

Exploring the Influence of Perceived Trust and Its Determinants on Fintech Adoption Intentions: Insights from Pakistan

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Abstract

The study aimed to assess how Pakistani customers' propensity to use fintech services was influenced by perceived trust (PT) and its antecedents. Although fintech services are growing in popularity in Pakistan, little is known about the factors that influence users' propensity to use them. A survey was carried out to achieve the study objective. Data analysis was carried out by using statistical tools. The results of the study indicated that customers' Intentions to use fintech (IUF) services in Pakistan are significantly influenced by perceived utility, considered ease of use, and PT. Perceived risk (PR) has little effect on consumers' IUF services. The findings of the study have important implications for policymakers and fintech companies in Pakistan. The importance of creating user-friendly, dependable, and secure fintech services is highlighted by the considerable influence that perceived usefulness (PU), perceived ease of use (PEU), and PT have on intents to use fintech services. Providers should also focus on boosting client trust in their offerings through transparent pricing, unambiguous terms and conditions, and stringent security protocols. By creating a regulatory framework that safeguards consumers' interests, fosters innovation, and advances financial inclusion, policymakers may stimulate the use of fintech.

Keywords: Perceived Trust, Fintech, Perceived Risk, Perceived Usefulness, Perceived Ease of Use, Intention to Use FinTech.

INTRODUCTION

New financial technologies, sometimes referred to as fintech, have emerged as a result of recent rapid technological advancements, offering clients distinctive financial services and solutions. Fintech has revolutionized how individuals as well as businesses control their finances and upended the traditional banking sector. In many countries, like Pakistan, where fintech use has skyrocketed in recent years, the use of fintech services has grown in popularity ([Rahman et al., 2023](#)). A number of factors, such as perceived trust (PT) in technology and its forerunners, affect the adoption of fintech services.

PT is the extent to which people believe that a technology is reliable, secure, and capable. PT in fintech services is essential to their adoption and use since they include the sharing of private financial data and transactions. Additionally, a person's inclination to use fintech services is greatly affected by the antecedents of PT, such as Perceived Risk (PR), perceived advantages, and PEU. PR refers to the level of uncertainty and potential harm associated with using a technology, whereas perceived utility and PEU allude to how helpful and user-friendly people believe the technology to be. Figure 1 highlighted the reasons to use FinTech.

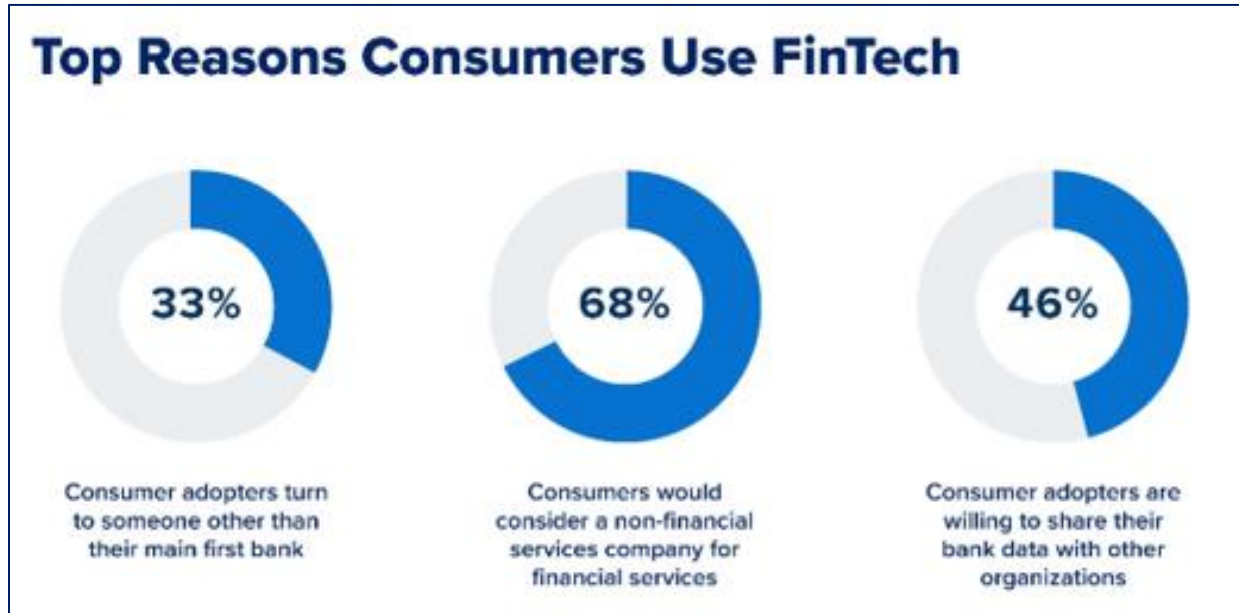


Figure 1: Reasons to Use FinTech.

The objective of this study is to assess how Pakistani customers' propensity to use fintech services was influenced by PT and its antecedents. Despite the fintech services are growing in popularity in Pakistan. However, little is known about the factors that influence users' propensity to use them. Various previous studies identified various factors about the FinTech in Pakistan (Ali et al., 2018; Butt & Khan, 2019; Saleem, 2021), however, Pakistani customers' propensity to use fintech services was influenced by PT and its antecedents was noted studied by previous studies. Hence, results of the study have significant effects for policymakers and fintech companies in Pakistan.

LITERATURE REVIEW

Theoretical Foundation

The TRA is often used to predict behavior in people. The TRA makes it clear that a person's conduct and behavior are determined by their behavioral objectives. Therefore, someone who firmly believes in certain outcomes will be more likely to behave emotionally. On the other hand, someone who really believes that the conduct will have negative effects would have an angry manner (Rahi et al., 2022). Subjective norms and attitude are the two factors that, according to TRA, effect a person's behavioral intention. An individual's attitude states to their positive or negative tendency while engaging in a certain conduct. Fintech consumers' attitudes about using fintech, which are obtained by applying the TRA to the Fintech environment, limit the purpose of fintech use. It is acknowledged that customers will have the freedom to choose and think about services that are accessible (Lee & Chen, 2022). When developing and promoting the usage of fintech, it is needed to recognise the PR aspects as consumers may be reluctant to use it due to concerns about danger. TAM, a redesigned version of TRA, was first created to

characterize IT user acceptability. This approach postulates that the usage of a framework is directly dictated by behavioral goals of use. This is then influenced by how customers feel about using the framework and how valuable they think it is, as well as how helpful they think the system is. TAM and UTAUT, which are widely used theoretical frameworks for identification the acceptance and usage of technology.

The TPB basic has been shown to be useful in anticipating and understanding human behavior across various ITs. TPB reveals that an individual's behavioral intention directly influences their actual behavior while engaging in various activities. As a result, it is determined by their perceived behavioral controls, subjective norms, and attitude while engaging in the activity. Behavioral intention is an evaluation of one's willingness to expend effort when undertaking specified acts. Fintech is defined as non-monetary companies using technology to innovate financial processes and services. Fintech enables customers to participate in a variety of mobile climate administrations. The many benefits of fintech enable customers to acquire an environment of advancement and straightforwardness, reduce expenses, make financial data more transparent, and remove middlemen.

Fintech Risk Perception

There are many ways to define the concept of PR. When applied to the context of the data framework, the perception of risk has a damaging effect on the implementation of information systems or information technology. According to the study, consumers may feel that there is an increased danger associated with the use of technical innovation due to the goods or services it may produce. Accordingly, "customers' impression of weakness, vulnerability, and the possible negative outcomes related to Fintech" is the definition of "PR." Even if fintech has drawn a lot of attention, the customer's intention to use it is still unclear and uncertain. It is believed that a more pessimistic person would have a detrimental impact on such behavior (Berakon et al., 2022; Usman et al., 2022). Buyers may be apprehensive to adopt fintech since the dangers are significant and cannot be overlooked.

Trust: Dependability and Limitation

Dependability serves as the basis for trust. In fintech use involving online buying or availing services, consumers depend on websites and apps to perform numerous jobs in financial transactions. The lack of a cash-on-delivery (COD) option has also hampered certain clients due to financial loss. The proposed research model includes four main constructs: PR, PU, PEU, and PT. PR implies an individual's perception of the potential negative outcomes correlated with using fintech services. PU implies to an individual's perception of the degree to which fintech services can enhance their financial activities. PEU signifies to an individual's perception of the degree to which fintech services are easy to use. PT describes to an individual's confidence in the reliability, integrity, and competence of the fintech service provider. These four constructs are expected to have a significant impact on individuals' IUF services in Pakistan. The proposed research model is illustrated in Figure 2.

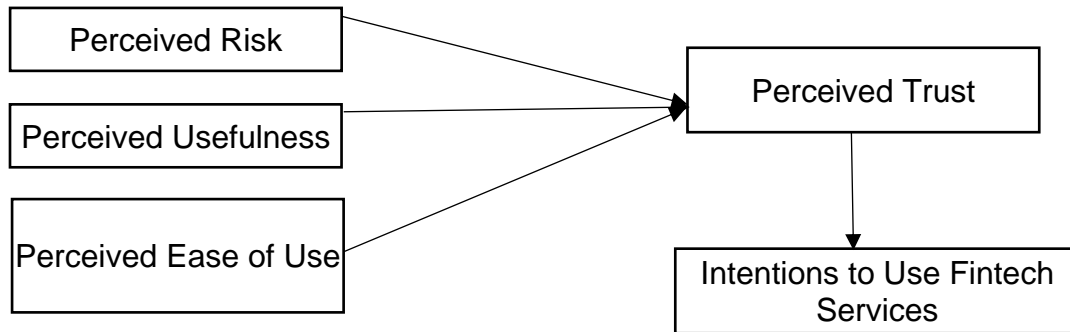


Figure 2: Proposed research model.

Hypothesis 1: *PR has a significant effect on individuals' IUF services in Pakistan.*

Hypothesis 2: *PU has a significant effect on individuals' IUF services in Pakistan.*

Hypothesis 3: *PEU has a significant effect on individuals' IUF services in Pakistan.*

Hypothesis 4: *PT mediates the relationship between PR, PU, PEU, and IUF services in Pakistan.*

METHODOLOGY

Authors define a flowchart as "a flowchart for guiding the inquiry in such a way that maximum control was exercised over components that might interfere with the validity of the research outcomes" (2016). According to the above definition, the term "research configuration" should be considered to describe the whole method developed to investigate the study's related issues. This study identifies, analyzes, and explains the components that support the development of environmentally friendly information utilizing a quantitative research illuminating framework. A quantitative method to research was applied in this study. The approach of employing questionnaires has been used to acquire quantitative data. Therefore, one may get the insights required to appreciate the relationships between the variables and probable differences between the groups. The research "PT and its Antecedents' Impact on IUF: Evidence from Pakistan" used a mixed-method approach that included quantitative data collecting and analysis. According to the literature study, PT and its Antecedents have an influence on IUF: Evidence from Pakistan.

The positivist worldview and the quantitative research method are closely intertwined. This investigation is guided by the positivist perspective. The positivist phenomenon is founded on the idea that our world is a physical place. In terms of appearance, it is more accurate. Valid and trustworthy measuring tools may be used to ascertain the truth. The positivist approach is used to build a theoretical understanding of any problem. There are several ways to discover this, including surveys and first-hand reporting. A wide variety of approaches, such as statistical analysis, focus groups, questionnaires, sampling, measurement, interviews, and sampling, may be used in the measuring process. These results demonstrate that positivism may be used to link variables, which can subsequently be used to test the hypothesis (Lee et al., 2022). An online survey was used to collect the data, and responses were evaluated on a Likert

scale. Conducting quantitative research, which comprises the identification of employee-based facts that may be utilized for such reasons, is a frequent practice in the area of employee marketing. Because self-administered surveys are in line with current trends in the study of service marketing, research may be evaluated successfully (Rahi et al., 2022).

A convenience sampling method was used. Smart PLS was used for data analysis. When we talk about the validity of a theory, concept, or notion, we are referring to the capacity to assess such things precisely. This research aims to shed light on previously buried aspects by using co-relational analysis. Furthermore, the research will assist in the creation of a more effective strategy to analyzing the issue and gaining an intuitive understanding of the key facts. Articles, thoughts, educational publications, and internet resources were all employed to supplement the author's understanding of the topic at hand. Table 1 shows operationalization.

Table 1: Operationalization of Variables.

Variable	Description	Measurement Scale	References
PR	The extent to which users perceive risk in using FinTech services, considering potential financial loss, data security, and privacy concerns.	Likert scale (1-5)	Smith, 2019, Chen, 2020
PU	Users' belief in the practicality and value of FinTech services in meeting their financial needs and goals.	Likert scale (1-7)	Davis, 1989, Venkatesh, 2003
PEU	The perception of how easy it is to use FinTech services, considering user-friendliness and accessibility.	Likert scale (1-7)	Davis, 1989, Venkatesh, 2003
PT	The level of trust and confidence is important.	Likert scale (1-5)	McKnight, 2002, Mayer, 1995
IUF Services	Users' expressed intentions to utilize FinTech services for their financial transactions and activities.	Likert scale (1-7)	Ajzen, 1991, Fishbein, 1975

RESULTS AND ANALYSIS

The researchers employed the linear regression analysis approach, in which the influence of numerous factors may be measured simultaneously, to keep track of the impact that several separate variables (independent variables) had on other variables (dependent variables). R represents the degree to which the detected and anticipated values of the dependent variable are associated. The R-values might range from minus one to one. R-square values vary from 0 to 1. This depicts the change in the dependent variable caused by the independent components' effects. If a model produces a low number, it means the model is not resilient; this reveals the model's compatibility with the population. ANOVA (analysis of variance) determines

whether independent variables generate outstanding performance when explaining variations in the dependent variable. It is suggested that the F significant value be less than 0.05. Following the completion of data collection, 400 completed questionnaires were submitted. The statistical analysis of the acquired data was carried out using a stringent data screening approach. All the normal statistical concerns, such as outliers, missing values, and data anomalies, were ruled out.

Demographic profile of the respondents

Table 2 describes the sample of the *Respondents* taken from all over Pakistan through emails and online channels such as google forms, total 400 *Respondents* were taken as a sample, with 311 (77%) male and 89 (23%) females.

Table 2: Gender of Respondents.

Gender of Respondents	Frequency	Percent%
Male	311	77%
Female	89	23%
Total	400	100

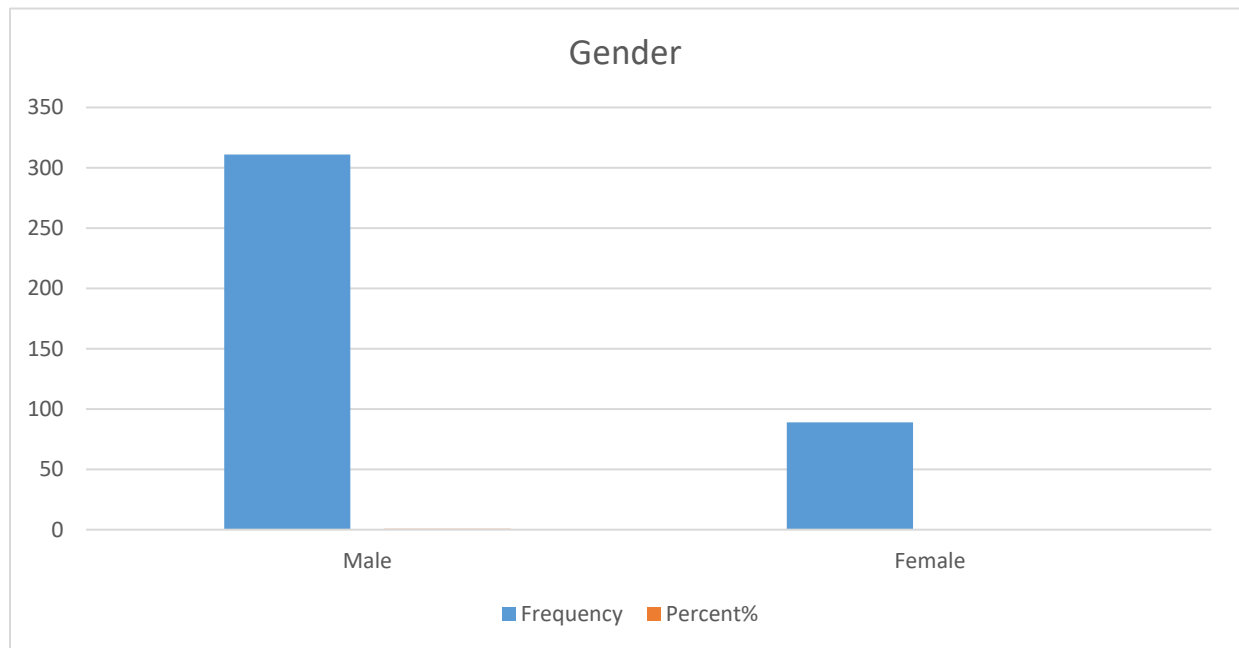


Table 3: Age (Years old).

	Frequency	Percent%
25-35	18	4.5%
36-45	188	47.0%
46-55	175	43.5%
55 & Above	19	5%
Total	400	100

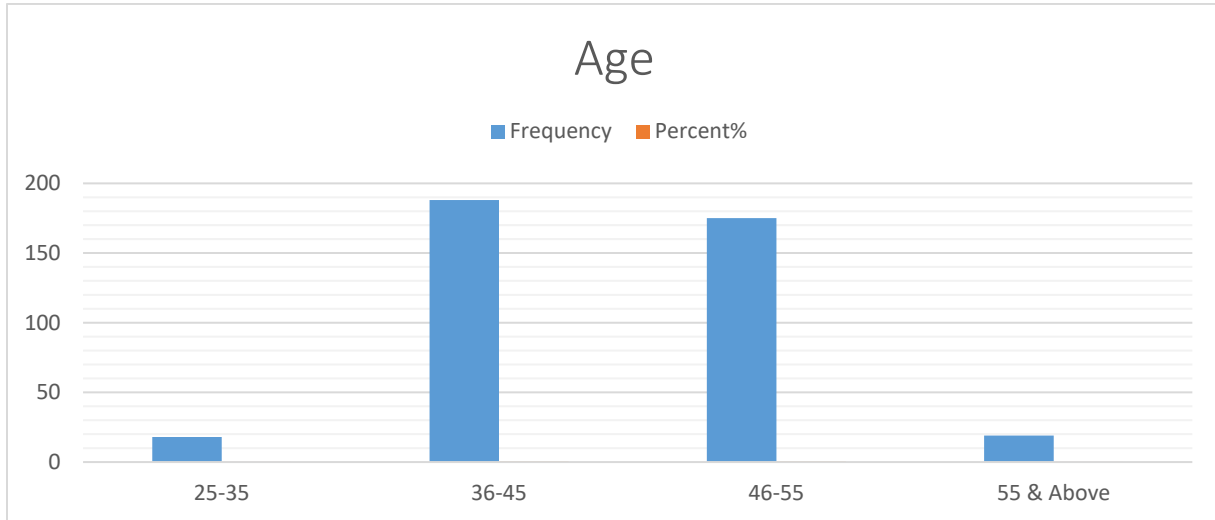


Table 3 describes that the sample of *Respondents*, total 400 *Respondents* were selected as a sample. Data was collected from the random age groups, in the age group 25 to 35 years there were 18 respondents, 188 respondents had age in the range of 36 to 45 years, 175 respondents had age in the range of 46 to 55 years.

Table 0: Highest Education.

	Frequency	Percent%
Bachelors	4	1%
Masters	188	47%
MS/Mphil	199	50%
PhD	9	2%
Total	400	100

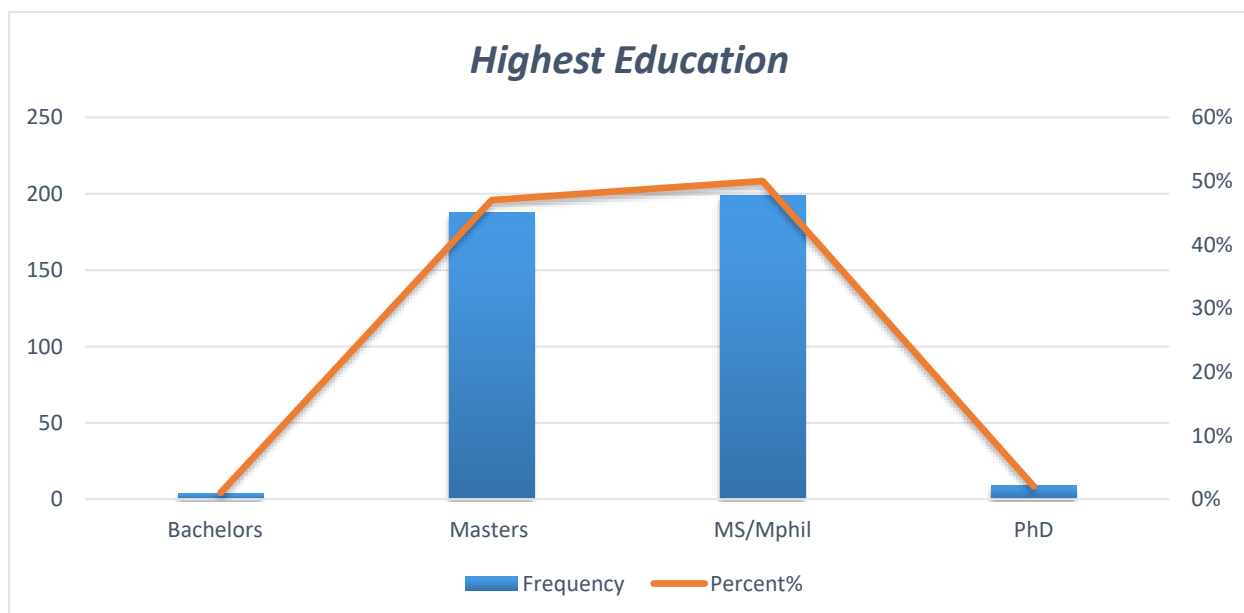


Table 4 describes that the sample of *Respondents*, total 400 *Respondents* were selected as a sample. Data was collected from the random educational backgrounds groups, 1% respondents had highest qualification as bachelors, 47% respondents had masters degree, 50% respondents had MS/Mphil qualification and 2% were PhD qualified.

Table 5: Experience (Respondents).

	Frequency	Percent
0-5 years	108	27.1
6-10 years	117	29.1
11-15 years	77	19.3
More than 15 years	98	24.6
Total	400	100.0

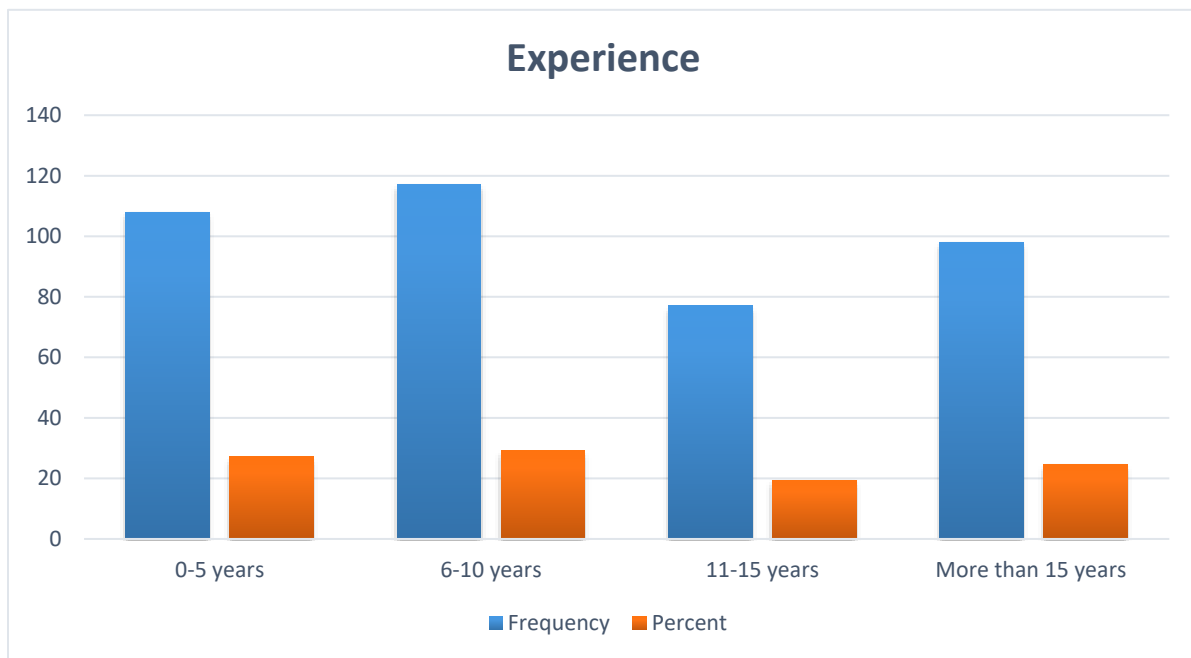


Table 5 describes that when the data was collected from 400 *Respondents*, then it was found that 27% *Respondents* had 1 to 5-year experience, 29% *Respondents* had experienced between 6 to 10 years, 19% *Respondents* had experienced between 11 to 15 years and there were 25%) espondents who had more than 15-year experience.

Table 6: Management Level.

	Frequency	Percent
Lower	206	51.6
Middle	84	21.0
Upper	110	27.4
Total	400	100.0

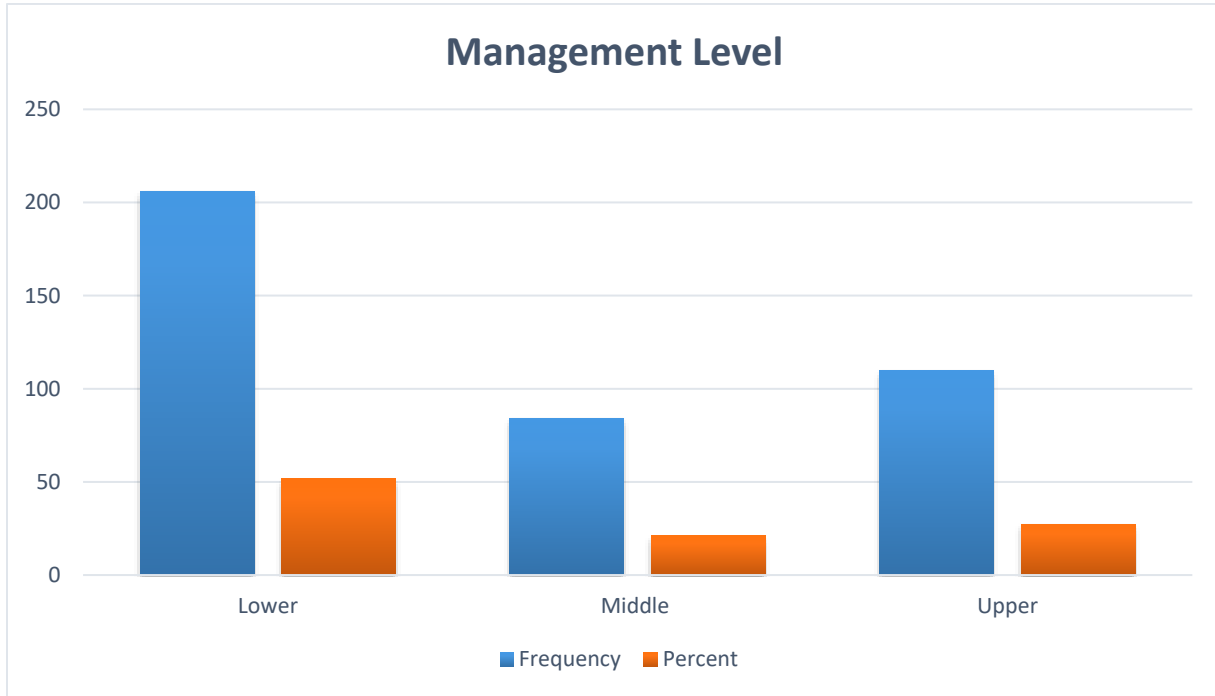


Table 6 describes that when the data was collected from 400 *Respondents*, then it was found that 51% respondents were in lower level management, 21% *Respondents* were in middle level management and there were 27% *Respondents* who were in upper level management.

Measurement Model

PLS structural equation modeling, was used in this study. In the study, the Smart PLS software was employed. The measuring model, also known as the external model, was accessible. This marked the start of the first stage. To evaluate model compatibility, a measurement analysis is performed, which involves evaluating the accuracy and precision of the measurements. The consistency with which a measuring device measures the desired property indicates its accuracy. All of the requirements for CR, alpha, and AVE values for the relevant variables were clearly satisfied in this study. Alpha, CR, and AVE all add up to a reasonable level for future investigation, as seen in Table 7. Unfortunately, one of the components had to be removed in order to lighten the load on the outside.

Table 7: Factor loading, Alpha, CR, and AVE.

Variable	Cronbach Alphas	CR	AVE
PR	0.795	0.823	0.806
PU	0.779	0.827	0.833
PEU	0.733	0.800	0.875
PT	0.788	0.814	0.781
IUF Services	0.779	0.827	0.833

Alpha for this construct is 0.795, demonstrating a high degree of internal consistency dependability. The CR and AVE scores of 0.823 and 0.806 show that the items assessing this concept have strong convergent and discriminant validity, respectively. Alpha for this construct is 0.779, which indicates a high degree of internal consistency dependability. The CR and AVE scores of 0.827 and 0.833 show that the items assessing this concept have strong convergent and discriminant validity, respectively. PEU: This construct's Cronbach's alpha is 0.733, which is somewhat below than the indicated threshold but still an acceptable degree of internal consistency dependability. The items assessing this concept show strong convergent and discriminant validity, as indicated by the high CR and AVE scores of 0.800 and 0.875, respectively. Alpha for this construct is 0.788, demonstrating a high degree of internal consistency dependability. The CR and AVE scores of 0.814 and 0.781 show that the items assessing this concept have strong convergent and discriminant validity, respectively. IUF Services: This construct has a Cronbach's alpha of 0.779, which shows a high degree of internal consistency dependability. The CR and AVE scores of 0.827 and 0.833 show that the items assessing this concept have strong convergent and discriminant validity, respectively.

Table 8: Descriptive Statistics.

	N	Min.	Max.	Mean	SD	Skewness	Kurtosis
PR	400	1.00	5.00	2.45	1.71	-.26	-1.25
PU	400	1.00	5.00	3.12	1.48	-.76	-.38
PEU	400	1.00	5.00	2.39	1.68	-.31	-1.23
PT	400	1.00	5.00	3.56	1.61	-.40	-.90
IUF Services	400	1.00	5.00	2.45	1.71	-.26	-.38

Table 9: Correlation analysis.

	PR	PU	PEU	PT	IUF Services
PR	1				
PU	-0.011	1			
PEU	0.061	.341**	1		
PT	0.012	.523**	.436**	1	
IUF Services	0.063	.461**	.474**	.542**	1

Table 10: Multicollinearity (Variance Inflation Factor).

	Collinearity Statistics	
	Tolerance	VIF
Gender	.883	1.127
PR	.886	1.124
PU	.775	1.372
PEU	.822	1.494
PT	.678	1.621
IUF Services	.677	1.622

VIF value higher than 5 or 10 is contemplated a cause for concern and may indicate the need to address multicollinearity in the model. It is important to address multicollinearity as it can lead to unreliable coefficient estimates, inflated standard errors, and inaccurate predictions. The results of ANOVA states that the F statistics results are significant at $p < 0.05$ in Table 12.

Table 11: Regression Analysis.

Model Summary				
Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
1	.615 ^a	.046	.043	.44640

Table 12: ANOVA.

Model		Sum of Squares	df	Mean Square	F	Sig.
1	Regression	14.436	5	2.887	14.489	.000 ^b
	Residual	298.513	1498	.199		
	Total	312.949	1503			
a. Dependent Variable: Transformational Leadership (Teacher)						

Table 13: Coefficients.

Model		Unstandardized Coefficients		Standardized Coefficients	t	Sig.
		B	Std. Error	Beta		
1	(Constant)	2.998	.149		20.170	.000
	PR	.704	.121	.745	2.511	.012
	PU	.726	.737	.766	.967	.002
	PEU	.103	.071	.103	-.049	.001
	PT	.466	.724	.531	-1.440	.015
a. Dependent Variable: IUF Services						

CONCLUSION

The findings of the study indicated that customers' IUF services in Pakistan are significantly influenced by perceived utility, considered ease of use, and PT. PR has little effect on consumers' IUF services. The results of the study have influential consequences for policymakers and fintech companies in Pakistan. The importance of creating user-friendly, dependable, and secure fintech services is highlighted by the considerable influence that PU, PEU, and PT have on intents to use fintech services. Providers should also focus on boosting client trust in their offerings through transparent pricing, unambiguous terms and conditions, and stringent security protocols. By creating a

regulatory framework that safeguards consumers' interests, fosters innovation, and advances financial inclusion, policymakers may stimulate the use of fintech. The results show that customers' tendency to use fintech services in Pakistan is substantially inspired by perceived value, considered ease of use, and PT. These findings highlight the necessity for fintech companies to create services that are easy to use, reliable, and secure in order to boost client confidence. By creating a regulatory environment that supports innovation, safeguards the interests of consumers, and advances financial inclusion, policymakers may stimulate the use of fintech.

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