



## Original Article

## Anxiety, Perceived Risk, Psychological Satisfaction as Correlates of Consumer Acceptance of E-banking in Pakistan

Rehan Sohail<sup>1</sup>, Syed Shoaib Nazir<sup>1</sup>, Abid Nazim<sup>2\*</sup> and Umer Chaudhry<sup>1</sup><sup>1</sup>School of Management, Forman Christian College University, Lahore, Pakistan<sup>2</sup>Department of Psychology, Forman Christian College University, Lahore, Pakistan

## ARTICLE INFO

## Keywords:

Perceived Risk, E-banking, Psychosocial Factors, Consumer Satisfaction

## How to Cite:

Sohail, R., Nazir, S. S., Nazim, A., & Chaudhry, U. (2024). Anxiety, Perceived Risk, Psychological Satisfaction as Correlates of Consumer Acceptance of E-banking in Pakistan: E-Banking Acceptance in Pakistan. *Pakistan BioMedical Journal*, 7(05). <https://doi.org/10.54393/pbmj.v7i05.1089>

## \*Corresponding Author:

Abid Nazim

Department of Psychology, Forman Christian College University, Lahore, Pakistan  
abidnazim@fccollege.edu.pkReceived Date: 12<sup>th</sup> April, 2024Acceptance Date: 26<sup>th</sup> May, 2024Published Date: 31<sup>st</sup> May, 2024

## ABSTRACT

Consumer behavior is shaped by several psychological processes including anxiety, satisfaction and perception of risks involved in service utilization. Advancements in technology have significantly affected the consumer decisions. Financial security has always been one of the main concerns of many individuals which is also linked with their quality of life and emotional wellbeing. **Objective:** To identify the personal and social factors correlated with e-banking adoption, perceived risks linked to e-banking and psychological satisfaction related to e-banking adoption. **Methods:** A descriptive cross sectional study comprising 440 adults belonging to different areas of Pakistan were included in the study. The data were collected through a detailed demographic form and questionnaire specifically designed for this study between February 2023 and April 2023. Data were processed and analyzed using standard statistical software. **Results:** Age, education, gender turned out to be significant personal correlates of adoption of nonconventional modes. Income and residential setup were identified as significant social correlates of nonconventional mode adoption. Issues related to trust, ease of use, safety and usefulness were the main factors perceived as risks. Men and women showed different levels of psychological satisfaction attached with adoption of nonconventional modes of transaction. **Conclusions:** Several personal and social factors are pivotal to adoption of nonconventional modes of financial transactions and lead to different pattern of perceived risks and satisfaction.

## INTRODUCTION

Anxiety, high perception of various risks and lower levels of psychological satisfaction are considered detrimental to one's wellbeing [1]. Wellbeing gets influenced by a wide range of factors including the consumer decision making as it results in consequences contributing directly to stress. Consumer satisfaction is a focus of research for many years as it is considered a key factor leading to competitive advantage and also contributes to stress among many. There are four dimensions of consumer satisfaction namely quality, performance, disconfirmation and expectation [2]. Another factor which influences the consumer decision making process is the perception of risks involved in behavior adoption, risk perception among consumers is mediated by developmental level of the country, service channels and geographical region [3].

Financial security is one of the main concerns of many which is associated directly with psychological wellbeing of not only an individual but of the family in specific and society in general. The financial decisions of the consumers are affected by not only the temperament of an individual but also from service provision and technological advances. Past few decades are marked with high dependence on technology leaving significant impact on our lives. The rapid expansion of technology has altered lives and has led to notable changes in lifestyle, physical and emotional health of people around the globe. The use of technology has become essential for meeting the needs of highly demanding consumers, making traditional modes of managing consumer services inefficient. A relevant example is of E-banking services that have emerged as the

fastest growing trend as it provides customers with an electronic platform to make banking transactions, such as bill payments and fund transfers, and is beneficial for both consumers and banks [4, 5]. E-banking has gained widespread acceptance globally, and Pakistan is no exception with a high ratio of technology acceptance to achieve cost advantages. This has been done to provide consumers to enhance the consumer satisfaction banks have created complex web-based solutions for their retail customers, which has improved customer service and retention while simultaneously lowering bank operating costs [6]. The adoption of e-banking as a nonconventional mode of financial transaction is found to be associated with several psychological risks and barriers [7]. The literature indicated the amount of information available, trust on the service provider, ease of use, past relationship with the service provider, privacy and security and usefulness as significant psychological factors influencing adoption of e-banking [8]. Perceived risk has been the point of interest in academic research for very long, it is perception that individuals actively have when they fail to understand the product details [1]. Zhang 2020 E-banking contributed significantly in enhancing the satisfaction among consumers as the service is generally perceived as cost effective, efficient, secure and convenient to handle even heavy transactions which otherwise get hard to manage and even insecure [9, 10]. By examining the relationship between anxiety, risk perception, psychological satisfaction and consumer acceptance of e-banking, the study intends to gain insights into the extent to which consumers in Pakistan perceive e-banking as a useful tool in improving their satisfaction associated with overall banking experience [11]. Identifying perceived risks can be helpful in addressing the insecurities of the consumers [12]. Understanding these key areas can contribute to the development of strategies to enhance the perceived satisfaction specific to use of e-banking services and promote their acceptance among consumers across the country [13].

Present study therefore, aimed to identify the key psychological correlates pertinent to acceptance of e-banking and also to assess the nature of association of perceived risks and level of psychological satisfaction with e-banking adoption.

## METHODS

Present study used descriptive cross sectional survey design to study 440 adult consumers using e-banking services and recruited using purposive sampling technique. The sample size was determined using g-power analysis with medium effect size and only those participants were selected who were at least 18 years of age, have at least one active bank account and using one of

the online transactional mode. Sample belonged to different cities of Pakistan approached through different social networking sites. A detailed self-administered questionnaire was designed specifically to collect data for this. The questionnaire had three sections including questions related to detailed personal information and questions about various dimensions of online banking services utilization and satisfaction related to these services. The acceptance of e-banking use was specifically recorded through 7 questions recording frequency, latency, purpose of use and other related dimensions. The questions in section two assessed various aspects of e-banking experience such as ease of use, security concerns, convenience, perceived benefits, and barriers to adoption of e-banking. The third section consisted of questions taken from literature to assess perceived risk and questions from anxiety subscale of DASS-21 [14]. The perceived risk questions were based on the structured questions taken from questionnaire employed in several previous studies, these questions aimed to assess 4 key dimensions of risk namely performance risk, financial risk, time risk and privacy risk. Scoring proposed by the original author was used to calculate the risk perception score and higher score indicated stronger perception of psychological risk. Psychological satisfaction was measured through 5 questions which recorded responses on 5 point Likert scale. The questions were carefully designed to gain information regarding research objectives. The questionnaire was in English language and noted have reliability ranging from 0.81 to 0.92. The procedure of the present study was reviewed and approved by the concerned ethical and research review committee of school of management FCCU, Lahore through letter number ERC-SOM-020-022 dated 23 November, 2022. A pilot study was conducted before the actual study to identify potential issues related to the presentation, comprehension, and clarity of the questions. Overall, the questionnaire was well-received by the respondents, who reported the content as easy to comprehend. Carefully structured questionnaire was then converted into an online survey; a link was generated and shared with around 800 adults through email and popular social media platforms. Only 440 individuals completed the questionnaire in the span of almost three months between February and April 2023. Data were analyzed using Statistical Package for Social Sciences (SPSS version 25.0) and employed a combination of descriptive and inferential statistical procedures.

## RESULTS

Table 1 presents demographic information of the study participants. The participants included both men (49%) and women (51%). The mean age of the sample was 31 (SD=10.03) years and most of the participants (41.6%) falling between 26 and 35 years of age. Educational level of majority (54%) of the participants was graduation, 3% had received education till intermediate, 39% till masters and 3% and 0.5% had doctorate and post doctorate degrees respectively. Women outnumbered men, whereas, age of the sample was from 18 to 76 years. The average monthly income was 23015 rupees with minimum income of 20000 and maximum income being 9000000 rupees. Majority of the participants were single (50%) and had education till graduation.

**Table 1:** Descriptive of Characteristics of Respondents (N=440)

| Variables             | N (%)     |
|-----------------------|-----------|
| <b>Gender</b>         |           |
| Men                   | 215 (49%) |
| Women                 | 224 (51%) |
| <b>Age</b>            |           |
| 18-25 Years           | 139 (32%) |
| 26-35 Years           | 183 (41%) |
| 36-45 Years           | 75 (17%)  |
| 46-55 Years           | 30 (7%)   |
| >55 Years             | 13 (3%)   |
| <b>Education</b>      |           |
| Intermediate          | 13 (3%)   |
| Bachelors             | 239 (54%) |
| Masters               | 172 (39%) |
| PhD                   | 14 (3%)   |
| Post Doc              | 2 (0.5%)  |
| <b>Marital Status</b> |           |
| Single                | 222 (50%) |
| Married               | 210 (48%) |
| Divorced              | 5 (1%)    |
| Widowed               | 3 (0.7%)  |

Majority of consumers used e-banking sources for multiple reasons. However, majority of single reason users used e-banking services for transferring funds. The average rate of using e-banking services was 3 times a week (Table 2).

**Table 2:** Reasons Attributed to E-Banking Adoption (N=440)

| Reasons Of Use           | N (%)     |
|--------------------------|-----------|
| Checking Account Balance | 35 (8%)   |
| Transferring Funds       | 109 (25%) |
| Paying Utility Bills     | 49 (11%)  |
| Shopping                 | 27 (6%)   |
| All of these             | 220 (50%) |

In general, majority of the sample was satisfied with the quality of e-banking services. Interestingly, more female consumers were satisfied with e-banking services,

whereas, male participants comprised majority of dissatisfied consumers. Psychological dissatisfaction was noted to be related with low use of e-banking, whereas, high psychological satisfaction was observed to be linked with higher use of e-banking (Table 3).

**Table 3:** Psychological Satisfaction Associated with E-Banking Services

| Variables            | Total Sample (n=440) | Men (n=178) | Women (n=262) | Use of E-Banking |
|----------------------|----------------------|-------------|---------------|------------------|
|                      | N (%)                | N (%)       | N (%)         | Correlation      |
| Not at all Satisfied | 58 (13%)             | 40 (23%)    | 18 (7%)       | -0.38**          |
| Somewhat satisfied   | 200 (46%)            | 80 (44%)    | 120 (46%)     | 0.07             |
| Satisfied            | 119 (27%)            | 39 (22%)    | 80 (30%)      | 0.40**           |
| Very much Satisfied  | 63 (14%)             | 19 (11%)    | 44 (17%)      | 0.22**           |

From the results it is evident that high anxiety score was related to low frequency of e-banking use. Similarly all types of risk scores were found to be related with significantly low use of e-banking services (Table 4).

**Table 4:** Association of Anxiety and Perceived Risk with Use of E-Banking

| Variables        | E-banking Use | Mean ± SD |
|------------------|---------------|-----------|
| Anxiety          | -.51**        | 6 ± 4.04  |
| Financial risk   | -.47**        | 11 ± 3.01 |
| Performance risk | -.20**        | 15 ± 9.29 |
| Time risk        | -.19**        | 8 ± 5.60  |
| Privacy risk     | -.22**        | 9 ± 4.72  |

\*\*p<0.001

The mean anxiety score of participants in current sample falls in clinically normal range which is typical for nonclinical populations. From the results it is evident that high anxiety score was related to low frequency of e-banking use. Similarly all types of risk scores were found to be related with significantly low use of e-banking services.

**Table 5:** Correlation of Usage of E-Banking with other Study Variables (N=440)

| Variables | PRT     | PEOU    | PU      | Safety  | Access | Usage | Mean ± SD    |
|-----------|---------|---------|---------|---------|--------|-------|--------------|
| PRT       | 1       | -       | -       | -       | -      | -     | 41.50 ± 5.66 |
| PEOU      | 0.646** | 1       | -       | -       | -      | -     | 44.90 ± 5.4  |
| PU        | 0.789** | 0.657** | 1       | -       | -      | -     | 39.86 ± 5.85 |
| Safety    | 0.433** | 0.455** | 0.392** | 1       | -      | -     | 25.14 ± 3.70 |
| Access    | 0.648** | 0.696** | 0.706** | 0.411** | 1      | -     | 39.86 ± 5.85 |
| Usage     | 0.25**  | 0.23**  | 0.31**  | 0.17*   | 0.28** | 1     | 4.9 ± 2.28   |

Note: PRT= Perceived Reliability/Trust; PEOU= Perceived ease of use; PU=Perceived usefulness, Access= Accessibility.

\*p<0.05, \*\*p<0.01

The Findings revealed that utility of e-banking shared significant positive association with all dimensions of e-banking including reliability, ease of use, safety and ease of use. The strongest association was observed between perceived usefulness and e-banking adoption. When adoption of e-banking was related with access it revealed significant positive association (Table 5).

## DISCUSSION

The use of technology has significantly changed the face of conventional lifestyle; one of the pronounced changes is the introduction of electronic service utilization including e-banking service which undoubtedly has transformed the consumer experience. The consumer's adoption of specific services is effected by a number of behavioral intentions including perceived risk involved in adoption, psychological satisfaction, perceived ease of use, reliability, usefulness, safety [9, 15, 10, 16]. Present study identified anxiety as a common expression of psychological discomfort which is generally linked with behavioral intentions related to adoption of new behaviors including e-banking, these intentions are affected by both environmental and personal factors [11]. High levels of anxiety may become instrumental to develop uncertainty which usually results in behavioral decline this is also evident in findings of the present study that revealed low frequency of e-banking use in participants with higher anxiety levels [17]. This is aligned to studies reporting that negative emotional states may result in poor behavioral intentions to adopt e-banking [18]. Anxiety can easily heightened the perception of risk by making an individual feel more vulnerable to make safe financial decisions and consumers prefer modes of financial management that are secure and involve less risk [6, 16]. Present study also considered the perceived risks significantly associated with adoption of e-banking services as this has been described in several studies as significant correlate and predictor of e-banking adoptions [19]. When it comes to adoption of new behaviors and options, psychologically the decision depends on risk benefit ratio involved in the adoption of novel practices. Our participants considered financial risks or insecurity most significant and it was associated with lower frequency of e service use. This is understandable in the economic context of the country which is struggling with poor economic growth adversely affecting the lifestyle of majority. Threats to privacy and security of the personal and account information was another main concern which surfaced as a psychological barrier and weakening the behavioral intentions to e-banking adoption. These perceived risks are conceptually linked with trust that the consumer may develop on services and service providers. Trust acts as a catalyst, mitigating concerns related to potential risks and uncertainties associated with financial transactions carried out through conventional and non-conventional banking services. In case of novel situations that involve strong perceived risks, both anxiety and dissatisfaction are likely to be high resulting in psychological distress which makes the new options threatening and works as significant barrier in adoption to these practices [19, 20, 21, 22]. Present findings provided robust evidence that individuals who perceived e-banking services more helpful

or easy to use were more inclined to utilize e-banking services, this was supported by previous studies reporting similar pattern of findings [23, 17]. Aligned to previous studies a strong positive association between perceived reliability and e-banking acceptance was observed in our study as use of e-banking was higher in participants who trusted the services and perceived them as reliable modes of financial transactions. Individuals usually consider a service platform use worthy when it fulfills their needs adequately and timely which is evident through the use of e-banking services as it has made the service provision available around the clock and without any significant delay as is mentioned in other studies [24]. Consumers can assert good control over options according to their individual needs and achieve their goals without a hurdle or delay. Usefulness and ease of use are not the only factors encouraging adoption of e-banking services. For many consumers safety of the operations carried out using these platforms is more pertinent according to many researchers conducted in Pakistan and other countries. As trust plays a fundamental role in the adoption and acceptance of e-banking services. This is observed in present study that when consumers have confidence in the security measures, privacy protection, and overall integrity of the e-banking system, they are more likely to embrace it as a viable option for their financial needs, these observations are supported by findings reported in other studies previously [23]. E-banking platforms allow consumers more freedom to manage and assert more control over their finances, which has made financial operations far more accessible and convenient contributing to consumer satisfaction [25]. If the e-banking interface is perceived as secure, user friendly and effectively meets the needs of the consumers, it inculcates satisfaction among consumers [26, 27]. This is evident in findings of the present study as the consumers who were not satisfied with the quality and performance of e-banking services had lower frequency of using these services compared to those who showed significantly higher satisfaction. This might be because of the fact that high satisfaction enhances engagement in behaviors and eliminates perceived barriers as is explained in Technology acceptance model [28].

## CONCLUSIONS

Present study points that high anxiety; high perception of risk is linked with lower frequency of E-banking use, whereas high psychological satisfaction was associated with better adoption of e-banking services in Pakistan.

## Authors Contribution

Conceptualization: RS, AN

Methodology: UC, RS

Formal analysis: SSN, RS, AN

Writing, review and editing: AN, UC

All authors have read and agreed to the published version of the manuscript.

### Conflicts of Interest

The authors declare no conflict of interest.

### Source of Funding

The author received no financial support for the research, authorship and/or publication of this article.

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