

## **How Perceptions About Ease of Use and Risk Explain Intention to Use Mobile Payment Services in Pakistan? The Mediating Role of Perceived Trust**

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### **Abstract**

This research aims to investigate the influence of perceived ease of use and perceived risk on intention to use mobile payment services in Pakistan via mediating role of perceived trust. A total of 320 smartphone users were approached using a questionnaire-based survey method and hypotheses were tested using hierarchical regression. The results of this study confirm that perception about ease of use and perception about trust of consumers significantly influences the intention to use mobile payment service. Whereas, perceived risk is found insignificant in explaining intention to use mobile payment services in Pakistan but, perception about risk is found as a significant negative influencer of perceived trust among consumers. This study is helpful for mobile payment service providers like Bank's marketing manager, financial institutions, etc. for making their strategies accordingly to tap consumers who prefer traditional cash mode of payment and it is also fruitful for the government and concerned departments to maintain transparency in monetary and economic transactions by m-payment services that can prove a helping hand for developing economies.

**Keywords:** M-payment, technology adoption, perceived risk, perceived trust, theory of planned behavior, ease of use mobile payment.

### **1. Introduction**

Massive developments in mobile technology have increased the use of smartphones across the globe as smartphones have become the necessity of many people's life (Wang

et al., 2016). People find it easier to perform their day-to-day task by using their mobile phones. Along these lines, Phonthanukitithaworn et al. (2016) added that mobile payment (m-payment) technology is tremendously grooming in all the countries for accommodating both the organizations and individuals. As per the definition given by Liu et al. (2011), "Mobile payment services (or m-payment) refers to the forms of combinative technologies that provide consumers with the ability to complete a financial transaction in which monetary value is transferred over mobile terminals to the receiver via the use of a mobile device". Mobile payments enable consumers to transact or to make monetary transactions (such as payments) and economic exchanges by cashless means (Pham & Ho, 2015). The mobile payment (m-payment) "space" is evolving rapidly, if it is continuing to increase with the same pace then by 2022, mobile transactions will reach up to \$3.4 billion (Allied Market Research, 2017). These arguments generate the need to further study m-payment in developing countries like Pakistan.

These days, almost every bank is using online platforms as well as mobile applications for providing their services by digital means like payments of bills, local and foreign remittances, e-commerce, m-commerce, etc. In most of the developing countries, due to technological advancement and popularization of internet and smartphone use among people, the use of m-payments is also increasing drastically. Developing countries' economies can be better off to a larger extent by the increased usage of m-payment systems as it maintains transparency and checks corruption in nations (FITS Study, 2013). As far as Pakistan (a developing nation) is concerned, there are about 139 million unique mobile subscribers (SBP, 2016) and by the year 2020, this figure is projected to expand by an additional 17 million new unique mobile subscribers (The Mobile Economy, 2017). There are many mobile payment platforms (powered by banks and other financial institutions) currently serving the nation ("Branchless Banking Newsletter," 2015; SBP, 2016) but even in this digital era, there is a major chunk of people that do not use such kind of m-payment services and prefer to transact via traditional modes of payment. There may be multiple reasons behind this reluctance that forces consumers to adopt or not to adopt m-payment service in the nation and the same is the underlining research question of this study that may prove very helpful for up-heaving m-payment use in Pakistan.

Till date, many studies on m-payment service technology adoption reside in literature and already predicted the consumer's m-payment adoption intention by many factors. But most such studies were undertaken in countries including Spain, Arab, India, Thailand, China, USA, and Germany (Al-Sharafi et al., 2017; Hansen et al., 2018; Humbani & Wiese, 2019; Sinha et al., 2019). Unfortunately, there is absence of such studies on m-payment use intention in Pakistani context (to best of the researcher's knowledge) even after the presence and growth potential of a large number of smartphone users across the nation. As Google indicated that Pakistan is among those four countries that have potential to give billions of smartphone users in coming years (The Express Tribune, 2017). In Pakistan, there may be numerous factors that play a role behind m-payment

adoption intention, however, we focused on perceived ease of use, perceived risk and perceived trust.

Perceived ease of use (PEOU) was found as a direct antecedent of intention to adopt m-payment service by many researchers (Sinha et al., 2019; Venkatesh et al., 2003). The most of past researchers quote the definition given by Davis (1989) to define PEOU as “the degree to which individuals believe that utilizing a specific technology would be free of effort both physical effort and mental effort”. Moreover, the perceived risk (PR) has also been found as a negative influencer of m-payment adoption intention (Srivastava et al., 2010; Wu et al., 2017; Yang et al. 2012). In this study, these two factors (PEOU and PR) were primarily focused to investigate a combo effect on perceived trust (PT) of mobile users across the nation behind the intention to use m-payment services (Fan et al., 2018). As per researcher’s knowledge, the influence of PEOU, PR, and PT on m-payment adoption intention has not been investigated yet in Pakistani context and the results of this article may be helpful for the mobile payment service providers, marketing managers of financial institutions (e.g. banks), and government officials and for other m-payment stakeholders as well. Given that, we aim to examine:

- RO1: The impact of Perceived Ease of Use and Perceived Risk on intention to adopt m-payment in Pakistan.
- RO2: The mediating role of Perceived Trust between Perceived Ease of Use and intention to adopt m-payment in Pakistan.
- RO3: The mediating role of Perceived Trust between Perceived Risk and intention to adapt m-payment in Pakistan.

These arguments can further be supported by technology adoption model henceforth TAM (Davis, 1989) and theory of planned behavior, henceforth TPB (Ajzen, 1991). Individuals plan the behavioral intention according to varying situations, when found favorable situation behave favorably. Applying the same, ease of use and perceptions of less risk build individuals’ trust which ultimately impact their behavioral intention to use that technology. The findings of the study help management regarding measures taken to promote m-payment in the country. The next section of the study covers literature review and methods used to conduct this study.

## **2. Literature Review and Hypotheses Development**

### *2.1 Perceived Ease of Use and Intention to Adopt or Use m-Payment*

One of the most important constructs of TAM was PEOU (perceived ease of use) which means “the degree to which individuals believe that utilizing a specific technology would be free of effort both physical effort and mental effort” (Davis, 1989). PEOU has many definitions in literature but the researchers adopted the definition given by Davis because it’s clearly matching the concept of construct (PEOU) used in this study as researchers want to see the impact that how the simplicity and effortless like factors contribute in an individual’s intention to adopt a particular technology (m-payments) and this plays an important and critical role where people are unfamiliar with the use of technology (Sinha et al., 2018).

Ajzen (1991) posits that “intentions are indications of how hard people are willing to try, of how much of an effort they are planning to exert, in order to perform the behavior”. Intentions to adopt any product or technology of consumers is an important factor and direct determinant and predictor of behaviors of consumers for using a product or technology (Yu, 2012). TPB posits that the main reasons behind the performance of behavior of individuals are the intentions that develop from individuals believes and attitudes towards technology. Therefore, m-payment adoption or use is primarily depending on the intention to adopt or use m-payment systems. Prior research studies indicate that PEOU has a significant association with the consumers’ intention to use or adopt technological products (Sinha *et al.*, 2018). As most people in Pakistan are mostly tyro (unfamiliar with the technological product use) and find sometimes it difficult to use technology products due to the complexity factor. Therefore, it is expected that PEOU will have a significant positive impact on the intention to adopt or use m-payment systems in Pakistan. So, the researchers proposed the following hypothesis:

- **H<sub>1</sub>:** Perceived Ease of Use positively influences intention to adopt or use mobile payment systems.

### 2.2 *Perceived Risk and Intention to Adopt or Use m-Payment*

Perception often leads to actions. According to Tan and Leby Lau (2016), “Perceived risk means an individual’s degree of expected uncertainty associated with the result of using a certain technology”. The risk may be classified in security, monetary, societal, performance, privacy like terms (Khasawneh, 1970). The researchers quote and adopted this definition of the perceived risk just because it is defining the study’s construct perceived risk to a greater extent. As the technology adoption process in this modern era is increasing day by day among individuals but while adopting such technologies individuals are very much concerned about the risks associated with that particular technology as past studies showed that there is a negative impact of PR on an individual m-payment adoption intention in Thailand (Phonthanukitithaworn *et al.*, 2016), Spain (Schierz *et al.*, 2010), Singapore (Chandra *et al.*, 2010), USA (Park *et al.*, 2019), and China (Wu *et al.*, 2017). Based on these previous research findings, the researchers deduced the following hypothesis:

- **H<sub>2</sub>:** Perceived Risk negatively influences intention to adopt or use mobile payment systems.

### 2.3 *Perceived Trust and Intention to Adopt or Use m-Payment*

Zhou (2013) defined perceived trust as a “willingness to be loyal to a service provider based on positive expectation toward the service provider’s future behavior”. Usually, in an m-payment service context, consumers often take a decision for either adopting a m-payment service or not is based upon their perceptions that a service provider will be trustworthy and reliable or not, therefore, the researchers quote the above-mentioned definition of trust. As per innovation-decision process (a view of IDT – innovation diffusion theory) for promoting a technological product in pre-adoption stages of technology or technological product, implanting trust in consumers regarding technology or technological product can be very helpful (Rogers, 2003). There are three dimensions

of belief represented by trust in which integrity, ability, and benevolence are included (Kumar et al., 2018). In this study, the researchers are interested in covering only two dimensions i.e. ability and integrity collectively as a PT. The perceptions that a trustful party may meet the expectations of the consumers often leads to affect the intention to adopt m-payment positively and causes consumers to adopt such services in many countries like in Thailand (Phonthanakitithaworn et al., 2016), China (Shao et al., 2019), USA (Park et al., 2019) and India (Kumar et al., 2018) as well. So, that is why the researchers infer the following hypothesis:

- **H<sub>3</sub>:** Perceived Trust positively influences the intention to adopt or use mobile payment systems.

#### *2.4 Perceived Ease of Use and Perceived Trust*

In mobile payment and other technological products adoption context, PEOU could motivate the consumers to adopt technology or a technological product (Davis, 1989; Venkatesh and Davis, 2000) like mobile payment services as it can boost PT in consumers as they find themselves more confident while adopting mobile payment services after they find it is easier to use (Belanche et al., 2012). PEOU has been found as a direct predictor of PT in the literature (Belanche et al., 2012; Kumar et al., 2018). So, therefore, researchers deduced the following hypothesis:

- **H<sub>4</sub>:** Perceived Ease of Use positively influences the Perceived Trust.

#### *2.5 Perceived Risk and Perceived Trust*

In literature, the relationship between perceived risk and perceived trust has been defined extensively (Zhou, 2013). The perceived risk could be an area of interest of service providers as it is an antecedent of trust perception among consumers (Park et al., 2019). Based on these arguments, the strike of PR on mobile payment use or adoption intention has been explained by PT as well. In the previous m-payment adoption studies, it is found that the association between perceived risk and trust is negative (Park et al., 2019). As per these findings, the researchers deduced the following hypothesis:

- **H<sub>5</sub>:** Perceived Risk negatively influences the Perceived Trust.

#### *2.6 Perceived Trust as a Mediator*

The significance and importance of PT have already been discussed briefly in the previous sections of this study. It was also elaborated in previous sections that the concept of *perceptions leads to intentions and intention ultimately into behaviors* has been derived from the TRA and TPB (Ajzen, 1991). Based on these deductions many researchers have used different constructs for enhancing the prediction power of these theories. As there are several constructs has been tested as mediator for example Wu et al. (2017) used perceived risk as mediator and found its effects negatively consumers' acceptance intention, Park et al. (2019) employed multi-dimensions of perceived benefits and reported that perceived benefits (except experiential benefit) impacts positively on attitude toward using, and perceived usefulness has also been investigated by many researchers as mediator and it was also found that it explains positively the intention to use (de Luna et al., 2018). Moreover, Trust has also been investigated as a mediator in many studies by the researchers and it is found that trust positively affects intention to

use (Park et al., 2019). However, in the present study, the researchers were interested in testing Perceived trust as a mediator basing of the theory of planned behavior given by Ajzen (1991). The present study is used and tested PT as a mediator for the first time (to best of the researcher's knowledge) in Pakistan. Agreeing with the suggestion given by Oliveira et al. (2016), researchers built on this sequence and series of testing mediator in TAM and TPB and used perceived trust as a mediator in this study. Basing on all these arguments researchers expected the following hypotheses:

- **H<sub>6</sub>:** Perceived Trust mediates the relation between Perceived Ease of Use and intention to adopt mobile payment systems.
- **H<sub>7</sub>:** Perceived Trust mediates the relation between Perceived Risk and intention to adopt mobile payment systems.

### 3. Methods

#### *3.1 Population, Sample, and Procedure*

In this study, the researchers collected data from smartphone users of Pakistan who are not currently using m-payment services. Due to time and resources constraint, the researchers were able to collect data from the respondents of only one metropolitan city of Pakistan (i.e. Lahore). In the present study, the convenience based sampling technique was employed because the population is the unknown (Islam, 2014). The researchers conducted a self-administered questionnaire-based survey for data collection. The data was collected between January-2019 to March-2019. A total of 320 questionnaires were floated towards respondents by employing item response theory with a criterion of 20 respondents against each item of questionnaire. Out of these 320 respondents, only 286 respondents replied back (response rate = 89.37 percent). However, 6 questionnaires were found redundant thus, only 278 questionnaires were used in the final analysis (effective response rate = 86.87 percent).

Respondents were examined on the basis of demographical characteristics in which gender, age, and qualification are included. On the basis of gender, there was a slight difference, but the majority of respondents were female (N=139, 50.18 percent). As per the age of respondents, majority of them were below 25 years of age (N=234, 84.48 percent) while most of the respondents were having 16 years of formal education (N=251, 91.94percent).

#### 4. Measures

The questionnaire consisted of 16-items in total. The scales used in this study were adapted from the past studies because they have already examined regarding validity and reliability. The researchers first conducted a pilot study on 25 respondents to ensure the reliability of the scales in the Pakistani context. In addition, for face validity questionnaire was sent to three experts for their suggestion. The responses were taken using a 5-point Likert scale.

#### *4.1 Perceived Ease of Use*

PEOU was measured by using a 6-item scale of Davis (1989) who reported its Cronbach's alpha value as 0.94. In the present study, this scale is also found reliable in the Pakistan context by having an internal consistency of 0.84. A sample item of this scale includes, "I believe that learning to use mobile payment systems would be easy for me."

#### *4.2 Perceived Risk*

A four-item scale was developed by J.-H. Wu and Wang (2005) to measure perceived risk and reported its Cronbach's alpha value as 0.93. This scale yielded an internal consistency of 0.80. A sample item of this scale includes, "I think using mobile payment service in monetary transactions has potential risk."

#### *4.3 Perceived Trust*

Gefen, Karahanna, and Straub (2003) developed a 6-item scale to measure perceived trust and reported its reliability as 0.83. Kumar et al. (2018) shortened this scale up to 3-item and reported its reliability as 0.80. The same 3-item scale is used in this study. This shortened scale also found reliable in the Pakistani context by yielding Cronbach's alpha value as 0.63. A sample item of this scale includes, "I believe that mobile payment service providers are honest."

#### *4.4 Intention to adopt m-Payment services*

Davis (1989) developed a 3-item scale to measure intention to adopt the technology. The same scale was also used in this study and attained Cronbach's alpha value as 0.77. A sample item of this scale includes, "Given a chance, I intend to adopt mobile payment service in the future."

### **5 .Results**

#### *5.1 Preliminary Data Analysis*

The data used in this study were examined properly for the missing values in the data, extreme values in the data (outliers), data normality and multicollinearity among variables before testing the underlying hypotheses (Islam et al., 2019; Islam et al., 2019). The main reason behind doing so is to avoid any negative impacts on the findings of this study as the presence of any of these issues can affect negatively study's findings (Islam et al., 2019). In this study, the researchers confront with the random pattern of missing values as it's a common issue in primary data collection or in almost all research (Kang, 2013). As per the suggestions were given by Hair et al., (2014), the researchers replace the missing values in responded questionnaires by the mean value of other responses of the same item. In addition, valuing the suggestions given by Sekaran (2003), researchers only used a questionnaire that was filled up to 75 percent, therefore a total of 2 questionnaires were considered redundant also and were not included in the final analysis. The data is then further investigated for outliers as they can harm by increasing the variability (Cousineau and Chartier, 2010). As per the suggestions were given by Sekaran (2003), the outliers were removed from the data after finding out them by box plot method resulting in a decrease of further such 6 questionnaires that were not able to

be used in the final analysis. The study used Kline (2015) suggested standardized ranges of  $\pm 3$  for skewness and  $\pm 10$  for kurtosis, to note a normal distribution of data. We followed Hair et al., (2014) regarding multicollinearity and found correlation well below 0.80 (see Table 1).

### 5.2 Descriptive Statistics and Reliabilities

Table 1 below represents the value of the construct's mean, standard deviation, reliabilities, and Pearson's Correlations coefficient. We used the criteria of 0.60 to examine internal consistency of the scales (Bagozzi & Yi, 1988). Thus, the values of Cronbach's alpha found in Table 1 were between 0.63 and 0.83. In addition, the mean values show that respondents were near to agree regarding their PEOU and intention to adopt m-payment whereas near to neutral regarding their perceived risk and perceived trust. The values in Table 1 also demonstrates that PEOU is not significantly related with perceived risk ( $r=0.06, p > 0.05$ ) but positively related with perceived trust ( $r = 0.14, p < 0.05$ ) and intention to adopt or use mobile payment systems ( $r = 0.47, p < 0.01$ ), while perceived risk is strongly negatively associated with perceived trust ( $r = -0.24, p < 0.01$ ) but do not have significant association with intention to adopt m-payment ( $r = -0.05, p > 0.05$ ) and in addition perceived trust is positively and significantly related with the intention to adopt m-payment ( $r = 0.30, p < 0.01$ ).

**Table 1: Summary of Mean, Standard Deviations, Reliability and Pearson's Correlation Coefficients**

Variable	Mean	SD	C. Alpha	Gender	Age	Qualification	PEOU	PR	PT	INT
Gender	-	-	-	1						
Age	-	-	-	-0.27**	1					
Qualification	-	-	-	-0.21**	0.24**	1				
PEOU	3.73	0.64	0.83	-0.25**	0.08	0.05	1			
PR	3.32	0.82	0.80	0.00	0.04	0.01	0.06	1		
PT	3.22	0.64	0.63	-0.16**	-0.02	-0.00	0.14*	-0.24**	1	
INT	3.58	0.74	0.77	-0.23**	-0.07	-0.00	0.47**	-0.05	0.30*	1

*Note:* PEOU = Perceived ease of use; PR = Perceived Risk; PT = Perceived Trust; INT = Intention to adopt m-payment; \*\* =  $p$  is less-than 0.01; \* =  $p$  is less-than 0.05

### 5.3 Regression Results

The study used SPSS to test the suggested hypotheses of the study. Table 2 portrays the regression results of hypothetic relation ( $H_1$ - $H_5$ ) of this study. The values are illustrating that perceived easiness of use is positively influencing perceived trust ( $\beta = 0.14, p < 0.05$ ) whereas has a positive and strong impact on intention to adopt m-payment ( $\beta = 0.54, p < 0.01$ ) while perceived risk is negatively influencing perceived trust ( $\beta = -0.19, p < 0.01$ ) but do not have remarkable impact on intention to adopt m-payment ( $\beta = -0.04, p > 0.05$ ). In addition perceived trust is positively and significantly influencing the intention to adopt m-payment ( $\beta = 0.35, p < 0.01$ ).

**Table 2: Path Coefficients among Variables**

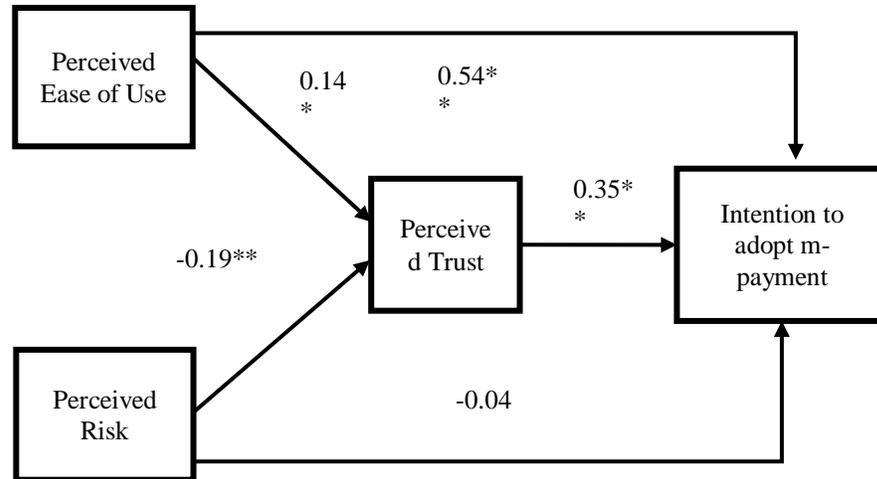
Hypothetic Relation	$\beta$	<i>p-value</i>	Result
PEOU→INT	0.54	0.00	Accepted
PR→INT	-0.04	0.36	Rejected
PT→INT	0.35	0.00	Accepted
PEOU→PT	0.14	0.01	Accepted
PR→PT	-0.19	0.00	Accepted

*Note:* PEOU = Perceived ease of use; PR = Perceived Risk;  
PT = Perceived Trust; INT = Intention

#### 5.4 Mediation Results

Moreover, for testing mediating processes, this study employs a hierarchical regression method by Baron and Kenny (1986). However, before applying this technique for analyzing the model, all the three pre-requisites suggested by Baron and Kenny (1986) for the sake of testing mediating processes in which “(a). Predictor should have a significant association with predictand (b). Predictor should have a significant association with the mediating variable (c). The mediating variable should have a significant association with the predictand” are included. In this study, there were only two hypotheses that were dealing with mediating processes (i.e. H<sub>6</sub> and H<sub>7</sub>). On the basis of above mentioned criteria given by Baron and Kenny (1986) for mediation process testing, researchers found that mediating process deduced in H<sub>7</sub> cannot proceed further (see Table 2) however, the second mediating process deduced in H<sub>6</sub> was analyzed further as all these three conditions were being fulfilled (see Table 2).

By the hierarchical regression method process with using three models, in the first model demographical variables (gender, age, and qualification) were included as control variables to control their effects. In the second model, PEOU (the predictor) was introduced to note its significant impact ( $\beta = 0.51, p < 0.01$ ). In the third and final model when perceived trust was introduced as mediating variable then the coefficient value of perceived ease of use falls from 0.51 to 0.48 but remains significant ( $\beta = 0.48, p < 0.01$ ), however, the value of the beta coefficient of perceived trust in the third step noted as significant ( $\beta = 0.25, p < 0.01$ ). This show that perceived trust among smartphone users in Pakistan partially mediates the relation between PEOU and intention to adopt m-payment (see Table 3) and in this way, H<sub>6</sub> of this study was found supportive and therefore accepted.



**Figure 1: Hypothesized Theoretical Framework**

**Table 3: Mediation of Perceived Trust Using Hierarchical Regression**

Variables	M1(β)	M2(β)	M3(β)
<i>Control Variables:</i>			
Gender	-0.44**	-0.28**	-0.22**
Age	-0.23*	-0.25**	-0.22*
Qualification	-0.10	-0.10	-0.08
<i>Independent Variable:</i>			
PEOU		0.51**	0.48**
<i>Mediating Variable:</i>			
PT			0.25**
R <sup>2</sup>	0.08	0.26	0.30
ΔR <sup>2</sup>	-	0.18	0.04

Note: PEOU = Perceived ease of use; PT = Perceived Trust; \*\* =  $p < 0.01$ ; \* =  $p < 0.05$

## 6. Discussions

As discussed previously, the findings of this study provided support for most of the relationships that was expected (See Figure 1). In addition, in this study, the mediating variable (perceived trust) was also tested after controlling the effect of demographical variables. The results of this study indicate that PEOU is an important determinant of the

adoption intention of m-payment services in Pakistan. This finding shows that the consumers are more likely to be tempted towards adopting that technology they think is easy to use and requires fewer technicalities to use and researchers found this relationship in accordance with the past studies as well (Kumar et al., 2018). Further, the impact of PEOU is also observed upon PT indicating that in Pakistan people are more likely to trust on a product or service that they believe or perceive will be easy to use and which may ultimately cause them to adopt that particular product or service. This judgment is also non-conflicting with the former studies in the literature (Kumar et al., 2018). In this study, PR is found as a negative influencer of PT as per expectation which betokens that the people in Pakistan are less likely to trust in a product or service that they believe will involve in some kind of privacy or monetary riskiness. The researchers found that this finding is also in accordance with the prior studies on m-payment adoption (Park et al., 2019). Further, the present study posits that PT has a strong impact on behavioral intention to adopt m-payment services in Pakistan which is also holding consistency with the former studies in the same field (Park et al., 2019).

Further, in the Pakistani context, the PR is not influencing the intention to adopt m-payment services as the association among PR and intention as well as the impact of PR on intention is insignificant which is indicating that people are not much concerned about the risk factor while adopting m-payment services. There might be multiple reasons behind this finding. One of the plausible reasons behind this finding might be that the majority of the respondents in this study were below 25 years of age (i.e. *younger*) and according to Deery (2000), younger people usually underrate the risk. Secondly, there is again a clarification that the sample causes this insignificance as not all the consumer's perceptions about risks are the same. They think differently about risk as by taking their expertise and skills in managing a system into account (Belanche et al., 2012). This study's finding is consistent with former such studies as well (Ozturk et al., 2017; Farah et al., 2018).

In addition, if findings upon mediation processes are considered, then there were two hypotheses that were deduced by the researchers for dealing with the mediating role of PT (i.e. H<sub>6</sub> and H<sub>7</sub>). Only H<sub>6</sub> was carried out for mediation analysis but mediation process in the underlying hypothesis (H<sub>7</sub>) was not carried out on technical grounds as conditions of hierarchical regression was not fulfilling (Baron & Kenny, 1986). So as per going with the only possible mediation process (i.e. H<sub>6</sub>), the present study posits that PEOU and PT collectively influence the intention for m-payment adoption. TPB states that "*an individual's intention to adopt an innovation is determined by attitude and subjective norms, which are formed by behavioral and normative beliefs of an individual.*" (Ajzen, 1991; Yang et al., 2012). So, therefore the mediation process depicted by H<sub>6</sub> (PEOU→PT→INT) found plausible which also portrays that if consumers think that a technology is easy to use by taking their technical features into account and they are also driven by positive perception of trust on service provider then these positive perceptions about a product leads to develop their intention to adopt such products and services.

## 7. Implications

The findings of the study have important contributions. Firstly, this study extends the existing literature on TAM by following the future call of Oliveira et al. (2016), and incorporated perceived risk and perceived trust in the same model. The new TAM model is further supported by TPB which posits that perceptions lead to develop intentions and which in turn leads to actual behaviors (Ajzen, 1991). Secondly, this study fulfills the gap of Pakistani context as not much has been examined in the country.

Regarding practical implications, the study may be helpful for the financial institutions (banks, microfinance institutes etc.) and their marketing managers. The study suggests management and marketing managers about how they can tap consumers of traditional cash mode payment by strengthening perceptions of ease of use and building trust. Suffice to say that, ease of use and trust are the most important aspects that consumers consider while promoting m-payment. It is also fruitful for the government and concerned departments to maintain transparency in monetary and economic transactions by m-payment services that can prove a helping hand for developing economies in avoiding corruption and money laundering or black money transfer activities (FITS Study, 2013). Thus, primarily this study is helpful for banks and financial institutions, a bank's marketing managers can make sound strategies by making the people across the nation aware that mobile payments are easy to use and by enhancing bank's trust level among consumers in Pakistan.

Due to time and resources constraints, the study used small sample size and most of the respondents were below 25 years of age (i.e. young) and all data were collected from one metropolitan city of Pakistan (i.e. Lahore) which may make this study less generalizable (Peat, 2002). Further, this was a cross-sectional study, but this should be conducted by using panel data also and therefore future researchers are recommended to employ longitudinal data. Further in the present model other constructs like social influence, privacy concerns perceived benefits, the perceived cost can also be employed in Pakistani perspective as well as globally in different countries for future researches as they are also expected to explain the intention to use or adopt m-payment service.

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