving facilities, spending reminders, and digital budgeting tools academic institution can incorporate applied financial modules in their academic programs, enabling students with competencies to handle finances efficiently in a digital environment. Together, these actions can support young individuals save consistently, spend carefully, and form sound financial habits.

- **Limitation and Future Research**

Multiple drawbacks should be considered while evaluating the results. The research was conducted on a group of 193 young individuals, which may restrict the generalizability of outcomes. Its cross-sectional approach only reflects financial habits at a one moment in time, and the dependence on respondent-reported data may not accurately represent real financial habits. Future research may adopt long term study designs including bigger and more varied samples and apply unbiased measures of financial knowledge and behaviour. Research could also investigate how population characteristics or various types of FinTech tools impact these associations.

• Contribution to Literature

This analysis offers a detailed framework connecting digital financial knowledge, financial structuring, and FinTech usage to youth's saving and spending patterns. It emphasizes the intermediary role of financial planning and illustrates how digital platforms can transform knowledge into practice. The observation is useful for educators, financial institutions, and government authorities working to improve financial competence among digitally active young individuals. Generally, the study highlights that integrating financial understanding with organized financial management and financial technology tools are essential for promoting systematic saving and rational spending in modern digital economy.

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