

**Research Article**

Examining Self-Efficacy and Continuance Intention in Fintech: An Empirical Study Using ECT-IS and Self-Efficacy Theory

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Declaration of interests

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Abstract

The primary objective of this research is to improve theoretical comprehension and pinpoint crucial variables that influence fintech continuance intention by adopting an expectation confirmation model in conjunction with self-efficacy theory. To achieve this, data from 324 fintech users is examined by using structural equation modeling. The study finds that both financial and technological self-efficacy, as well as confirmation, significantly impact perceived usefulness. Moreover, it is discovered that financial and technological self-efficacy exert direct and indirect effects on perceived usefulness through confirmation. In addition, satisfaction and perceived ease of use demonstrate positive correlations with perceived usefulness and confirmation. Furthermore, perceived usefulness, satisfaction, and perceived ease of use all have positive effects on fintech continuance intentions. This study adds to the literature by investigating the influence of domain-specific self-efficacy on fintech continuance intention and incorporating mediating factors such as perceived usefulness, perceived ease of use, satisfaction, and confirmation. The research differentiates between financial and technological self-efficacy and elucidates their relationship with continued intentions. The findings have practical implications for understanding users' fintech continuance intentions, emphasizing the importance of integrating self-efficacy theory and the ECT-IS model in the financial sector.

Keywords: Fintech Continuance Intention, Self-Efficacy Theory, ECT-IS Model, Structural Equation Modeling

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1 INTRODUCTION

Fintech refers to the use of technology to improve the delivery of financial goods and services. It could apply technical innovation to traditional financial services or to new financial services offerings that interrupt the current market. The term fintech has gained popularity in the 21 century or well over a century; it has shaped the way people interact with their money. Fintech is often associated with start-up banks or cryptocurrencies, but its history can be traced to the late 1800s when money was transferred through telegrams or the Morse code. In 2019, \$137.5 billion was invested in fintech startups, providing many opportunities for investors. According to Arner (2021), fintech can be divided into several eras.

The infrastructure that would facilitate transnational financial services was built during the Fintech 1.0 period (1886–1967). From 1967 to 2008, there was a period known as fintech 2.0. In 1967, Barclays erected the first ATM and PayPal was launched in 1998. Fintech 3.5 represents a shift away from the financial system dominated by the West, or embraces global achievements in digital banking. Payment provider platforms include shopify for e-commerce, house call pro for plumbers, and mental health for yoga studios, giving these businesses a properly connected system to run their businesses. In the ECT model, the following is the procedure through which customers decide to repurchase: Before buying a product or service, customers establish an initial opinion about it. In the second phase, they obtain and use the goods or services. They acquired opinions regarding their performance after a period of initial use.

Third, they assess their perceived usefulness with their initial expectations and the cost of confirming their expectations. Fourth, they developed a sense of satisfaction, perceived ease of use, and impact based on the degree of confirmation or intention that led to confirmation. Finally, satisfied users build a repurchase intention through perceived ease of use, whereas users who find goods and services are difficult to use or are unhappy with goods and services stop using them. The key to creating or sustaining a long-term loyal base for users is perceived ease of use and satisfaction. The researcher now explains the problem statement. The term "fintech" refers to innovative technology that improves the delivery and usage of financial services. With an expectation-confirmation model that combines self-efficacy theory, the major goal of our research is to improve the theories and identify variables that could determine the degree of continuous intention to use fintech. Previous studies (Chen, Chen, Lin, & Chen, 2011; Shiau, Yuan, Pu, Ray, & Chen, 2020) did not include some important factors such as perceived ease of use, self-efficacy, and satisfaction with using fintech, and never investigated the relationship between these variables with self-efficacy and ECT-IS theory in Pakistan.

Past research gaps can be removed by adding factors such as perceived ease of use and financial and technological self-efficacy to the ECT-IS model. In our research, self-efficacy theory is used to examine the continuance intention of fintech users after analyzing the relationship between satisfaction, perceived ease of use, and other variables. Previous studies (Chen, Chen, Lin, et al., 2011; Jatimoyo, Rohman, & Djazuli, 2021; Shiau et al., 2020), researchers analyzed various factors and investigated their relationships using different mediating factors that showed either positive or negative behavior with continuance intentions. However, the researchers did not investigate the relationship between continuing intentions, perceived ease of use, or satisfaction with self-efficacy theory; therefore, the researcher investigated their relationship and examined whether perceived ease of use and satisfaction have positive or negative effects on continuance intentions. Moreover, the researcher analyzed two theories: self-efficacy and ECT-IS theory. The researcher added the perceived ease of use or self-efficacy factor to examine continuing intentions that have not been discussed before. Perceived ease of use is a significant issue to consider when examining the long-term intentions of fintech users.

To investigate the relationship between financial self-efficacy & perceived usefulness in fintech, relationship between financial self-efficacy & users' confirmation of using fintech, relationship between Technological self-efficacy & fintech users' perceived usefulness, relationship between Technological (smartphone) self-efficacy & users' confirmation of fintech usage, relationship between Confirmation & users' perceived usefulness of fintech usage, relationship between Perceived usefulness & users' satisfaction toward fintech use, relationship between Confirmation & satisfaction of users toward fintech use, relationship between Perceived usefulness & perceived ease of use toward fintech usage, relationship between Confirmation & perceived ease of use toward fintech usage, relationship between Perceived usefulness & fintech continuance intentions, relationship between satisfaction & perceived ease of use in fintech, relationship between satisfaction & fintech continuance intentions, relationship between perceived ease of use & fintech continuance intentions, Confirmation mediates the impact of financial self-efficacy on the perceived usefulness of fintech under the full model and to investigate that Confirmation mediates the impact of technological self-efficacy on the perceived usefulness of fintech under the full model.

By enhancing transparency, lowering prices, removing middlemen, and making financial data more available, fintech can improve users' experiences with financial services (Hasan, Yajuan, & Mahmud, 2020). By combining self-efficacy with ECT-IS theory, the goal of our research is to enable fintech companies to gain a better understanding of how consumers' financial and technological self-efficacy affect their intentions to continue using fintech. In our study, two independent variables are financial and technological self-efficacy, and one dependent variable is continuance intentions, whereas mediating factors are used to determine the continued intention of fintech users, such as perceived ease of use, satisfaction, perceived usefulness, and confirmation. Our research is highly significant for all financial sectors, companies, banks, and all those that use technology for transaction purposes. After learning how to conduct operations, self-efficacy can help individuals improve their ability to complete various tasks. Our research used self-efficacy or ECT-IS theory to better understand customers' intentions to use fintech, as well as the relationship between satisfaction, perceived ease of use, and intentions of fintech use in the future. The Researcher checks whether fintech helps customers by providing fintech products and services, whether fintech products or services are easy to use, or whether customer satisfaction levels increase.

2 LITERATURE REVIEW AND HYPOTHESES DEVELOPMENT

2.1 ECT-IS Theory

Expectation-confirmation theory is the most widely utilized conceptual model for understanding users' continuance intentions. Filieri, Acikgoz, Ndou, and Dwivedi (2020) ECT was expanded to build ECT-IS continuance by comparing user continuing intentions with consumer purchasing decisions. The ECT-IS continuation has been adopted and extended from the IS literature to describe users' IS continuance intentions in multiple configurations (Shiau et al., 2020). Most ECT-IS research has either established additional components to improve the ultimate explanatory power or combined ECT-IS theory with various theories to broaden the conceptual base of our study model.

2.2 Self-efficacy Theory

The term "self-efficacy" comes from social cognition theory, and it relates to a person's belief in his capability to complete tasks and achieve goals under given conditions. In other words, a person with greater self-efficacy is highly motivated to put in extra effort to complete a task (Liu et al., 2020). Self-efficacy is a person's assessment of their capacity to carry out the activities necessary to achieve the desired result (Younis et al., 2021). Zhang, Guo, and Vogel (2020) claimed that self-efficacy does not reflect on what people did previously, but rather assesses what they might be able to do in the future. Furthermore, it is concerned with an individual's point of view of how he or she will be able to execute a task, rather than their current skillset (Kao, Tsou, & Chen, 2021). According to social cognition theory, a correct assessment of personal efficacy has important practical significance (Wardana et al., 2020). Self-efficacy has been highlighted as a variable that determines consumers' intention to continue using financial services either directly or indirectly (Abbott et al., 2018).

2.3 Financial Self-efficacy and Perceived Usefulness

The level at which they believe that the use of an application will help them perform better is referred to as perceived usefulness. Hoseinzade and Mokhtari (2017) state that perceived usefulness is the level at which people feel that installing an application will help them perform their job more effectively. Customers with higher financial self-efficacy believe that they can manage or control their finances (Asebedo & Payne, 2019). Buchanan and LeMoyne (2020) found that people with a greater level of self-efficacy are much more inclined to accept the action or be enthusiastic about the outcome. People with strong financial self-efficacy find advantages over risks in the fintech domain, including profitable investment possibilities. Thus, the following hypothesis is proposed:

H1: Financial self-efficacy has a positive and significant effect on users' PU.

2.4 Financial Self-efficacy and Confirmation

Confirmation refers to something that confirms or verifies a Christian ceremony by confirming or being confirmed, corroborating, ratifying, and verifying. Self-efficacy is strongly associated with goals. When opposed to people with less self-efficacy set lower objectives for themselves or People with higher self-efficacy set greater objectives for themselves and are more dedicated to achieving them (Buenaventura-Vera, 2017). An Individual with greater financial self-efficacy is highly capable of enduring overwhelming odds, exerting extra thought to reach goals at higher levels (Ahmed, 2019). User expectations were confirmed when their performance met the required expectations. The greater the individuals' financial self-efficacy, the more probable their initial expectations are to be met, resulting in a direct correlation between financial self-efficacy and confirmation. Thus, the researcher proposes the following hypothesis:

H2: Financial self-efficacy positively and significantly affects user confirmation of fintech usage.

2.5 Technological Self-efficacy and Perceived Usefulness

Many studies have found that technical self-efficacy influences the utilization of new features is influenced by technical self-efficacy (Shiau et al., 2020). Huang, Teo, and Zhou (2020) indicate that technological self-efficacy affects perceived usefulness more than perceived ease of use. Furthermore, Fintech self-efficacy is a major estimator of perceived usefulness (Baabdullah, Alalwan, Rana, Patil, & Dwivedi, 2019). Moreover, Mbede et al. (2020) indicated that smartphone self-efficacy had a positive impact on perceived usefulness. Users can manage their finances using smartphone apps or mobile banking. Customers believe that the latest technology is valuable and that users will have a positive attitude toward it. As a result, individuals with strong technological self-efficacy view fintech as more precious. Thus, the following hypothesis is proposed:

H3: Technological (smartphone) self-efficacy positively and significantly affects users' PU.

2.6 Technological Self-efficacy and Confirmation

Researchers find that attaining a greater degree of self-efficacy can inspire individuals to put in more work to attain the desired results or confirmation. Hecht-Höger et al. (2020) stated that individuals' worry about employing technological advancements is minimized by technological self-efficacy. An individual with a greater level of technological self-efficacy is more interested in adapting to changes in technology than an individual with a low level of technological self-efficacy (Yorganci, 2017). These beliefs may aid in the generation of positive behavior and, as a result, the achievement of the desired results. Consequently, the researcher ruled out the following hypothesis:

H4: Technological (smartphone) self-efficacy positively and significantly affects users' confirmation of fintech usage.

Perceived usefulness refers to "the degree to which a person believes that employing a certain system will improve his or her job performance". Confirmation is a substantial determinant of perceived usefulness in ECT-IS theory, leading to increase in perceived usefulness (Nascimento, Oliveira, & Tam, 2018). Owing to the unpredictability of IS use expectations, the user's original perceived usefulness of IS use may not be constant, or the perceived usefulness of IS use may be influenced by confirmation experience (Nikou & Economides, 2021). As a result, users' confirmation of expectations boosts perceived value, which boosts perceived ease of use or the desire to use it again (Ko et al., 2021). A significant impact of confirmation on perceived usefulness was demonstrated in the case of online banking. Moreover, Ismoyo (2020) shows that the perceived usefulness of smartphone banking services is significantly influenced by users' post-adoption confirmation. Fintech confirmation has a beneficial effect on its perceived usefulness. Thus, the following hypothesis is proposed:

H5: Confirmation has a positive and significant impact on perceived usefulness.

2.7 Perceived Usefulness and Satisfaction

Shiau et al. (2020) investigated how an individual's intention to continue utilizing online banking is influenced by cognitive beliefs and influences and found that one of the most important elements affecting satisfaction is users' post-adoption perceived usefulness. Various studies using the ECT model have demonstrated the direct influence of perceived usefulness on satisfaction (Shiau et al., 2020). Shiau et al. (2020) have proven the validity of perceived usefulness as a factor in online banking. Moreover, Susanto, Ulum, and Ardianingsih (2021) there was a lot of discussion regarding how perceived usefulness affects consumer satisfaction with mobile banking services. Thus, the following hypothesis is proposed:

H6: Perceived usefulness has a positive and significant impact on user satisfaction with fintech usage.

2.8 Confirmation and Satisfaction

Confirmation refers to the degree to which an individual's authentic experience verifies one's initial anticipation (Oghuma, Libaque-Saenz, Wong, & Chang, 2016). According to a previous study, confirmation is positively associated with satisfaction (Liu & Shih, 2021). Confirmation contributes to user satisfaction if prior expectations are met or even exceeded (Thong, Hong, & Tam, 2006; Venkatesh & Goyal, 2010). The confirmation world refers to consumers' assessment of the alignment between their expectations of using fintech and its overall performance. As a result, if customers' initial expectations are met, the use of fintech will satisfy them. Users' initial expectations are updated in concert with the continuous use of fintech. If fintech meets or exceeds expectations, then post-adoption expectations are validated. Thus, the following hypothesis is proposed:

H7: Confirmation have a positive and significant effect on satisfaction with fintech usage.

2.9 Perceived Usefulness and Perceived Ease of Use

Users are more willing to accept new technology if it is easy to use and requires less effort and time. Varga and Fodor (2021) describe the perception that utilizing a certain technology will make the effort simpler as perceived ease of use. Dai, Teo, Rappa, and Huang (2020) attempted to investigate how an individual's cognitive ideas and feelings influence their continued intention to use fintech and found that users' post-adoption perceived usefulness is an important aspect in determining their perceived ease of use. Additionally, various researches using the ECT model have verified the direct impact of perceived usefulness on perceived ease of use (Liu, Yi, Sun, Yang, & Chua, 2021). Although perceived usefulness and perceived ease of use are significant variables in IS adoption, they may have an impact on later decisions. Romano, Di Carlo, Andújar, and Rotolo (2021) Moreover, Wirasatriya et al. (2021) went into great detail related to the significance of perceived usefulness in determining perceived ease of use with smartphone banking services. Consumers find a fintech service useful if it is simple to use and makes specific tasks easier for them to complete. Thus, the following hypothesis is proposed:

H8: Perceived usefulness has a positive and significant effect on the perceived ease of use with fintech usage.

2.10 Confirmation and Perceived Ease of Use

The degree in which one's actual usage experience reflects one's initial anticipation is referred to as confirmation (Gupta, Yousaf, & Mishra, 2020). According to previous studies by Islam, Mäntymäki, and Bhattacharjee (2017), confirmation is directly related to perceived ease of use. Confirmation leads to perceived ease of use once prior expectations are confirmed, or even beyond (Belhadi et al., 2021). Confirmation in the fintech field refers to a consumer's view of the alignment between their expectations and a product's overall performance. The level of confirmation has some effect on perceived ease of use (Zhao et al., 2018). The researcher proposed the following related hypotheses:

H9: Confirmation has a positive and significant effect on perceived ease of use.

2.11 Perceived Usefulness & Fintech Continuance Intention

In various situations, such as internet services, information systems, and online commerce, the perceived usefulness of anything is a major factor in deciding what you are going to do (Al Ketife, Al Momani, & Judd, 2020). Moreover, Lim, Kim, Hur, and Park (2019) fintech users' perceived usefulness have a favorable impact on their satisfaction, according to one research, and this association has been confirmed in following investigations (Nascimento, Souza, et al., 2018). As a result, high-value customers who get from fintech are more likely to stick with it for their investments. According to this study, perceived usefulness has a big influence on whether you will keep doing it. Thus, the following hypothesis is proposed:

H10: Perceived usefulness has a positive and significant effect on fintech continuance intentions.

2.12 Perceived Ease of Use and Satisfaction

Consumers have expectations thereafter, according to related research, and these expectations will impact users' satisfaction with fintech (Bhattacharjee, 2001; Roca, Chiu, & Martínez, 2006) the perceived ease of use or satisfaction that people perceive have a favourable impact. When fintech products and services are easily available to fintech users, their satisfaction level also increases. The following hypothesis was proposed:

H11: Perceived ease of use has a positive and significant effect on satisfaction in fintech.

2.13 Satisfaction and Continuance Intention

Satisfaction has been extensively researched in several disciplines as a major indicator of intention. In the IS field, satisfaction is intended to encourage users' intent to use a system in the future (Kim, Song, & Lee, 2021). According to ECT-IS, Consumer satisfaction with IS use influences their decision to use the same IS in future (Brown, Weber, & De Bie, 2014; Yousaf, Mishra, & Gupta, 2021). According to a study on mobile payments, satisfaction has been associated to continue intentions (Ayanso, Herath, & O'Brien, 2015). Furthermore, Zhang, Zhou, Lin, and Sun (2018) proved the beneficial impact of user satisfaction on their decision to continue using e-finance. Thus, the researcher proposes the following hypothesis:

H12: Satisfaction has a positive and significant effect on fintech continuance intentions.

2.14 Perceived Ease of Use and Fintech Continuance Intentions

In various domains, perceived ease of use has been extensively examined as an important estimator of continuance intentions. In information systems, perceived ease of use is intended to promote customers' intention to continue using the system. According to ECT-IS, perceived ease of use with IS affects their continuing intention of using the same IS (Khanra, Dhir, Islam, & Mäntymäki, 2020). This link has been demonstrated in several studies. Perceived

ease of use is directly related to continuing intentions, according to a study of mobile payments. Furthermore, in the research of Soria et al. (2018) beneficial impact of perceived ease of use on users' continuing intention of using e-finance was validated. Thus, the following hypothesis is proposed:

H13: Perceived ease of use has a positive and significant impact on fintech continuance intention.

2.15 Confirmation, Financial Self-efficacy & Perceived Usefulness

Confirmation of the mediating effect of financial self-efficacy plays a crucial role in bolstering consumers' perceived usefulness by confirming fintech use. Positive financial behavior is associated with financial self-efficacy (Shiau et al., 2020). Fan and Babiarz (2019) found that positive financial actions have the greatest overall impact on perceived ease of use, since they validate predicted outcomes. Moreover, Financial self-efficacy referred to someone's confidence in an individual capacity to perform specific financial tasks (Tian, Wang, Zhang, & Wen, 2019). Financial self-efficacy refers to the belief that one can control and manage one's financial situation (Asebedo & Payne, 2019). Beneficial influence of confirmation on perceived usefulness. For example, it has been observed that confirmation has an important impact on perceived usefulness in a study on users' continued use of on-demand transportation service applications (Giri et al., 2019). Financial self-efficacy influences confirmation, which in turn influences fintech's perceived usefulness. Thus, the following hypothesis is proposed:

H14: Confirmation mediates the impact of financial self-efficacy on the perceived usefulness of fintech in the full model.

2.16 Confirmation, Technological Self-efficacy & Perceived Usefulness

Technological self-efficacy in the usage of smartphones refers to a person's impression of what they can do with a smartphone; children may believe that they may install, use apps, and take advantage of various functions developed (Cha et al., 2020). Moreover, users with stronger self-efficacy are much more inclined to interact with tasks or activities according to the theoretical framework of self-regulation. Customers select tasks that they generally want to engage in (Chen et al., 2020). These beliefs may serve to alleviate anxiety, which in turn can help generate desired behavior and, as a result, accomplish desired results. In other words, the users' expectations were met. User perceptions of usefulness were positively associated with confirmation. For example, in a study of hotel apps, the validation of service expectations has a large direct influence on perceived usefulness (Reher et al., 2020). Thus, the following hypothesis is proposed:

H15: Confirmation Mediates the Impact of Technological Self-Efficacy on the Perceived Usefulness of Fintech Under the Full Model.

3 METHODOLOGY

Our study's main objective is to integrate an expectation confirmation model with self-efficacy theory to improve theory and identify factors that influence continued fintech intention. Figure 1 presents the theoretical framework of the study. In this study, we employ a positivist philosophy that employs a deductive approach. The data for this study were collected from fintech users using online questionnaires. A pilot test was conducted to confirm the validity of the questionnaire's structure by evaluating its logical consistency, comprehensibility, item sequencing, and relevancy. The pilot study included respondents' past experiences with financial technology. Due to the unstable working conditions caused by the pandemic, respondents preferred to conduct all financial transactions through technology.

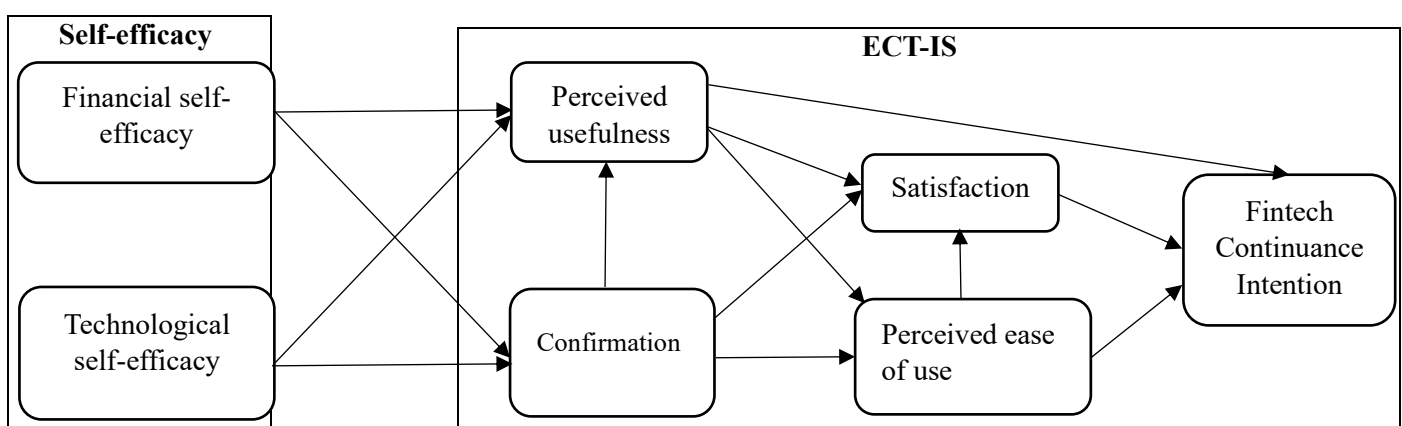


Figure 1. Theoretical Framework

Our study used a cross-sectional design and a quantitative research strategy for data collection. Our primary goal was to validate and invalidate our proposed hypothesis. Construct and item definitions were derived from previous studies. All elements of fintech continuation should be modelled as reflective constructs. Data were collected through an online questionnaire using a 5-point Likert scale, where 1 indicated "strongly disagree" and 5 indicated "strongly agree." The study was conducted with ethical considerations in mind, ensuring that the data were collected without any bias or in a neutral environment.

3.1 Measurement

Researchers use financial or technological self-efficacy as an independent variable to analyze the continuance intention of fintech users through self-efficacy theory. Researchers used financial self-efficacy as a construct and used five items. One of them is that "I am fully capable of making personal investment decisions" adapted from (Montford & Goldsmith, 2016). In the construct of technological self-efficacy, researchers used four items to measure consumer behavior. One of them is that "I am able to figure out how to use the interface of a smartphone on my own" and adapted from (Zhou et al., 2014).

The researcher uses perceived usefulness, confirmation, and satisfaction as mediating variables to analyze the continuing intention of fintech users. The researcher used perceived usefulness as a construct and used four items for it. One of them is "Using Fintech improves my performance in managing personal finances," which was adapted from (Bhattacharjee, 2001). In the confirmation construct, the researcher used four items to measure consumer behavior regarding fintech. One of them is that "My experience with using fintech was better than what I expected" and it was adapted from (Bhattacharjee, 2001). However, four items were used in the construct of satisfaction. One of them is "I am satisfied with the performance of fintech" and was adapted from (Atcharyachanvanich, Okada, & Sonehara, 2007).

Perceived ease of use was used as a mediating variable, while continuance intention was used as an independent variable. In the perceived ease of use framework, the researcher use six items, and one of them is that "I would find fintech products and services easy to use" and it is adapted from (Davis, 1989) Researchers used five items in the design of fintech continuation intention. One of them is "I intend to continue investing using Fintech rather than discontinue its use" adapted from (Bhattacharjee, 2001). However, in all these construct items, the researcher uses a 5-point Likert scale to measure consumer intention regarding fintech. In a previous study (Shiau et al., 2020), researcher use 7-point Likert scales to collect data.

3.2 Data Collection and Procedure

The empirical data gathered through an online questionnaire have numerous advantages compared to traditional paper-based questionnaires, including a shorter response time, reduced costs, and the absence of geographical constraints. Google Forms were employed to disseminate the questionnaires to various fintech users. A total of 324 respondents provided data. With the exception of the demographic questionnaire, all instruments were evaluated on a 5-point Likert scale, where 1 indicated "strongly disagree" and 5 indicated "strongly agree." Prior to completing the questionnaire, respondents with prior experience using fintech were instructed to read the explanation of the research objectives and privacy assurance. The researcher analyzed the data collected from the online questionnaire to assess the continuance intention of fintech users using AMOS and SPSS. AMOS and SPSS are two software programs utilized for applying statistical tests to the data obtained from the respondents. The SEM approach is more appropriate for our model because of its complexity and the presence of multiple components, indicators, and model interactions.

4 RESULTS AND ANALYSIS

In this study, researchers used different demographics, such as gender, age, level of education, time of fintech use, and frequency of fintech use. These demographics were chosen by the research because they are related to our research topic, and through these demographics, researchers can easily conduct surveys. Data are collected from Pakistani fintech sectors where females use fintech more than males, which is why the female percentage is higher than males. Most 20- to 29-year-old people use fintech compared to other age groups, and most of the respondents have bachelor's degrees. The user's time to use fintech is one to two years. 2 to 3 times/week frequency is higher due to the frequent use of fintech.

4.1 Descriptive Statistics and Reliability Test

The internal reliability of the items within the variables was checked using Cronbach's alpha test. The table below shows that the group of items within the variable has met the requirement of Cronbach's alpha criteria, as the value for each construct is more than .70, and Cronbach's alpha value fell between 0.881 and 0.923, indicating that there was no need to remove any item from the data.

Table 1. Descriptive Statistics

| Variable | Mean | No of items | Std. Deviation | Cronbach Alpha | Mini | Max |
|-----------------|------|-------------|----------------|----------------|------|------|
| FinSelf | 3.77 | 5 | .65171 | .923 | 1.00 | 5.00 |
| TecSelf | 3.99 | 4 | .71864 | .909 | 1.00 | 5.00 |
| Confirmation | 3.72 | 4 | .60590 | .881 | 1.00 | 5.00 |
| PerUse | 3.80 | 4 | .59664 | .882 | 1.00 | 5.00 |
| Satisfaction | 3.76 | 4 | .59768 | .876 | 1.00 | 5.00 |
| PerEaOfUse | 3.86 | 6 | .57536 | .913 | 1.00 | 5.00 |
| FinConIntention | 3.65 | 5 | .56489 | .868 | 1.00 | 5.00 |

Note: *FinSelf* and *TecSelf* indicate financial self-efficacy and technological self-efficacy, *PerUse* represents perceived usefulness, *PerEaOfUse* represents perceived ease of use, and *FinConIntention* indicates fintech continuance intentions.

For each construct, the mean value ranged from 1 to 5. The maximum value for each construct was 5, whereas the minimum value was 1. In the above-mentioned table, financial self-efficacy has a mean of 3.7796 and a standard deviation of .65171 or .425, which means that it has a normal relation; technological self-efficacy has 3.9977 mean and .71864 standard deviation or .516 is a variance; and confirmation and perceived usefulness have 3.7230, 3.8025 mean and .60590, .59664 standard deviation of .367, .356 are the variances, respectively. Thus, all these variables have a normal relationship, and descriptive statistical analysis shows that this model is a good fit.

Table 2. Model Fit Indicator/ Confirmatory Factors Analysis

| CFA indicators | Threshold Range | Observed value |
|----------------|-----------------|----------------|
| CMIN/DF | ≤ 3 | 2.300 |
| GFI | ≥ 0.80 | .837 |
| IFI | ≥ 0.90 | .927 |
| CFI | ≥ 0.90 | .926 |
| RMSEA | ≤ 0.80 | .063 |

Note: *CMIN/DF* indicates chi-square value or degrees of freedom, *GFI* stands for goodness of fit index, root mean squared error approximation is called *RMSEA*, *CFI* represents comparative fit index, and *IFI* stands for incremental fit index.

Table 2 lists the model fit indices. The values for each indicator lie within the threshold value, which indicates that our model is a good fit. The threshold value for CMIN/DF, which is also called the minimum discrepancy, should be equal to or less than three, and our observed value for this indicator is 2.300, which lies under the criteria. The observed value for the goodness of fit index (GFI) is .837 which is below the threshold value range that should be equal to or greater than 0.80. However, our observed values for IFI and CFI are .927 and .063 respectively, that also lie within the range of threshold values for these mediators, which should be greater than or equal to 0.90. The last indicator for this purpose is RMSEA, whose observed value lies within a range of threshold values less than or equal to 0.08. All indicators for the model fit indices indicate that our framework is a good fit.

4.2 Structural Equation Modelling

SEM allows us to examine the structure of interrelationships articulated in a chain of appearance, comparable to a sequence of multiple regression equations (Hair Junior, Black, Babin, Anderson, & Tatham, 1998). The findings of the hypothesis and regression weights of each variable towards the other variables are presented in the tables 3. In Table 3, the researcher examines the structural equation modeling (SEM). A p-value < .5 indicates significant relationships. "FinSelf" and "Confirmation" have a direct effect of .508 (S.E. = .046), indicating a positive and significant impact. "FinSelf" and "PerUse" exhibit a direct effect of .381 (S.E. = .047), also significant. "TecSelf" shows direct effects on "Confirmation", "PerUse", "Satisfaction", "PerEaOfUse", and "FinConIntention" (.118, .222, .174, .367, and .002 respectively, with S.E. of .042, .043, .043, .038, and .037 respectively). "TecSelf" significantly influences "PerUse", "Satisfaction", "Confirmation", and "PerEaOfUse", but has an insignificant effect on "FinConIntention" (p-value = 0.970). Financial self-efficacy and fintech continuance intention have an indirect effect with an estimated value of .361, S. E. for it is .055, and the p-value for this relational path is positive and significant. Technological self-efficacy and fintech continuance intention have an indirect effect with an estimated value of .188, S.E for it is .045, and P-value shows that it has a positive and significant relational path. Hypotheses 14 and 15 suggest that confirmation mediates the influence of financial and technological self-efficacy, respectively, on perceived usefulness. A formal mediation test, established by Zhao et al. (2010), was used to elucidate the mediation effect. As a result, the study supports H14 and H15. Below Figure 2 present the screenshot of SEM in Amos.

Table 3. Structural Equation Modeling

| Relational path | | Estimate | S. E | P |
|------------------------|---------------------|----------|------|------|
| Direct effect | | | | |
| FinSelf | ---> Confirmation | .508 | .046 | *** |
| FinSelf | ---> PerUse | .381 | .047 | *** |
| FinSelf | ---> Satisfaction | .407 | .048 | *** |
| FinSelf | ---> PerEaOfUse | .367 | .042 | *** |
| TecSelf | ---> Confirmation | .118 | .042 | .017 |
| TecSelf | ---> PerUse | .222 | .043 | *** |
| TecSelf | ---> Satisfaction | .174 | .043 | *** |
| TecSelf | ---> PerEaOfUse | .367 | .038 | *** |
| TecSelf | ---> FinConIntenion | .002 | .037 | .970 |
| Confirmation | ---> FinConIntenion | .322 | .043 | *** |
| PerUse | ---> FinConIntenion | .141 | .042 | .003 |
| Satisfaction | ---> FinConIntenion | .111 | .042 | .018 |
| PerEaOfUse | ---> FinConIntenion | .269 | .047 | *** |
| FinSelf | ---> FinConIntenion | .116 | .049 | .053 |
| Indirect effect | | | | |
| FinSelf | ---> FinConIntenion | .361 | .055 | *** |
| TecSelf | ---> FinConIntenion | .188 | .045 | *** |

NOTE: *FinSelf* and *TecSelf* represent financial self-efficacy and technological self-efficacy, *PerUse* indicates perceived usefulness, *PerEaOfUse* represents perceived ease of use, *FinConIntenion* indicates fintech continuance intention, and *S.E* stands for standard error.

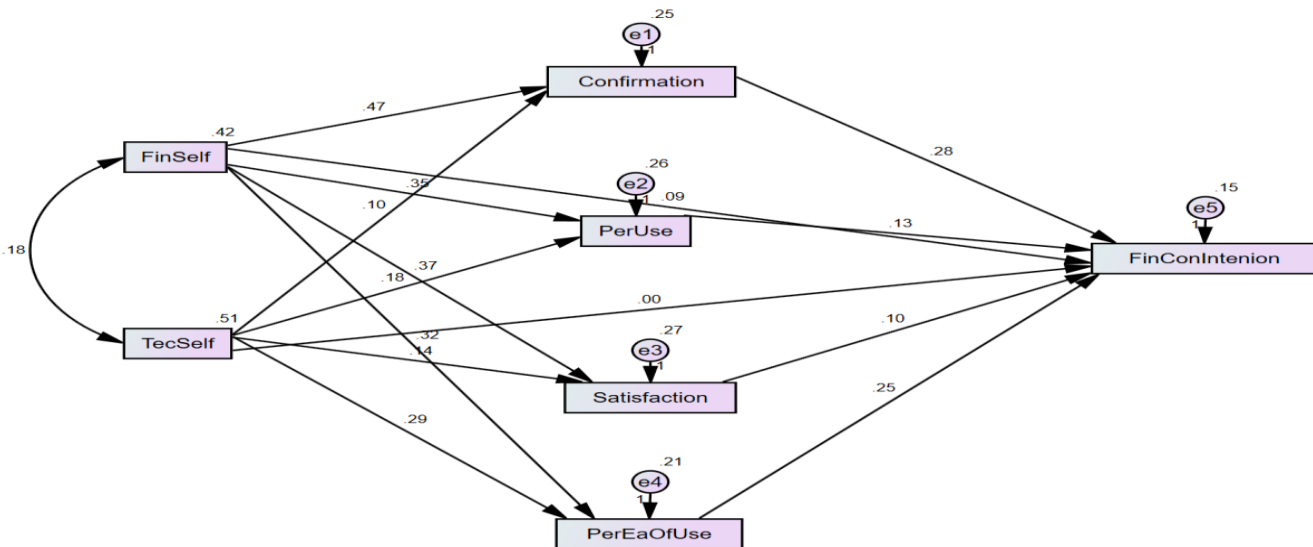


Figure 2. Structure Equation Modelling

5 DISCUSSION AND CONCLUSION

5.1 Discussion on Results

By combining self-efficacy with ECT-IS theory, this research intends to assist fintech companies and financial firms in better understanding how financial and technological self-efficacy affect consumers' fintech continuing intentions. The direct and indirect impacts of financial and technological self-efficacy on fintech continuation intentions were investigated in this study. Perceived ease of use, confirmation, satisfaction, and perceived usefulness all play moderating roles in examining the relationship between financial or technological self-efficacy and fintech continuing intention. Now, researchers will explain each hypothesis individually. According to the results of our research, “financial self-efficacy has a positive and significant impact on perceived usefulness”. H1 is supported by earlier studies that examined the effects of similar variables. In the previous studies of Shiau et al. (2020) where a positive link between financial self-efficacy and perceived usefulness has been founded.

Users' financial self-efficacy has a substantial effect on their confirmation. These outcomes are in line with previous research findings (Hong, Hwang, Tai, & Chen, 2014; Shim, Serido, & Tang, 2012). Outcomes are similar to

those made by Farrell, Fry, and Risse (2016) suggested that financial self-efficacy influences individual budgeting results based on personal finance behavior. Furthermore, Shiau et al. (2020) found positive and significant associations between financial self-efficacy and confirmation so, researcher accepts H2 because it is supported by previous findings. The outcomes and findings of our investigation have received both practical and theoretical support. Technological self-efficacy had a positive and significant impact on perceived usefulness and confirmation. Previous studies also demonstrated that the higher a user's feeling of technological self-efficacy, the more they consider technology to be highly valuable (Chen, Chen, & Yen, 2011). Shiau et al. (2020) identified different variables in their study, and positive associations were found between technological self-efficacy and perceived usefulness. These results agree with those of earlier studies (Mateen, Saeed, Shim, & Hong, 2020). However, the study was written by Shiau et al. (2020), where positive associations were found between technological self-efficacy and confirmation, which supports our hypothesis that researchers accept this hypothesis.

This study investigated the impact of confirmation on perceived usefulness in Pakistan's financial sector. According to Bhattacharjee (2001), confirmation has a strong positive effect on perceived usefulness, implying that the degree of confirmation may affect consumers' perceptions of fintech, supported by our findings that there is a positive association between confirmation and perceived usefulness. The impact of perceived usefulness on satisfaction in Pakistan's fintech sector is also investigated in this study. Our findings are consistent with those of earlier studies that examined the impact of similar variables (Shiau et al., 2020). Previous investigations have found a favorable relationship between perceived usefulness and satisfaction. The results revealed that confirmation had a considerable beneficial effect on satisfaction. Confirmation has a positive effect on satisfaction. Satisfaction rises as fintech confirmation increases. The findings of our investigation were consistent with those of previous studies. Previous research has demonstrated a positive relationship between confirmation and satisfaction.

This study investigates the impact of perceived usefulness on perceived ease of use and the intention to continue using fintech in Pakistan's fintech sector. According to our findings, PU has a substantial positive impact on perceived ease of use, according to our findings. The eighth hypothesis is that "perceived usefulness has a positive and significant influence on perceived ease of use". Previous investigations have discovered a favorable association between perceived usefulness and perceived ease of use. Perceived usefulness has an impact on fintech continuation intentions, which is supported by the findings of previous studies. In a previous study (Shiau et al., 2020), a positive association between confirmation and perceived ease of use was discovered, supporting our hypothesis and vice versa. The outcomes demonstrate that perceived ease of use has a strong beneficial effect on fintech continuation intentions. After assessing all variables, the researcher examined the influence of confirmation using the full model. To some extent, confirmation mediates the influence of financial self-efficacy on perceived usefulness. Furthermore, the significant direct impact suggests the presence of some neglected secondary mediators, which might be investigated further in future studies (Zhao et al., 2010). Regardless of the potential to eliminate an additional mediator, the mediation of confirmation between the influences of self-efficacy and perceived usefulness was verified.

Confirmation is also important for modulating the association between technological self-efficacy and perceived usefulness. Technical self-efficacy is one of the most crucial variables for fintech sustainability. On the one hand, users' technological self-efficacy has a direct impact on their sense of fintech usage. On the other hand, confirmation reduces the impact of technical self-efficacy on perceived usefulness. Furthermore, a positive direct impact suggests the presence of many neglected mediators, which might be investigated further in future studies (Zhao et al., 2010). The full mediation of confirmation between the influence of self-efficacy and perceived usefulness is proven when an additional mediator is removed. Experts who recommend fintech services should consider customers' essential aspects such as financial and technological self-efficacy and provide logical products and services. It could improve customer satisfaction, perceived ease of use, and continuing intentions, boosting the competitiveness of fintech companies. As a result, the researcher accepted all the hypotheses supported by previous studies.

5.2 Research Implication and Contribution

This research blends self-efficacy theory or ECT-IS theory to better acknowledge users' fintech continuing intentions. This applies the perseverance intention notion to the fintech sector, which has received little attention in previous research. This study defined two fintech-related domain-specific self-efficacies: financial self-efficacy and technological self-efficacy. Researchers have emphasized the significance of various types of self-efficacy in different situations. Overall, self-efficacy can be utilized as a baseline for future studies to enhance efficiency. In the context of fintech use, previous research has not specifically addressed the association between self-efficacy or continuing intentions and mediating factors, such as perceived ease of use, perceived usefulness, satisfaction, and confirmation. As

a result, our research outcomes add to new fintech research and help us better understand how users want to utilize fintech in the future. Because empirical data exist on the association between financial or technological self-efficacy and fintech continuing intentions, the current findings and results will add to the literature. In terms of its practical implications, this study focuses on financial institutions and businesses. Owing to advanced technological updates, the financial sector is in high demand and under stress.

This study had two practical implications. First, this study emphasizes the importance of fintech consumers' financial self-efficacy. Despite the absence of a second mediator, this study validated the indirect effect of financial and technological self-efficacy on perceived usefulness through the mediation of confirmation. Users' perceived usefulness can be influenced not only directly by financial self-efficacy but also indirectly by the confirmation of fintech use expectations. Users in the financial sector are increasingly interested in their results and profits. A positive technical experience can increase their sense of confirmation, perceived usefulness, satisfaction, perceived ease of use, and intent to continue; however, positive financial outcomes have a higher influence. As a result, fintech and financial firms can group customers based on their financial self-efficacy and create unique services for each aspect to offer a choice of customized schemes. With regard to investment management via fintech, most people have no trouble using smartphones and software. Consequently, the ubiquitous use of cell phones boosts users' willingness to stick with fintech. Second, according to this research, the validation of fintech use expectations is a major estimator of satisfaction and a key variable that influences users' decisions to continue using the technology.

Users' satisfaction and subsequent intentions are influenced by the rational decision process they go through to establish their usage, and confirmation influences users' fintech continuing intention in two indirect ways: by influencing users' satisfaction and users' perceptions of fintech usefulness. Researchers recommend that fintech companies and financial firms assist consumers in establishing suitable fintech expectations, as excessive expectations can lead to disappointment or fewer expectations and poor perceived usefulness can decrease users' enthusiasm to continue using fintech. Although determining the ideal degree of users' expectations is difficult, it remains a critical part of fintech. Identifying the direct and indirect factors that influence user intentions to continue using fintech services can provide useful insights for businesses to ensure their long-term success of fintech companies.

5.3 Study Conclusion

This research combines self-efficacy theory and ECT-IS theory to acknowledge users' continuing fintech intentions. This study examines two theories to determine whether fintech users in Pakistan want to stick with it. Researchers have examined the direct and indirect relationships between dependent and independent variables using mediating factors such as perceived ease of use, perceived usefulness, satisfaction, and confirmation. The goal of our research is to use an expectation-confirmation model that incorporates self-efficacy theory to examine the components that could define the level of fintech continuation intention. Data were collected through an online questionnaire and analyzed using SPSS and AMOS. The Researcher concludes that there is a positive and significant impact between all factors.

5.4 Limitations, Further Indications, and Suggestions

From a self-efficacy perspective, this study seeks to assess users' fintech continuation intentions. Our research is limited to fintech users in Pakistan's financial sector. The findings are not generalizable and may vary depending on the industry and situation. This study is limited to a particular industry and a single nation, Pakistan. Future researchers should be able to generalize the findings by conducting a cross-sector and cross-country study on the same scenario. The direct and indirect impacts of financial and technological self-efficacy on confirmation and perceived usefulness were studied as they have a substantial impact on fintech continuation intention. Future research could examine the direct and indirect impacts of domain-specific self-efficacy on fintech persistence. The data in this study were cross-sectional. Longitudinal research could be used in the future to evaluate causal hypotheses about financial self-efficacy, technological self-efficacy, and other important elements in fintech adoption. To acknowledge the relationship between dependent and independent factors, other aspects of the variables associated with good financial behavior, such as perceived risk, attitude, and trust, can be investigated.

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