Fintech Use, Financial Confidence, and Financial Health among Young Adult Consumers

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Abstract

The current study investigated the mediation effect of the relationship between fintech use and financial health among college students. From February to May 2023, a self-reported survey was conducted to collect primary data from college students representing young adult consumers. Structural equation modeling (SEM) was used to identify reliable factors with SPSS Macro Process Model 4. Bootstrapping was used in the analysis. The results indicated that financial confidence fully mediated the relationship between fintech use and financial health. Fintech use positively affected financial confidence, and financial confidence predicted financial health. However, the direct impact of fintech use on financial health was insignificant. The findings indicate that fintech should be adopted as a tool to improve college students' financial confidence and thus improve their overall financial health. These empirical findings should be applied to financial institutions and financial planners among their potential young adult consumers and clients, specifically college students.

Keywords: *financial health, fintech use, financial confidence, young adult consumers*

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Research Background

Researchers and financial institutions have been aware of the importance of the financial decisions made by young adult consumers because young adult consumers represent a significant group of consumers in today's consumer market (Avci & Yildiz, 2021; Tanksale et al., 2014). Researchers have found that consumers' financial capability affects their financial behaviors, health, and well-being (Xiao, 2016; Xiao et al., 2023). Financial capability is defined as an individual's ability to perform the desirable financial behavior and the opportunity to act (Sherraden, 2010; Sherraden, 2013; Xiao et al., 2023; Xiao & Meng, 2024). An individual's financial ability is defined as the extent of the application of financial knowledge to make informed financial decisions, measured by objective financial knowledge and subjective financial knowledge (Huston, 2010). However, recent research has found that objective financial knowledge might be overestimated in the research model (Despard et al., 2020). Despard et al. (2020) posit that financial confidence should be considered a robust factor to predict desirable financial health in the research model. Furthermore, financial inclusion creates the opportunity to promote financial services and build efficient and effective financial markets (Barefoot, 2020; Feyen et al., 2023). Traditionally, access to a bank account has provided consumers with the opportunity to perform financial activities (Feyen et al., 2023). More recent research has found that fintech use provides this opportunity to get access to financial products, banking accounts, and financial services online with convenience and low account management fees (Beck, 2020; Feyen et al., 2023). While previous studies have examined the effects of financial knowledge on households' financial behaviors and financial outcomes, limited research has linked fintech use and financial confidence with young adult consumers' financial health. Given this background, if consumers easily access financial accounts and services, they might build their financial confidence. In turn, high financial confidence will bring high financial well-being to the consumers and shape their financial health. People experience financial difficulties when they cannot meet their basic living needs (Frankham et al., 2020; Kiely et al., 2015). Financial access and inclusion positively affect individuals' desirable financial decisions, well-being, and health (Chen et al., 2024). While a large body of research has found positive associations between objective and subjective financial knowledge and financial well-being, limited research investigates financial inclusion among young consumers to shape young adult consumers' future financial health. The current study is grounded in the psychological theory of financial anxiety. Through the self-reported survey, primary data were collected online from college students from February to May 2023. This study investigates the effects of fintech use on financial health among young adult consumers and the mediating effect of financial confidence on the relationship between fintech use and financial health. Thus, the study provides evidence for financial institutions, financial professionals, and the government to consider using financial strategies and techniques to improve young adults' financial confidence in shaping their overall financial health.

What is Financial Health?

Financial health is a complex concept in terms of definition. Studies have used the terms of financial well-being with financial health interchangeably. From a wellness perspective, financial health has been investigated from objective financial well-being/health (Bhutta, 2014; Brüggen et al., 2017; Joo, 2008; Parker et al., 2016; Weida et al., 2020) and subjective financial health (Britt et al., 2015). From objective financial health, consumers' financial health assesses their financial positions in a variety of domains, including saving, spending, borrowing, and planning (Parker et al., 2016; Weida et al., 2020). Some recent research has examined the links between objective financial health and payday loans (Bhutta, 2014), objective financial health, and public health (Weida et al., 2020). Britt et al. (2015) have found that mental health professionals had experienced the risk of subjective financial health.

From a subjective perspective, the Financial Health Network (FHN) defines the financial health assessment of an individual's financial life as a composite measurement to improve people's financial resilience and opportunities. Thus, the FHN designed survey questions to measure financial health in terms of spending, savings, borrowing, and planning (FHN, n.d.). The current study adopted the FHN measurement and used the 11-item measure of financial health (Weida et al., 2020). Moreover, financial hardship occurs when an individual's available financial resources cannot meet their minimum needs (Frankham et al., 2020). Previous research has used the following items to measure financial hardships: difficulty in paying bills, difficulty in purchasing groceries, difficulty in paying utility bills, difficulty in affording health care services, and costs. When financial hardships focus on the difficulty in paying bills, financial health covers a comprehensive definition of financial well-being. Other researchers have defined financial health as individuals' perceptions of financial well-being (Nanda & Banerjee, 2021). The argument is that perceptions of financial health are subjective and might be biased in the results. The

current study measures financial health using the FHN's definition to cover spending, saving, borrowing, and planning indicators. Following the similar guideline from Weida et al. (2020), we use the term "financial health," which has been used interchangeably with "financial well-being," as preference and consistency in the current paper.

Fintech Use and Financial Health

Financial technology (fintech) refers to the innovation and implementation of advanced technology in business models to support and enable financial services and products (Nicoletti et al., 2017). Financial institutions have promoted fintech to support clients' financial services and improve clients' overall financial wellness. As an emerging economy in the financial industry, fintech has been used in the financial services sector, covering savings, spending, borrowing, and planning (Lyons et al., 2022). Lyons et al. (2022) found that fintech development positively correlated with fintech inclusion and demand for savings, borrowing, and remittances. However, consumers' fintech use has been found to serve as a double-edged sword for consumers' well-being (Baiwir et al., 2024). On one side, fintech use might assist with consumers' desirable financial behavior and outcome, thus bringing healthy financial well-being. For example, fintech use helped consumers maintain healthy savings behaviors. Chen et al. (2024) found that frequent fintech use was positively associated with prudent financial behavior of maintaining adequate emergency fund savings. Moreover, fintech use also helps consumers to build healthy spending habits. Lee (2019) found that fintech use (i.e., overspending messages from financial institutions) was negatively associated with consumer spending. Conversely, fintech use might hinder consumers from performing desirable financial activities and thus lower their financial well-being if inappropriately used (Baiwir et al., 2024). Fintech use might indirectly impact financial health by mediating the role of other factors (Gafoor & Amilan, 2024). For example, financial confidence might mediate this relationship between fintech use and financial health.

Financial Confidence and Financial Health

Grounded on cognitive theory, confidence relates to how an individual's beliefs regarding their ability to achieve the goals (Möbius et al., 2022). Specifically, financial confidence refers to an individual's perception of daily financial management and financial knowledge (Moris et al., 2022; Palameta et al., 2016; Porto & Xiao, 2022). Research has used financial confidence and subjective financial knowledge interchangeably. However, Palameta et al. (2016) posited that financial confidence might be an indicator of the perception of daily financial management skills. Thus, the current study applied guidelines from Palameta et al. (2016) to define financial confidence as perceptions of day-to-day personal financial management capabilities. Moreover, Porto and Xiao (2022) found that financial confidence was a robust predictor of financial well-being by comparing four different levels of financial confidence.

Hypotheses

Grounded on the model of financial capability (Sherraden, 2013; Xiao, 2008; Xiao et al., 2022), the current study has the following four hypotheses:

H1: Fintech use is positively associated with financial confidence.
H2: Financial confidence is positively associated with financial health.
H3: Financial confidence mediates the relationship between fintech use and financial health.
H4: Fintech use is related to financial health, but the direction depends on the engagement of fintech use.

Method

Data

Data was collected from college students aged 20 to 34. The project proposal was approved by the institution's IRB office before the primary data collection. A self-assessment survey was conducted online from February to May 2023. The potential participants were enrolled in classes at the University School of Business during the time of data collection. Participants voluntarily completed the survey online without compensation incentives. Eighty-seven respondents completed the self-reported survey and were used in the analysis.

Measures

Dependent Variable.

Financial health is the dependent variable in the current study. The financial health scale was originally derived from the Center for Financial Services Innovation (CFSI; Parker et al., 2016) and validated by Weida et al. (2020). The scale was constructed using four domains with eleven indicators: savings, spending, borrowing, and planning.

Independent Variables.

Fintech use is a key independent variable and is measured by one survey question:

How often do you use a computer/laptop, tablet, smartphone, or financial applications (i.e., bank apps) to monitor or manage your account(s) (i.e., account balance or other account information)? Respondents were given four choices: never, at least once a month, at least twice a month; and at least once a week.
Financial confidence is another key independent variable and is measured by one survey question: On a scale of 1 – 7 below, 1 means strongly disagree and 7 means strongly agree.
How strongly do you agree or disagree with the following statement: I am good at dealing with day-to-day financial matters, such as checking accounts, credit and debit cards, and tracking expenses.
Control variables are *age, gender, objective financial knowledge, subjective financial knowledge, and income.*

Data Analyses

We tested the research model using structural equation modeling (SEM) to identify reliable factors with SPSS Macro Process Model 4 (Hayes, 2018). The size and significance of the unstandardized path coefficient and coefficient of determination (R^2) were used to evaluate the model (Götz et al., 2010). We also statistically controlled for the impact of age, gender, monthly income, subjective financial knowledge, and objective financial knowledge on financial confidence and health.

Results

Table 1 shows the descriptive results of the current study. The average age of the sample was 21.7 years old. The majority of the sample were male (67%). The average monthly income was $1,818. The average objective financial knowledge was 3.7 out of 5. The average subjective financial knowledge was 4.9 out of 7. The frequency of fintech use was 3.6 out of 4. The average financial confidence was 5.5 out of 7. The average financial health score was 8.9 out of 11.

The model examines the mediating effect of financial confidence in the relationship between fintech use and financial health. Results in Figure 2 show that financial confidence fully mediated the relationship between fintech use and financial health. Fintech use ($B = 0.39, p<0.05$) had a positive effect on financial confidence, and financial confidence ($B = 0.30, p<0.05$) positively predicted financial health. Moreover, the direct impact of fintech use on financial health was insignificant.

Discussion, Limitation, and Implication

The current study investigates the relationship between fintech use and financial confidence, financial confidence and financial health, fintech use and financial health, and the mediation role of financial confidence between fintech use and financial health. These investigations shed light on the relationships between fintech use and financial confidence with financial health among young adult consumers. In particular, we find that fintech, an effective innovation and tool, can improve financial confidence among young adult consumers. In turn, an increase in young adult consumers' financial confidence will shape their financial health regarding spending, savings, borrowing, and planning.

Limitations should be addressed in the current study. First, the sample size might be too small. Further studies should be extended to recruit more participants to validate its findings. Second, panel data might be considered to investigate the causal effects of the research questions.

The findings imply that fintech use served as a double-edged sword: if used appropriately, it helps improve young adult consumers' financial well-being; if used inappropriately, it might not reach its development goal of serving financial sector consumers. However, more research is needed to investigate this further. Fintech companies should understand the purpose of their fintech and develop it to meet users' needs. Financial professionals, such as financial counselors and planners, might provide guidance to young adult consumers on how to appropriately use fintech and build financial confidence to improve financial health (Delgadillo, 2016). Governments might consider offering workshops or seminars to promote fintech use and improve financial health. Lastly, subjective financial knowledge is positively associated with financial health. It implies that financial education should be emphasized in educating young adult consumers to establish appropriate self-perceptions of their financial knowledge and apply them to their financial decisions.

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Table 1. Descriptive statistics and correlations

	Mean	SD	Age	Gender	Income	OK	SK	Fintech	Fconfid	Fhealth
Age	21.66	3.38		-0.05	0.16	0.16	0.12	-0.04	0.10	-0.03
Gender (Male)	0.67	0.47			0.04	0.29*	0.28*	0.07	0.07	0.10
Income	1817.68	3498.21				0.15	0.13	0.13	0.08	-0.02
OK (0-5)	3.70	1.27					0.39**	0.10	0.04	-0.05
SK (1-7)	4.89	1.29						0.22*	0.42*	0.27*
Fintech (1-4)	3.57	0.80							0.36**	0.12
Fconfid (1-7)	5.51	1.43								0.39**
Fhealth (1-11)	8.86	1.41								1.0

Note:
OK: Objective financial knowledge;
SK: Subjective financial knowledge;
fintech: fintech use;
Fconfid: financial confidence;
Fhealth: financial health

FIGURE 1: Research Model

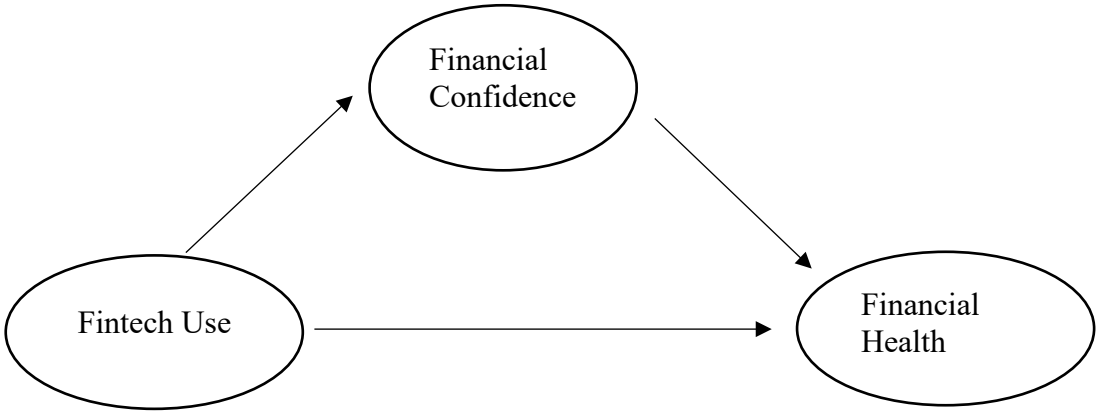
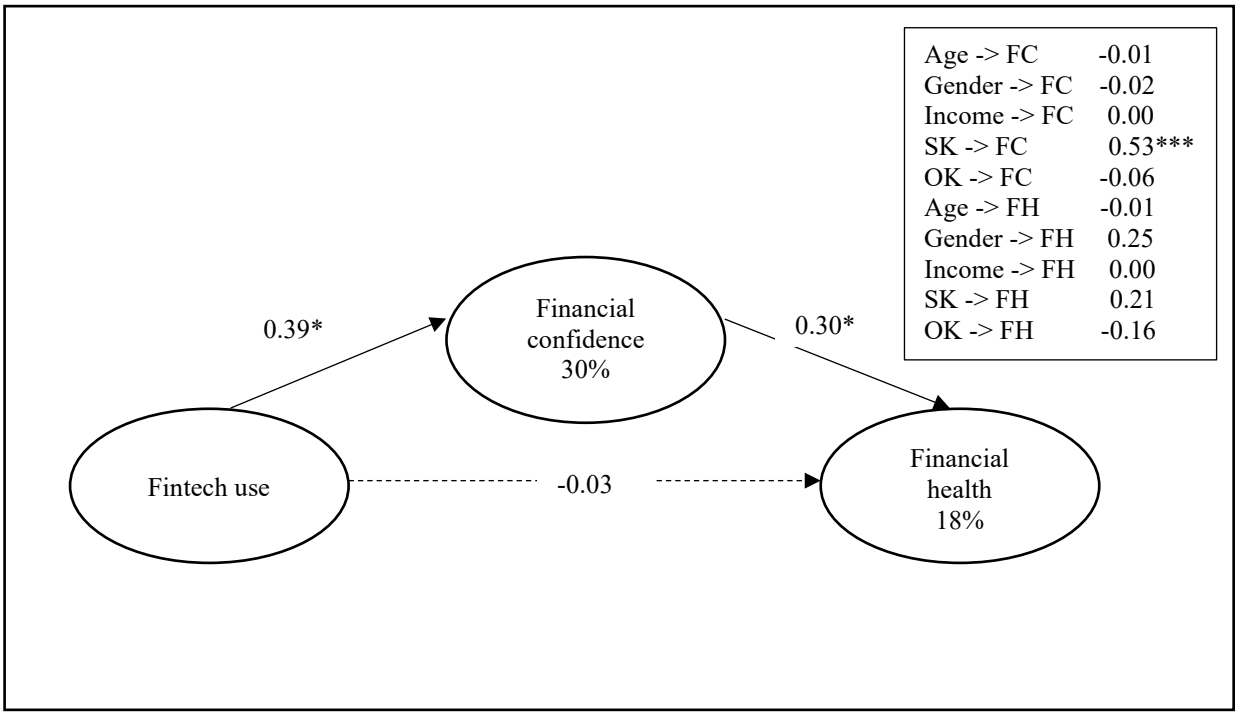


FIGURE 2: Model Results



Note: *p<0.05, **p<0.01, ***p<0.001, SK = subjective financial knowledge, OK = objective financial knowledge, FT = fintech use, FH = financial health.