

## **Unveiling Influential Factors of Customer's Usage of Fintech Products in Banking Sector amidst COVID-19: A Moderated Mediating Approach**

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### **ABSTRACT**

This study explores factors that affect bank customers' behavioral intention to adopt and use Fintech products and services during the Covid-19 pandemic, in Pakistan. It also examines the moderating impact of gender on the perception and usage of Fintech products in the banking sector, in Pakistan. A cross-sectional study was conducted. Banking customer intentions were holistically measured using the Technology Acceptance Model (TAM). The variables privacy, trust, and social behavior were integrated into the Unified Theory of Acceptance and Use of Technology (UTAUT). A questionnaire was distributed and returned by 324 people using convenience sampling. Model 10 and 4 of Process Macros v 3.5 of SPSS were used for data analysis. The results revealed that perceived privacy, trust, and social influence significantly impact banking customers' behavioral intention to use Fintech products, reflected in their actual usage of Fintech products during the era of the COVID-19 pandemic, in Pakistan. Results demonstrated that gender moderates the impact of social influence on behavioral intentions. This study recommends that banking managers strategically enhance and tailor their Fintech offerings, considering gender-specific preferences, to effectively position their products.

**Keywords:** Actual Usage, COVID-19, FinTech, Behavioral Intention, Privacy, Social Influence, Trust

### **Introduction**

Disregarding Technology has penetrated into every facet of human life. There is an explosive spread of information and communication technology in the financial services sector that has completely revolutionized it which in turn has changed the traditional approaches of service delivery to the customers (Elhajjar & Ouaida, 2019). The traditional methods of offerings services in the financial sector are increasingly replaced by newer and faster technology-fueled methods. Fintech is a buzzword in the financial world and can be defined as the amalgamation of finance and technology which utilizes blockchain, big data, and intelligent investment to facilitate customers in their financial transactions (Hu et al., 2019).

FinTech includes an array of services including payment methods, transfer of money, loan requests, etc. (Al Nawayseh, 2020). Traditionally, the transfer of money or payments was only possible through physical bank branches. Online banking emerged as a facet of Fintech, albeit a minor one, making transfer and payment services available through bank websites 24/7 (Shin et al., 2019). But online banking requires internet access as a prerequisite which limits the ability of customers to use it only when they have an internet connection (Salem et al., 2019). Lastly, mobile banking and mobile wallets emerged on the horizon as a result of continuous innovation in financial technology. M-banking or mobile wallets do not require an internet connection for their operation. Thus, it is the true depiction of convenience with its availability anytime and anywhere (Farah et al., 2018).

Notwithstanding all the developments in Fintech, it still faces numerous challenges and is still a long way from complete consumer adoption and trust, particularly in developing countries (Farah et al., 2018). Thus, more time and efforts for long-term success and public acceptance are crucial.

Although banks are currently making large investments in Fintech, the customers are still reluctant to adopt these services and thus the usage and adoption rates are reported to be quite low (Anouze & Alamro, 2019). In a developing country like Pakistan, these are even low. For instance, Pakistan is ranked eighth with one hundred and thirty-nine million mobile subscribers, but the nation only has only 1.6 million mobile banking users, indicating customers' reluctance towards using it (Farah et al., 2018). But the ongoing pandemic provides numerous opportunities to the banks to increase this ratio.

The world is presently confronted with the COVID-19 pandemic, with its assorted global, medium- and long-term impacts on many sectors of the economy and most importantly, the financial ecosystem. These circumstances proved to be a game-changer for the banking sector all over the world as people are prompted to adopt more digital solutions to their problems including accessing financial services. The adoption rates have gone to 64 percent across the globe with 87% adoption in China and India (Singh et al., 2020). But few inquiries have been made by researchers to study the adoption intention, diffusion aspects, and usage of Fintech services despite the existing massive market cushion (Al Nawayesh, 2020).

The study investigates the antecedents of behavioral intentions towards actual usage of Fintech products due to the existing gap in the literature in the Pakistani context. Existing research is fragmented and limited to identifying the barriers in mobile banking in Pakistan, observing consumer behavior in online banking, or the factors impacting m-banking pre-COVID-19. There is also a dearth of literature on the impact of security, privacy, and trust factors on the intentions and usage of customers (Salem et al., 2019; Singh et al., 2020). The present study combines numerous methods of online financial transactions including online and mobile banking, mobile banking, wallets, etc. under the head of Fintech and observes the impact of personal attributes of customers on behavioral intention towards actual usage of these products by the customers of Rawalpindi and Islamabad during the COVID-19

Additionally, gaining a better understanding of gender differences is vital for fostering not only individual adoption but also for creating sustained usage of new information technologies. The gender gap existing in different parts of the world including the Arab world, Middle Eastern and North African (MENA) regions makes it interesting to observe the difference in opinions between men and women regarding the use of Fintech (Merhi et al., 2020). Therefore, the study also explores the moderating impact of gender among the people of twin cities regarding their behavior intention to use Fintech products to analyze how the model fits with people from different genders groups.

## Literature Review

Davis for the first time in 1986 proposed the Technology Acceptance Model (TAM) to study the impact of technology on user behavior. The model uses two key factors, "*Perceived Usefulness*" and "*Perceived Ease of Use*" that impact an individual's intention to use technology. Since then, the model has been defined and refined by researchers many times in an attempt to get a thorough understanding of user behavior and intention to use technology. This model has become one of the most widely used models not only due to its straightforward approach but also because it has proven to be superior to other existing models as it can be improved and specified according to the analysis problem. For Fintech services, the model is applied to the new generation of IT instruments to financial innovation, thus the TAM has great applicability in this paper. But notwithstanding all this, existing research suggests that two elements used in the technology Acceptance Model cannot be counted upon exclusively when investigating the inclinations of individual customers' technology acceptance. Thus, over years, many investigations led to the development of first the TAM model and then the TAM2 (a revision of the original TAM) model. The TAM2 included moderating factors which included several social influence processes that incorporated subjective norm, voluntariness and image, and cognitive instrumental processes which further included job relevance, output quality, and result demonstrability. Further investigations led to the development of the UTAUT model by Venkatesh and his associates in 2003 (Salem et al., 2019; Singh et al., 2020).

The UTAUT comprises four main elements that include performance expectancy, effort expectancy, social influence, and facilitating conditions, all of them moderated by age, gender,

experience, and voluntariness of use. Existing literature explains that some added factors can be included in the model to expand its explanatory power. This would typically include perceived security, perceived privacy, and trust associated with the use of internet banking services (Salem et al., 2019; Singh et al., 2020).

A vast majority of studies have been conducted using TAM the model only and researchers have suggested that future studies should include the UTAUT model to investigate the impact of constructs other than included in TAM to observe their impact on behavior intentions towards Fintech usage. Existing research shows that while TAM explains forty percent of usage intention, UTAUT explains approximately seventy percent of adoption intention. Researchers have also advised incorporating trust, security, and privacy factors into it to enhance its predictive power (Farah et al., 2018). Therefore, this study examines the impact of trust, security, and privacy factors to investigate antecedents of customer perceptions about behavior intentions towards usage of Fintech products.

### **Perceived Privacy and Actual Usage**

Digitization and the subsequently increasing growth of mobile commerce then digital transactions have highlighted the individual's concerns about his anonymity i.e., his rights over his private data including his financial information (Sinha et al., 2019). The interactions between financial institutions and their clients give the financial institutions the opportunity to gain access to customers' private information including but not limited to customer details, account information, transactions information, etc. Most of this information can be categorized as the private information of customers (Dzidzah et al., 2020). Thus, higher perceived privacy directly and positively impacts the actual usage of Fintech products and services (Baabdullah et al., 2019; Salem et al., 2019).

H1a: Perceived Privacy positively impacts Pakistani individuals' usage of Fintech products/services during COVID.

### **Perceived Privacy and Behavior Intention**

Some of the studies have provided evidence that perceived privacy directly affects the actual usage of m-banking by customers through their behavioral intentions. These show that the lesser the perceived security of the customers, the lesser their intentions to adopt Fintech products; thus, exhibiting a direct and positive relationship between the constructs. It shows that decreased privacy concerns of customers increase the intentions of customers to adopt online banking services and thus, increase the actual usage of service by the customers. When there is high perceived privacy, customers' privacy concerns diminish and their intention to adopt Fintech products increases thereby increasing their actual usage (Baabdullah et al., 2019; Salem et al., 2019). Based on the discussion, the following is hypothesized:

H1b: Perceived Privacy has a positive impact on Pakistani individuals' intention to adopt Fintech products/services during COVID.

### **Social Influence and Actual Usage**

Social Influence can be termed as the influence of others to use a specific technology and posited that actions, statements, and attitudes of significant peers, friends, and family about the use of technology are very important (Singh et al., 2020). Past studies have asserted that social influence is extremely important when it comes to an individual's technology adoption with special respect to banking (Farah et al., 2018). It means that individuals look for suggestions from significant others due to uncertainties associated with technological adoption and that it is based on respect, honor, credibility, and social connection. Thus, this influence of others coupled with admiration from the peer community develops into a positive inclination towards the adoption of a technology (Chawla & Joshi, 2019).

H2a: Social Influence positively impacts Pakistani individuals' actual usage of Fintech products during COVID.

### **Social Influence and Behavior Intentions**

It is defined as the degree of influence of others to use a particular technology. Many studies have investigated the impact of social influence on the intentions and usage of technology in the banking sector. These express that reference groups' views, opinions and suggestions greatly can and do affect an individual's behavior intentions towards using innovations (Hassan & Wood, 2020; Merhi et al., 2020). An individual consults his/her social circle about new technologies before using them and their suggestions and opinions provided to him can significantly influence his choice of usage (Merhi et al., 2020). Based on the discussion, the following is hypothesized:

H2b: Social influence has a positive impact on Pakistani individuals' intention to adopt Fintech products/services during COVID.

### **Trust and Actual Usage**

Trust assumes the pivotal position in terms of factor affecting the adoption of digital platforms for transactions. This can be attributed to the innate risks related to this platform (Merhi et al., 2020). In fact, according to Hu et al. (2019). The definition of trust is usually context based as it is difficult to define it in general terms. It may be defined as one's inclination to put one's faith in an exchange partner in whom one is confident (Salem et al., 2019). In case of online transactions, trust can be defined as how much the customers believe in the subjective probability that their transactions online will occur in line with their confident expectations (Hassan & Wood, 2019).

Due to the big, high dimensional data involved in digital transactions, trust is the most important consideration and the intensifying threats of cybercrimes and the possibility of hacking into the customers' data makes trust a pivotal concern in determining adoption and usage of Fintech products or services (Lin et al., 2020). Prior research suggest that trust is one of the main drivers for the adoption of m-banking services. The studies also suggest that trust decreases customer's apprehensions about the risks associated with using fintech products (Hassan & Wood, 2019). Based on the discussion, the following is hypothesized:

H3a: Trust positively impacts the actual usage of Fintech products of Pakistani individuals during COVID.

### **Trust and Behavior Intention**

Extensive researchers have confirmed that users' trust in services maintains a significant role in adoption decision-making in the context of Fintech. Consumer trust could positively promote the adoption of Fintech applications by reducing the customer fears or apprehensions regarding their security and privacy when navigating through the digital world (Hu et al., 2019). A study by Chawla and Joshi (2019) notes that trust was the most significant driver of behavior intentions towards mobile banking adoption of people in India. Many other studies have reported similar results that trust is the most important catalyst for customer intentions towards adopting similar technologies. Based on the above discussion, the following hypothesis is proposed:

H3b: Trust positively impacts the Pakistani individuals' behavior intentions to adopt Fintech products during COVID.

### **Behavior Intention as a Mediator**

Many researchers suggest that behavioral intention is a vital antecedent of a customer's behavior and actual technology usage or adoption and more importantly, this correlation is shown in several studies when analyzing mobile banking adoption (Merhi et al., 2020).

Singh et al. (2020) explain that the original TAM model (Davis, 1985) indicates that behavioral intention affects the usage pattern of individuals. Numerous studies have pointed out that behavioral intention is indeed influenced by many factors. Accessibility of technology, information about its utility and usage, and then the direct experience of usage of the technology enables users to form stable behavior intentions for continued use in the future. Other factors like performance expectancy, effort expectancy, social influences, and facilitating conditions are important factors that influence behavioral intention. Behavior intention was also assessed through behavioral and technological factors with two main constructs: ease of use and usefulness. But none of these studies can directly be applied to the Pakistani context due to their certain limitations. . Based on the above discussion, the following hypothesis is proposed:

H4a: Behavior intention mediates the relationship between Perceived Privacy and Actual Usage during COVID.

H4b: Behavior intention mediates the relationship between Social Influence and Actual Usage during COVID.

H4c: Behavior intention mediates the relationship between Trust and Actual Usage.

**Gender as a Moderator**

Gender lies among the most extensively investigated demographic variables as both academicians and researchers recognize it as an important factor in examining the adoption intentions of people regarding technology. Many studies in past have explored the existing gender differences in the use of different Fintech products like online banking, m-banking, etc. and in customers’ perceptions about technology-related adoption intention (Glavee-Geo et al., 2017; Haider et al., 2018). Based on the above discussion, the following is hypothesized:

H5a: Gender moderates the relation between perceived privacy and actual usage of Fintech products of Pakistani people during COVID.

H5b: Gender moderates the relation between social influence and actual usage of Fintech products of Pakistani people during COVID.

H5c: Gender moderates the relation between trust and actual usage of Fintech products of Pakistani people during COVID

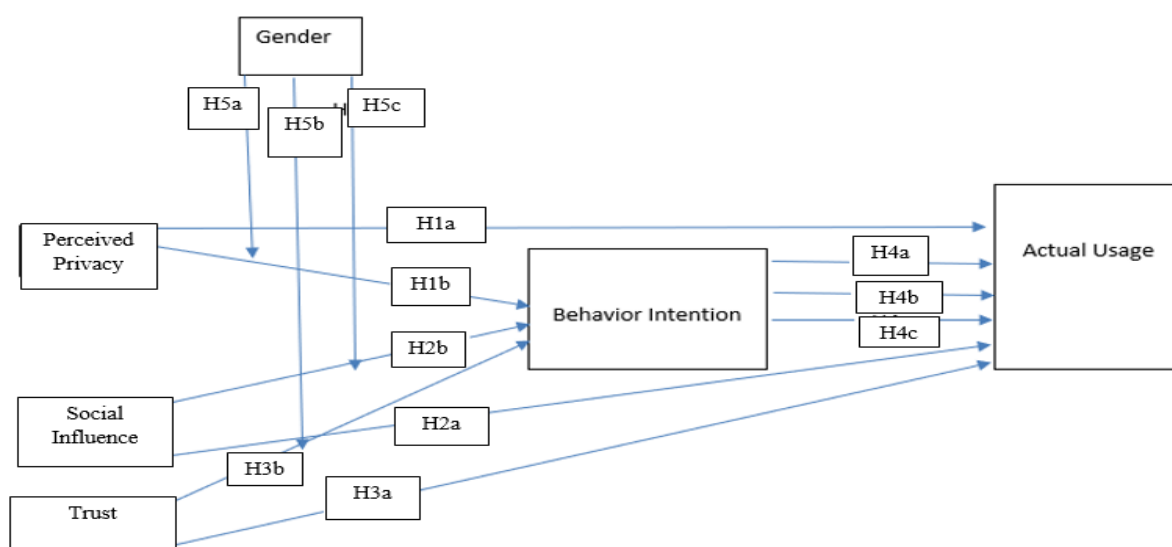


Figure 1 Theoretical Framework

## Material and Methods

The target population for the present study are the bank customers using Fintech products in Pakistan. Considering the difficulty in acquiring a sampling frame that has the details of all the banking Fintech customers in Pakistan coupled with the ongoing COVID19 scenario, the convenience sampling technique of the non-probability sampling has been used to obtain the required sample. The questionnaire included thirty-one items adopted from various studies in which actual usage has been measured as a frequency of use by requesting individuals to self-report their usage frequency by indicating their usage as “more than once a week”, “weekly”, “monthly”, “less than once a month” or “never” (Singh et al., 2020). All items have been measured on a Five Point Likert Scale where respondents rated the items from 1 for “Strongly Disagree” to 5 for “Strongly Agree”. Of the 450 questionnaires sent out, 324 were deemed appropriate to be added in the research. This is a response rate of 72%.

**Table 1**  
**Sources of Questionnaire Items**

Constructs	Items	Sources
Perceived Privacy	5	Baabdullah et al. (2019)
Trust	4	Hassan & Wood (2020)
Social Influence	3	Al nawayesh (2020)
Behavior Intention	4	Chawla & Joshi (2019) Al nawayesh (2020)
Actual Usage (measured as frequency of use)		Singh et al. (2019)

Of these acceptable 324 responses, 62.7 percent respondents were males and 37.3 percent respondents were females. Additionally, the collected sample incorporated diverse age groups; 15.1 percent of respondents were under 20 years of age. 38.6 percent were between the ages of 20-29, 14.2 percent were in the age group 30-39, 19.8 percent were between the ages of 40-49, 12.3 percent respondents were 50 or above. \*\*\* Ideally present in a table format

## Results and Discussion

**Table 2**  
**Descriptive Statistics**

	Mean	Std. Deviation	Skewness		Kurtosis	
	Statistic	Statistic	Statistic	Std. Error	Statistic	Std. Error
Frequency of Use During COVID-19	1.494	.8309	1.665	.135	1.887	.270
PP	3.2340	1.13649	-.468	.135	-.645	.270
TRU	3.4877	1.11883	-.742	.135	-.312	.270
SI	3.2757	1.13006	-.201	.135	-.951	.270
BI	3.4483	1.12366	-.447	.135	-.716	.270

Table 2 shows the mean, standard deviation of variables. Values of skewness and kurtosis show that the data is normally distributed.

## Reliability Analysis

Table 3 presents the results for reliability analysis. The values of Cronbach’s alpha for all variables fall within the cut of point indicating high reliability of items for variables

**Table 3**  
**Reliability Analysis**

Variables	Number of Items	Cronbach's Alpha
Perceived Privacy	5	0.95
Trust	4	0.95
Social Influence	3	0.96
BI	4	0.94

### Correlation Analysis

To check whether the variables are positively or negatively correlated, a correlations matrix based on Pearson's Correlation is presented in Table 4. The variables Perceived security and perceived privacy are highly correlated to each other ( $r = .82$ ,  $N = 324$ ,  $p < .01$ ). Similarly trust and perceived security are also highly correlated where  $r = .80$ ,  $N = 324$ ,  $p < .01$ . Additionally, trust and perceived security are also highly positively correlated where  $r = .91$ ,  $N = 324$ ,  $p < .01$ . The other variables either show a weakly or moderately positive correlation.

**Table 4**  
**Correlations Matrix**

	PP	TRU	SI	BI
PP	1			
TRU	.915**	1		
SI	.639**	.673**	1	
BI	.813**	.835**	.752**	1

\*\* . Correlation is significant at the 0.01 level (2-tailed).

The correlation matrix shows two variables Trust and Behavior Intention to be highly correlated ( $r = .92$ ,  $N = 324$ ,  $p < .01$ ) and ( $r = .81$ ,  $N = 324$ ,  $p < .01$ ). The other correlations are also moderate but the collinearity statistics of tolerance and VIF are well within the prescribed range. Regression Analysis was performed to test the hypothesis and model fitness. Table 5 presents the standardized coefficients and collinearity statistics. To check multicollinearity, Tolerance and VIF values are observed which are well within the range of 1 and 10 respectively. Thus, it is assumed that there is no multicollinearity in the data. The table shows that all variables are insignificant except social influence for which  $p = .00$  and  $t = 5.035$ . It shows that social influence significantly affects the actual usage of Fintech products of Pakistani people during COVID.

**Table 5**  
**Regression Results**

	$\beta$	t	Sig.	Tolerance	VIF
(Constant)	.214	.959	.338	-	-
PP	.302	2.566	.011	.155	6.462
TRU	-.206	-1.641	.102	.136	7.326
SI	.357	5.035	.000	.426	2.345
BI	.158	1.627	.105	.226	4.417
Gender	-.046	-.990	.323	.981	1.019

Table 6 gives model summary. It exhibits that R square is .32 which shows that 32 percent of the variance in the dependent variable actual Usage can be explained by predictor variables (Perceived Privacy, Trust, Social Influence and Behavior Intention).

**Table 6**  
**Model Summary**

Model	R	R Square	Adjusted R Square	R Square Change	Change Statistics			Sig.
					F Change	df1	df2	

1	.563 <sup>a</sup>	.317	.306	.317	29.489	5	318	.000
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### Mediation and Moderation Results

Mediation analysis is used to observe the impact of behavior intention on actual usage of Fintech products during COVID. Additionally, moderation analysis is used to investigate the impact of gender on behavior intentions. The tests of mediation and moderation are run using PROCESS macros developed by A. Hayes.

**Table 7**  
**Moderation effects of Gender between Perceived Privacy and Behavior Intention**

Outcome Variable: BI				
	$\beta$	se	t	p
Constant	.710	0.337	2.108**	0.035
PP	0.808	0.098	8.232***	0.000
Gender	0.112	0.255	0.4408	0.659
Int_1	-0.006	0.073	-0.0917	0.927

Table 7 shows that the regression of perceived privacy with that of the mediator (Behavior Intention) is significant,  $b = .81$ ,  $t = 8.23$ ,  $p = .0000$ . Therefore, it accepts the H1b hypothesis of the study. Additionally, the table also shows that 1% change in perceived privacy brings about 81% change in behavior intentions. The t-values and p-values also show that the relationship between perceived privacy and behavior intention in the presence of a moderator (Gender) is not significant,  $t = .44$ ,  $p = .66$ . Hence, it rejects hypothesis H5a of the study.

**Table 8**  
**Moderation effects of Gender between Trust and Behavior Intention**

Outcome Variable: BI				
	$\beta$	se	t	p
Constant	0.487	0.353	1.37	0.168
TRU	0.834	0.096	8.67***	0.000
Gender	0.030	0.275	0.112	0.911
Int_1	0.001	0.074	0.019	0.984

Table 8 shows the relationship between Trust and mediator (Behavior Intention) to be significant,  $b = .83$ ,  $t = 8.68$ ,  $p = .000$ . The relationship is significant at 1% level of significance which shows that 1% change in Trust brings 83% change in Behavior Intention. It accepts hypothesis H3b of the study. Additionally, the t-values and p-values show the relation of trust and behavior intention in presence of the moderator (Gender) to be non-significant,  $t = .11$ ,  $p = .91$ . Therefore, it rejects hypothesis H5b of the study and that gender does not moderate the relationship between Trust and Behavior Intentions.

**Table 9**  
**Moderation effects of Gender between Social Influence and Behavior Intention**

Outcome Variable: BI				
	$\beta$	se	t	p
Constant	0.143	0.379	0.377	0.705
SI	0.976	0.109	8.901***	0.000
Gender	0.663	0.277	2.387***	0.017
Int_1	-0.176	0.078	-2.239**	0.025

Table 9 shows the relationship between Social Influence and the mediator (Behavior Intention) to be significant,  $b = .98$ ,  $t = 8.9$ ,  $p = .0000$ . It shows that 1% change in social influence brings about .98



percent change in behavior intention. It accepts hypothesis H2a of the study. Additionally, it shows that the relationship between social influence and mediator in presence of the moderator (Gender) to also significant as the p-value is .025.

The interaction term in the table indicates the moderation effect of gender on the relationship between social influence and behavioral intention. The relationship is inverse with  $b = -.18$ . Therefore, we can say that 1% change in Social Influence causes about 18% inverse effect on behavior intention. Thus, moderation is significant, and the interaction term (social influence\*Gender) significantly moderates the relation between social influence and behavior intention. Thus, hypothesis H3b is accepted.

**Table 10**  
**Mediation Effects of Behavior Intention between Perceived Privacy and Actual Usage**

Outcome Variable: AU				
	$\beta$	se	T	p
Constant	0.174	0.131	1.33	0.18
PP	0.137	0.060	2.27**	0.02
BI	0.253	0.061	4.15***	0.000

Table 10 shows the relationship between perceived privacy and actual usage to be quite significant,  $t = 2.28$ ,  $p = .02$ . whereas this relationship between perceived privacy and behavior intention in the presence of mediator behavior intention is also significant  $b = .25$ ,  $t = 4.2$ ,  $p = .0000$ . The analysis shows that behavior intention partially mediates the relationship between perceived privacy and actual usage. It accepts hypothesis H4a of the study.

**Table 11**  
**Mediation Effects of Behavior Intention between Trust and Actual Usage**

Outcome Variable: AU				
	$\beta$	se	t	p
Constant	0.193	0.136	1.41	0.156
TRU	0.058	0.065	0.898	0.369
BI	0.317	0.065	4.88***	0.000

Table 11 shows that the direct relationship between trust and actual usage is non-significant as indicated by the p-value of 0.37 and t-value of 0.90. But the relationship between trust and actual usage in presence of mediator behavior intention is significant at 1% level,  $b = .32$ ,  $t = 4.8$ ,  $p = .0000$ . The analysis shows the direct relation between independent and dependent variables to be insignificant but through a mediator, it becomes significant (i.e. Trust  $\rightarrow$  Behavior Intention  $\rightarrow$  Actual Usage). Thus, behavior in tension fully moderates the relationship between Trust and Actual Usage, and hypothesis H4c is accepted.

**Table 12**  
**Mediation Effect of behavior Intention between Social Influence and Actual Usage**

Outcome Variable: AU				
	$\beta$	se	t	p
Constant	0.056	0.130	0.437	0.664
SI	0.259	0.052	4.97***	0.000
BI	0.170	0.052	3.24***	0.001

Table 12 shows the direct relationship between social influence and actual usage to be significant,  $b = .25$ ,  $t = 4.97$ ,  $p = .0000$ . This relationship is again significant in the presence of the mediator behavior intention as  $b = .17$ ,  $t = 3.4$ ,  $p = .001$ . Thus, it exhibits a partial mediation between social influence and actual usage in presence of behavior intention as a mediator. Thus, it accepts hypothesis H4b.

## Summary

The overall results of regression show that only perceived privacy and social influence directly influence the actual usage of Fintech products by Pakistani individuals during COVID. Therefore, hypotheses H1a and H2b are accepted. Trust was not found to directly influence the actual usage of Fintech products of individuals during COVID which leads to the rejection of hypothesis H3a.

The moderation analysis shows that gender influences the interactive relationship only between social influence and behavior intention leading to the acceptance of hypothesis H5c. There were no significant moderation impacts of gender found on the relationship between perceived privacy and behavior intention, and trust and behavior intention. Therefore, hypotheses H5a and H5b are rejected

Additionally, the mediation analysis shows that behavior intention fully mediates the relationship between trust and actual usage. It leads to accepting hypothesis H4c. It was also found that behavior intention partially mediates the relationship between perceived privacy and actual usage and thus, hypothesis H4a is accepted. Lastly, it was found that behavior intention partially mediates the relationship between social influence and actual usage, and thus, hypothesis H4b is accepted.

## **Discussion**

The findings of the study show that perceived privacy and social influence impact the actual usage of Fintech products by individuals during COVID. These findings were in line with existing research which stated that both these variables impacted the customer's actual usage of these services (Dzidzah et al., 2020; Baabdullah et al., 2019; Farah et al., 2018). Additionally, the results showed that trust does not directly impact the actual usage of Fintech products and services. This is quite contradictory to existing literature which shows that trust has a significant impact on the actual usage of financial technology of customers (Lin et al., 2020).

The results also exhibit that all three variables perceived privacy, social influence, and trust significantly impact the behavior intentions of individuals towards the adoption of Fintech products and services. This is similar to what is reported by Hu et al. (2019) or Baabdullah et al. (2019) etc. that perceived privacy, social influence, and trust, all these influence the intentions of individuals to use Fintech products.

Lastly, the findings show that gender only moderates the relationship between social influence and behavior intention. This is similar to what is reported by Glavee-Geo et al. (2017). The findings also show that no gender differences exist between the relation of perceived privacy and behavior intention as well as trust and behavior intentions which is quite contrary to what is reported by Haider et al. (2018) which states that gender differences exist in privacy and risk perception of individuals, impacting their intentions towards adopting of these products.

## **Conclusion**

The study provides valuable insights into the antecedents of behavioral intention towards the usage of Fintech products. The results reveal that perceived ease of use, social influence, perceived security, perceived privacy, and trust all significantly impact the behavior intention of customers towards using Fintech products. Additionally, age differences have been found in the relationship between perceived ease of use and behavior intention indicating that younger people are more inclined toward using Fintech products as compared to older people. But no gender differences were found indicating that both genders perceive ease of use similarly.

While significant gender differences were found in the relationship between facilitating conditions and social influence with women being more affected than men, no age differences were found indicating that customers belonging to all the age groups are affected by these variables in a similar pattern. Surprisingly in the case of both perceived security and privacy, the results indicate that no age or gender differences exist in the selected sample, implying all age groups and genders perceive the security and privacy of Fintech products in the same way. Future researchers should consider a

longitudinal research design by developing a dynamic model that would observe how the behavior intentions of customers change over time due to changes in their perceptions in COVID-19.

### **Implications of the Study**

The study highlights privacy, social influence, and trust significantly impact the intentions and usage of Fintech products in twin cities. Therefore, banks, to entice the customers and increase their usage of Fintech products, should focus their marketing campaigns and strategies according to these specific perceptions of the customers. It could be done by reinforcing the privacy and security of customers by not only using state-of-the-art technology to diminish threat actors but using ads and messaging to convey it to the customers as well. These measures might also lead to enhancing the overall trust of customers in Fintech products.

Additionally, the study also highlights that social influence is a significant predictor of intentions and usage of Fintech products of the population under study. This offers great prospects for the banks to increase service usage.

Moreover, the study also reveals that customers of both genders and all age groups are similarly affected by the security and privacy concerns regarding the use of Fintech products. Currently, in light of suggestions made by the State Bank of Pakistan (SBP) and the Federal Investigation Agency (FIA) regarding cyber security, the banks in Pakistan have adopted several strategies to ensure the safety and privacy of their customers. For instance, banks now provide transaction details to customers via SMS and emails with each transaction. Additionally, the introduction of EMV (short for European, MasterCard, and Visa) based chip debit cards provide added security to customers by using a PIN or Personal Identification Number unique to each customer.

Banks need to increase customer awareness about the laws and policies made regarding the privacy of customers' personal information. Furthermore, for the customers to increase their usage of Fintech products, banks have to assure them that a strong legal and moral system is in place to ensure the privacy of customers' data and transactions.

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