Mobile Phone Buying Decisions Among Young Adults: An Empirical Study of Influencing Factors

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Abstract

Background: The mobile phone shopping behavior of adults has been extensively studied in the past. However, given the novelty and dynamism of this domain and the multitude of new contributing factors coming into play, such studies soon become obsolete. Consequently, this phenomenon needs to be studied frequently within the context of contemporary social, technological, and market norms. In the same league, there is a pressing need to empirically examine the mobile shopping behavior of young adults in Pakistan. In this context, the last known such study was published in 2008. This paper provides a study of factors influencing mobile phone shopping behavior within the context of young adults in Pakistan.

Methods: A questionnaire-based survey consisting of a five-point Likert scale was conducted. The survey was disseminated via social media, and participation was voluntary. Over a period of two weeks, 416 respondents completed the survey to report mobile shopping behavior. We employed Confirmatory Factor Analysis (CFA) within the Structured Equation Modeling (SEM) model using AMOS 24. We chose CFA over Ordinary Least Squares (OLS) because the application of OLS is limited by compliance to simplifying assumptions. In contrast, SEM-CFA is a more robust method that also addresses the issue of multicollinearity, a common problem in survey data.

Findings: The empirical results suggest that the Service Encounter and Convenience have coefficients of 0.049 [P=0.265] and 0.02 [P=0.682] only, suggesting a statistically insignificant influence of the two factors on the mobile phone buying behavior. Similarly, Avoidance of Core Service Failure and Response only has a coefficient -0.05 [P=0.401], suggesting a feeble and statistically insignificant negative effect on the mobile phone buying behavior in Pakistan. However, Price and Attractiveness have been found to have coefficients of 0.436 [P=0.00] and 0.155 [P=0.00], indicating that these two key factors are having a positive and significant influence on the mobile phone buying behavior in young adults in Pakistan.

Contribution: The finding reveals mobile shopping behavior of young Pakistani adults might not be influenced by either Service Encounter or Convenience. Instead, the Price and Attractiveness of the mobile phone seem to affect the adults towards buying the mobile phone.

Recommendations: The price of the mobile phones needs to follow the target market, and the product category should also be identified according to the characteristics of the target market. In addition, the attractiveness of the mobile phone needs to be maintained even if the prices are lower, as this should positively influence the buyers. Further research is suggested to include cultural and social factors in this context.

Keywords: Commerce, mobile commerce, shopping behaviors, service encounter.

1. Introduction

In contemporary literature, technology has been termed as the most dynamic and rapidly evolving domain. One of the tremendous improvements relating to communication technology is the development of mobile phones, which are evidence of the rapid change in technological advancements [1]. Remarkable developments in mobile technology and applications have encouraged people to use them in their day-to-day life [2,3]. In recent years, the mobile phone has evolved from essentially an interpersonal communication device to a multimedia machine [4]. The technology of mobile phones has penetrated every aspect of daily life. Mobile e-commerce is considered an alternative approach for comparison and buying products and services anywhere anytime. Mobile phones are used for multi-purposes such as calling and sending messages, capturing pictures, accessing the internet, playing games, socializing, and downloading applications.

In recent years the number of mobile phone subscribers has increased substantially. By the end of 2019, 5.2 billion people subscribed to mobile services, accounting for 67% of the global population [5]. Globally, the total number of mobile subscribers (those subscribing to a cellular service) is going to grow from 5.1 billion in 2018 to 5.7 billion by 2023 at a CAGR of 2 percent [6]. This rapid growth has changed the future of mobile commerce and reshaped the present dynamics of shopping, evident from Figure 1, which depicts tremendous growth in mobile e-Commerce. Further, we believe that studying underlying trends will be of keen interest to practitioners and researchers [7,8].

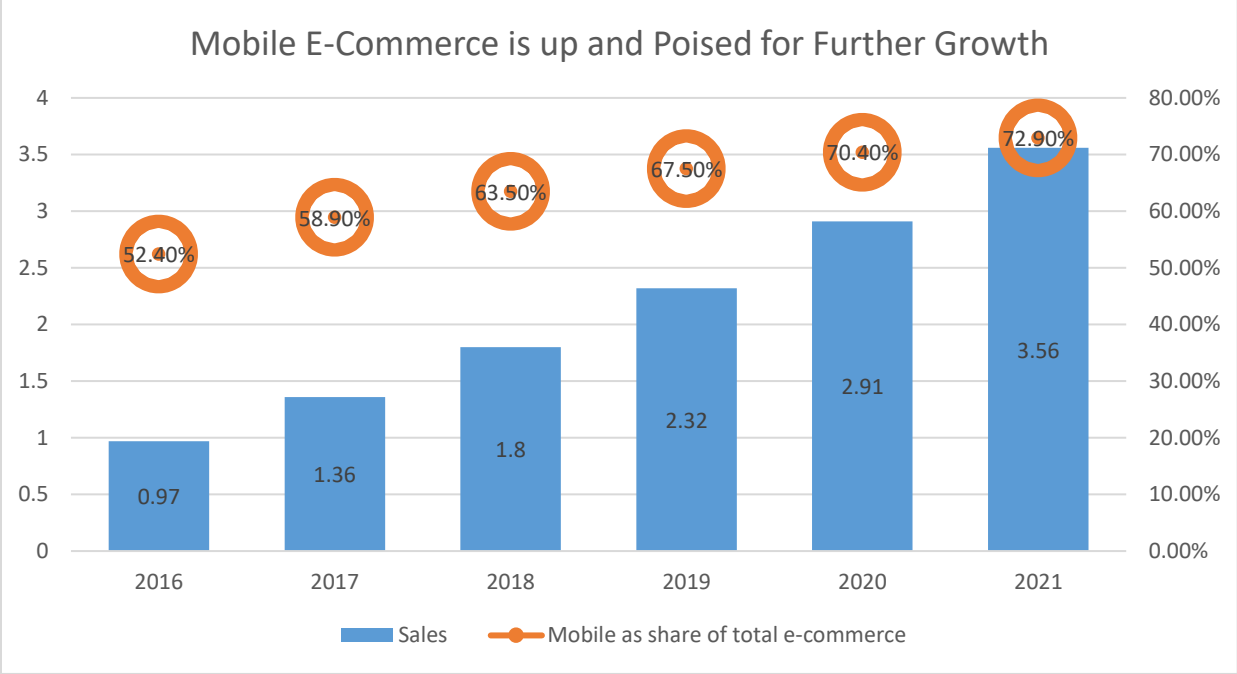


Figure 1: Mobile phone sales worldwide (in billions) and the share of mobile commerce as a % of total eCommerce [9]

Developments in the Asia-Pacific region trigger the growth in the mobile sector. In 2020, the Asia-Pacific region captured the largest share of more than 32.0% and was expected to witness significant growth from 2021 to 2028 [10]. Pakistan is an emerging mobile economy in the Asia-Pacific region that has witnessed unprecedented growth in the mobile sector. In Pakistan, the mobile industry has continued to lead the proliferation of telecommunication services since the deregulation of the telecommunication sector and the first mobile spectrum auction in 2004 [11]. The total number of cellular subscribers reached 170 million by the end of 2020, and mobile teledensity reached 81 percent by October 2020 [11]. In addition, the demand for the mobile phone has been double-fold in Pakistan due to the changing demographics. The majority of the population is young with rising awareness and usefulness of mobile phones, and increasing disposable income for households and young individuals. However, compared to the expansion of mobile phones in Pakistan, there has been 30 million fixed and mobile telephones line. As the population of the country is more than 162.4 million, the country had 5.37 million fixed telephone lines. The subscription of mobile have surged over 19.6 million which makes the sector of telecom stronger than ever. It is also regarded as the rapidly expanding sector in the world. It is due to the restrictions that have been lifted in 1994 as well as a third operator over GSM has got the license in 1995 [12]. It mainly leads to the rapid increase in the subscriber's counts as well as figures that have started to return to original targets. However, it is observed that from the previous six years' data, the telecom sector has witnessed

extraordinary growth, which in turn has influenced mobile phone purchasing as it has become an indispensable part of our daily lives [13].

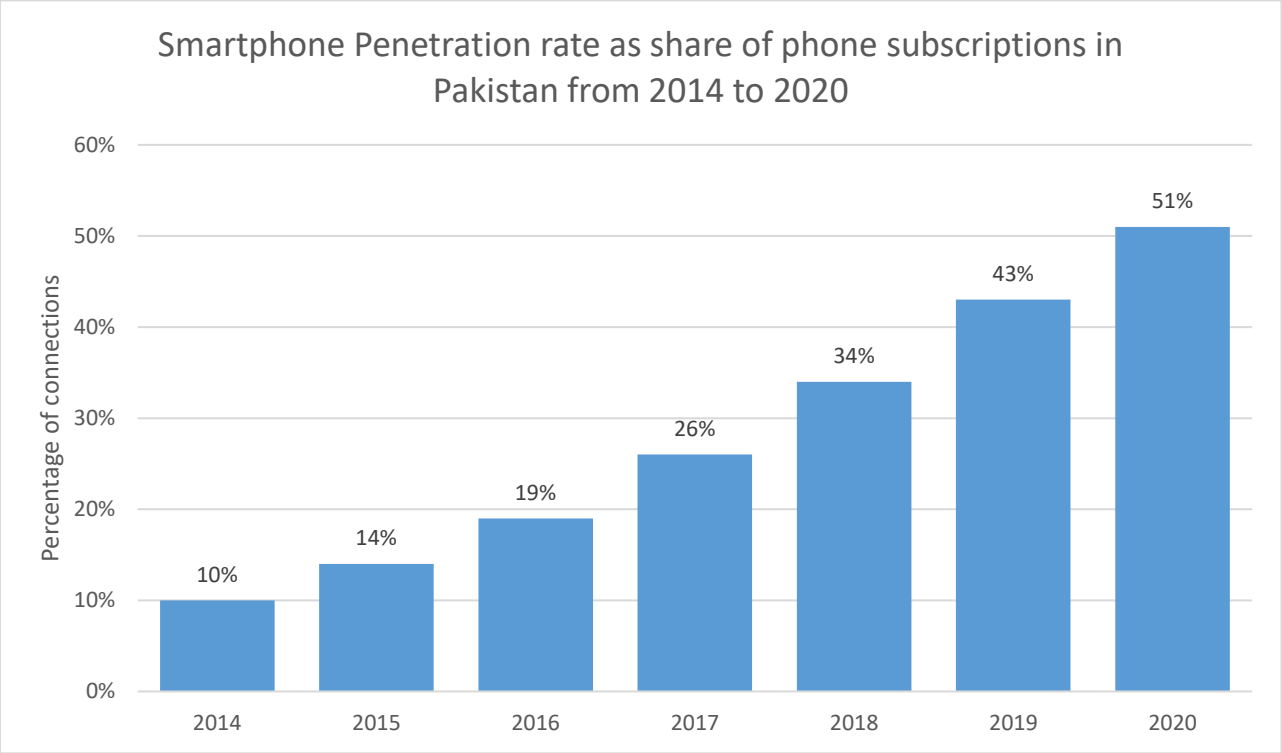


Figure 2: Penetration rate of mobile phones in Pakistan [9]

To conduct activities online and access the internet, mobile phones have quickly become the forerunner. In Pakistan, the usage of smartphones has witnessed an increasing trend for several years, as depicted in Figure 2, and is expected to grow further in the foreseeable future. With the increase in the use of smartphones, there is an opportunity for companies to target other potential firms through online channels. Moreover, the adoption and usage rate of smartphones among young consumers is high compared to older people who are less interested in technology due to challenges associated with learning and using this technology [14]. It is mainly due to the complexities involved in the user interfaces and smartphones on which they are not aware. Conceivably, the use of smartphones is observed more among young customers as compared to old customers [15]. In this regard, young consumers prefer to make online purchases, which is mainly due to the lack of availability of time. However, it is regarded as an inverse case for the old consumers that prefer to go for offline purchases by visiting the store. There is also no consensus in the literature regarding the significance of factors impacting the choice of mobile phones. [16] reported that price and brand are the most influential factors affecting the actual choice between mobile phone brands. In a study of Pakistani consumers, [17] reported that price does affect consumers' preference for a mobile phone. [18] also found conflicting findings in terms of the impact of price on purchase decision of mobile phone. It indicates a gap in the contemporary literature that lacks to explain the consumer behavior with respect to mobile phones among young adults in Pakistan. The current study focuses on exploring

mobile shopping behaviors among young adults. This chunk of customers is recognized as prospective mobile phone purchasers worldwide [19,20]. Marketers consider this cohort of young adults quite attractive for building a pool of brand-loyal customers and seeking revenues on a long-term basis.

The remaining part of this research study is organized as follows. The following section provides a review of the pertinent literature related to the study. In the third section, we have discussed the research methodology employed. Results from data analysis are furnished in the subsequent section. Finally, we concluded the paper followed by recommendations, limitations, and future research directions.

2. Literature Review

In terms of competition, mobile phone markets are considered to be uncertain. The main factors affecting purchase for new mobile phones include brand, price, characteristics of the products, etc. Additionally, these factors also influence customer purchase intention [9,12]. Previous studies related to information systems have made us understand the way individuals adapt to new technologies [8, 21, 22, 23]. A literature review on technology acceptance and mobile shopping suggest that a number of theories based on information systems and technology adoption, which are extended with other variables, are used to examine the adoption of mobile devices and their use in the purchase of products and services. The technology cceptance model (TAM) proposed by [24] is a widely used model for evaluating consumer acceptance of new technology. The TAM uses variables like perceived ease of use and perceived usefulness to predict behavior intention [6, 8]. Several researchers have extended the TAM model by adding more constructs such as self-efficacy, external control, anxiety, playfulness, enjoyment, and usability [25, 26, 27]. [28] empirically compared eight models in the information technology acceptance research and proposed a unified model that integrates elements across the eight models, known as a unified theory of acceptance and use of technology (UTAUT). The UTAUT model includes four key constructs performance expectancy, effort expectancy, social influence, and facilitating conditions. [29] extended the UTAUT model in the consumer context and proposed UTAUT2 by incorporating three constructs into UTAUT, which are hedonic motivation, price value, and habit.

In terms of competition, mobile phone markets are considered to be uncertain. The harsh market conditions and the rapid pace of technology in the mobile phone industry force companies to better understand their consumers to offer unique and competitive products with desired attributes [30]. Several empirical studies have been conducted to study the mobile shopping behavior of consumers. The main factors affecting purchase for new mobile phones include brand, price, characteristics of the products, etc. Additionally, these factors also influence customer purchase intention [8,12]. In the present study, we adapted constructs from the field of

technology acceptance and mobile marketing to understand factors affecting the mobile phone shopping behavior of young adults.

2.1 Price

The mobile phone price has been identified as a key factor in the choice of mobile phones, especially among young consumers [16]. The intense competition in the mobile phone market has led to a sharp fall in prices, which has further enhanced mobile phone usage [31]. [32] examined switching costs in the mobile phone market and reported that price was an important factor influencing consumer's decision to change their mobile phone. Therefore, mobile companies should consider price as an important determinant for retaining customers [12]. Appropriate pricing strategies are required to be employed for offering numerous diverse services to the customers. But, this is a costly affair. So companies should enforce retention strategies vigilantly [14]. The existence of multinational companies offering international brands in the mobile phone market in Pakistan is phenomenal, and it has made the market highly competitive. Moreover, Pakistan being a developing country, price determines consumer purchase decisions to a large extent [23]. Pakistan has observed diversity in terms of population, needs, demands, affordability, and perception of quality. Hence, it would be fascinating to investigate the relationship between price and mobile shopping behavior empirically. Thus, the following hypothesis has been proposed:

H_1: There exists a significant effect of price on mobile phone buying behavior among young adults.

2.3 Convenience

Convenience has also been considered another factor affecting the customers' buying behavior in the mobile phone shopping industry [13]. Inconvenience forced 21% of the customers to switch their mobile phone brands. These inconveniences are related to infrastructure, mark-up pricing for maintenance, or distant location of the service center. Therefore, location-based services need to be provided to retain the customer base. It, in turn, surely helpes the companies in gaining competitive advantage and in succeeding. Perceived ease of use and convenience indeed change the attitude of the consumers. It has also been investigated by the [23], and the author found it a critical factor, but no latest study could guide this factor. Hence it is proposed to empirically investigate how convenience plays a role in influencing mobile phone shopping behavior, and the following hypothesis is constructed:

H_2: There is a significant effect of convenience on the mobile phone buying behavior of young adults.

2.4 Avoidance of Core Service Failure and Response

Core service failure is the most common reason, wich forces customers to switch mobile phone services [33]. According to [34], core service failure includes all critical incidents due to mistakes or other technical

problems with the service. This core service failure factor alone or sometimes in combination with other factors often results in increasing the dropout rate of customers [35]. The failure to deliver core service is not only break-down in providing apt service but also damages customers' possessions [34]. Hence, quality products augmented with flawless core service delivery must be delivered to customers to prevent customer switching behavior. To build, maintain and retain a loyal customer base, companies need to provide value-added features in mobile phones and an inbuilt quick response and feedback system [13]. Core service failure was found as a critical factor, but no latest study could guide this factor. Hence, it is proposed to empirically investigate how convenience plays a role in influencing mobile phone shopping behavior. Hence, the following hypothesis is constructed:

H_3: There is a significant effect of avoidance of core service failure and response on mobile phone buying behavior among young adults.

2.5 Service Encounter

Service Encounter failures have also been identified as one of the factors that induce customer's mobile phone switching behavior [34]. Service encounter has been defined as any interaction between customers and employees of the service provider in relevance to core service offering [36,37]. It was found that 34% of the customers switch mobile phone services owing to service encounter failure [34]. Furthermore, customers often look for convenience and accessibility features while exhibiting mobile shopping behavior [38]. The customer's switching behavior might be enhanced if the company fails to address the customer's complaints. Service employees estranged behavior and attitudes, which are often responsible for service encounter failures. These failures often affect customer's mindsets [9,34]. Hence, failure to provide convenience and accessibility furthermore aggravate service encounter failures [60-70]. The impact of service encounters on mobile phone shopping behavior in the context of a developing economy like Pakistan has not been explored yet. Therefore, the following hypothesis has been proposed:

H_4: There is a significant effect of service encounters on mobile phone shopping behavior among young adults.

2.6 Attraction by Competitors

The mobile phone industry in Pakistan has been flooded with multinational corporations (MNCs), and customers have full knowledge about the prevalence of stiff competition among MNCs. Many companies provide better-differentiated services to their customer base, which is indeed difficult for the competitors to meet, thus keeping only a few brands in the market [14]. While exploring the factors influencing the consumer buying behavior towards a mobile phone buying decision, innovativeness, usefulness, price, enjoyment, attractiveness, and skilfulness were found as the key drivers responsible for this switching behavior among young adults [39, 70-77]. Competitors may provide value-added services along with more benefits pushes customers to switch from their existing service providers [40]. However, the mobile phone companies are expanding as well as growing in the

technology. Therefore, in order to empirically investigate the role of attraction by competitors in the case of Pakistani consumers, the following hypothesis has been proposed:

H_5: There is a significant effect of attraction by competitors on the mobile phone shopping behavior of young adults.

3. Research Instrument

The research instrument considered in this study is a survey questionnaire developed after following recommendations of measures designed by [41]. An extensive literature survey was carried out to generate a large pool of items for measurement. A questionnaire was developed in which each item was measured on a 5-point Likert Scale ranging from "very strongly agree" to "very strongly disagree". A panel of three marketing professors reviewed the questionnaire to evaluate the items for content validity. The items which they suggested were redundant, double-barrelled, and ambiguous were removed. A pre-testing was conducted to test the reliability and validity of the instrument. The results revealed that the instrument is valid and reliable. The selected items are shown in Annexure – I.

4. Data Collection and Sampling Technique

Respondents selected for the study were screened with a criterion of having purchased a mobile phone in six months. The study sample is consisted of young adults of Pakistan. Data was collected using a self-administered questionnaire. Respondents were selected using purposive sampling. In consideration of the sample size, the formula from the study of [42] has been used due to the fact that the population is unknown. The sample size for the study was calculated using [42] and taking 95% confidence interval with ±% precision. According to [42] ormula, the required sample size with this confidence interval and precision will be 385. So, approximately 430 respondents were approached through Google forms and online platforms. Of the 439 completed questionnaires, 416 were usable, resulting in a response rate of 96.74%.

4.1 Data Analysis Techniques

Data analysis was carried out in three stages. In the first stage, an exploratory factor analysis (EFA) was performed using the principal component analysis with Varimax Rotation. In the second stage, confirmatory factor analysis (CFA) using AMOS 24.0 was carried out to establish the reliability and validity of the measurement model. In the third, Structural Equation Modeling (SEM) using AMOS 24.0 was used to test the structural model.

4.2 Data Pre-processing

In the initial stage, the missing values were determined and removed through the nearby points. In addition, the outliers were detected using the univariate technique. In this manner, four outliers were removed based on the z-score value of +/- 3. On the other hand, the multivariate variables were also tested for outliers through Mahalanobis distance. Based on the results, it has been determined that no outliers are detected. Therefore, the data has been considered for further analysis.

4.3 Assessment of Normality

Normality is one of the core assumptions of statistical analysis, which states that the distribution of sample means is normal. A normal distribution of sample means refers to the data that roughly fits in a bell-curve shape. It is a prerequisite of various statistical tests that data should be the approximately normal distribution. If this assumption is violated, then the results of the study may also be misleading and inapplicable to real-world problems [43]. In addition, one of the core assumptions of AMOS (statistical package) also assumes that data is normal. Then, the best results are produced. Similarly, SEM and confirmatory factor analysis (CFA) have been used. Hence the multivariate normality has been assessed [44]. In the general case, the value of kurtosis and skewness falling within the range of -2 to +2 indicates that data is approximately normally distributed. However, in the case of multivariate normality, the multivariate value for kurtosis should be less than 5 in order to assume that data is approximately normally distributed [45]. Table 1 demonstrates the results of normality, and the multivariate kurtosis is less than 5 thresholds for each of the factors. Hence, there is sufficient evidence to claim that data is approximately normally distributed. It also suggests that results generated through AMOS are best-produced results since the core assumption of AMOS is also met.

Table 1: Assessment of Normality

Variable	Min	Max	Skew	CR	Kurtosis	CR
MSB4	3	5	-0.171	-1.095	-0.811	-2.597
MSB1	3	5	-0.247	-1.579	-0.732	-2.344
MSB2	3	5	-0.198	-1.269	-0.575	-1.841
MSB3	3	5	-0.119	-0.764	-0.537	-1.718
CON4	1	5	-0.019	-0.121	-0.312	-0.999
CON1	1	5	-0.198	-1.27	0.011	0.035
CON2	1	5	-0.314	-2.008	-0.246	-0.787

CON3	1	5	-0.147	-0.941	-0.057	-0.182
AC4	1	5	-0.064	-0.408	-0.851	-2.725
AC1	1	5	0.204	1.304	-0.527	-1.689
AC2	1	5	-0.158	-1.01	-0.848	-2.714
AC3	1	5	0.223	1.425	-0.683	-2.188
ASFR4	1	5	0.197	1.263	-0.171	-0.546
ASFR1	1	5	0.145	0.926	-0.643	-2.059
ASFR2	1	5	-0.022	-0.142	-0.193	-0.617
ASFR3	1	5	0.387	2.478	0	0.001
SE4	1	5	-0.348	-2.228	-0.66	-2.113
PRC1	2	5	-0.297	-1.9	-0.988	-3.164
PRC2	2	5	-0.305	-1.95	-0.762	-2.441
PRC3	2	5	-0.378	-2.421	-0.602	-1.927
SE1	1	5	-0.064	-0.408	-0.78	-2.496
SE2	1	5	-0.493	-3.159	-0.346	-1.108
SE3	1	5	-0.178	-1.141	-0.636	-2.035
Multivariate					35.492	8.208

4.4 Exploratory Factor Analysis (EFA)

Exploratory factor analysis was conducted on the 23 statements to identify the number of factors. We used principal component factor analysis (PCA) followed by Varimax Rotation with Kaiser Normalization. The results of EFA are depicted in Table 2. The Kaiser-Meyer-Olkin Measure of Sampling Adequacy Value was 0.737, which is above the cut-off value of 0.50 as suggested by literature [90-95]. It is indicating that data is suitable for factor detection. Bartlett's Test of Sphericity was tested through Chi-Square value 3139.765, indicating that the data has low sphericity. Therefore, it is suitable for factor analysis. Six components with eigenvalues greater than one are extracted from the data. Thus, the 23 items can be grouped into 6 different categories of factors, and each of the categories would measure a different construct together, enhancing the explanatory power of the model.

Table2: EFA Results

Item	**Factor Name**	**Component**					
		1	**2**	**3**	**4**	**5**	**6**
SE1	*Service Encounter*		0.842				
SE2			0.845				
SE3			0.847				
SE4			0.836				
ASFR1	*Avoidance of Core Service Failure and Response*					0.775	
ASFR2						0.72	
ASFR3						0.868	

ASFR4						0.821	
AC1	*Attraction by Competitors*			0.867			
AC2				0.804			
AC3				0.82			
AC4				0.81			
PRC1	*Price*						0.861
PRC2							0.883
PRC3							0.859
CON1	*Convenience*				0.853		
CON2					0.696		
CON3					0.876		
CON4					0.835		
MSB1	*Mobile Phone Shopping Behavior*	0.9					
MSB2		0.894					
MSB3		0.881					
MSB4		0.813					
	KMO Statistic = 0.737 Bartlett's Test of Sphericity						

4.5 Confirmatory Factor Analysis (EFA)

Confirmatory Factor Analysis (CFA) was employed to assess the latent factor structure. The measurement model yields are fit to data: CMIN/df = 1.526, GFI = 0.903, AGFI = 0.874, CFI = 0.962 and RMSEA = 0.046 respectively. Table 2 depicts the model fitness criterion. All five model fitness indices meet the criteria of standard model measurements. Hence, it can be stated that the measurement model fits well with the data.

Table 3: Model Fit Indices of the Measurement Model

Index of Fit	CMIN/df	GFI	AGFI	CFI	RMSEA
Value	1.526	0. 903	0.874	0.962	0.046
Source	[30]	[31]	[31]	[31]	[31]

As presented in Table 3, the values of all factor loadings were above 0.5, and AVE for all constructs was greater than 0.5 as suggested by [48]. In addition, Composite Reliability (CR) was also computed, and all values were found to be above the minimum acceptable level of 0.70 [48]. It can be seen in Table 3, the values of CR and AVE were according to the acceptable parameters, CR > 0.70 and AVE > 0.50, thereby establishing convergent validity [49,50].

Table 4: Standardized factor loadings, Composite Reliability, AVE, MSV AND MaxR(H) of the constructs

Statements	*Standardized factor loadings*	*CR*	*AVE*	*MSV*	*MaxR(H)*
Service Encounter		0.842	0.573	0.04	0.858
SE1	0.697				
SE2	0.845				
SE3	0.676				
SE4	0.796				
Price		0.88	0.71	0.238	0.887
PRC1	0.793				
PRC2	0.849				
PRC3	0.884				
Avoidance of Core Service Failure and Response		0.821	0.536	0.014	0.844
ASFR1	0.71				
ASFR2	0.631				
ASFR3	0.853				
ASFR4	0.718				
Attraction by Competitors		0.838	0.571	0.04	0.912
AC1	0.939				
AC2	0.672				
AC3	0.773				
AC4	0.773				
Convenience		0.842	0.577	0.007	0.869
CON1	0.837				
CON2	0.552				
CON3	0.839				
CON4	0.773				
Mobile Phone Shopping Behavior		0.912	0.721	0.238	0.921
MSB1	0.873				
MSB2	0.908				
MSB3	0.831				
MSB4	0.779				

In order to determine whether there is discriminant validity, the HTMT ratio suggested by [51, 77-85] is used. Table 5 provides the HTMT ratio. To conform to the discriminant validity, the value of HTMT should be less than 0.85 [51]. The estiamted ratio of HTMT for all constructs is less than the said threshold of 0.85, which suggests that all constructs conform to the discriminant validity.

Table 5: Discriminant Validity Analysis

HTMT	**SE**	**PRC**	**ASFR**	**AC**	**CON**
SE					

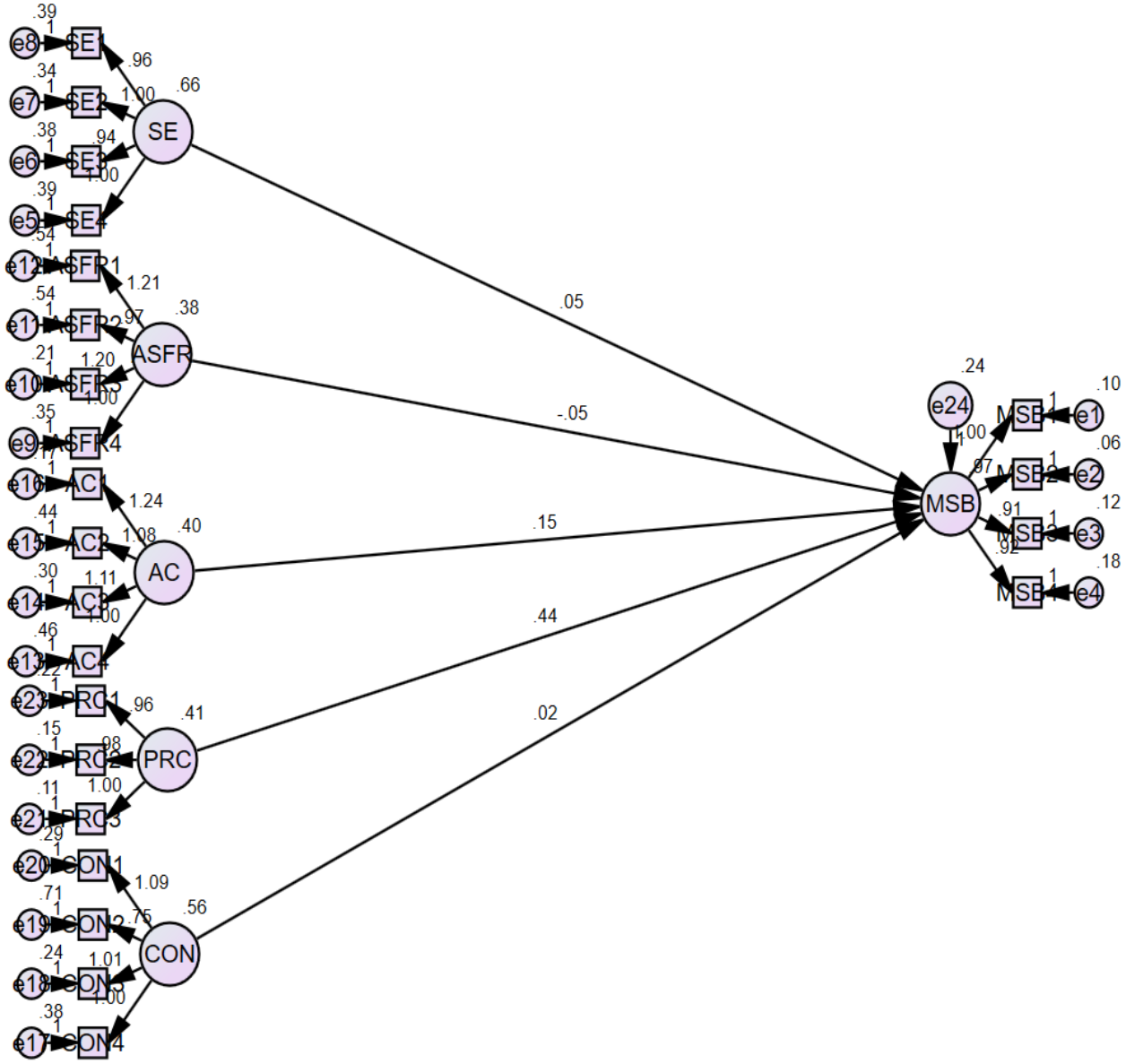
PRC	0.076				
ASFR	0.066	0.053			
AC	0.202	0.047	0.054		
CON	0.017	0.028	0.054	0.125	
MSB	0.004	0.492	0.021	0.174	0.02

4.6 Structural Equation Modelling

We used structural equation modeling using AMOS version 24 to examine the hypothesized relationships (see Figure 3). As seen in Table 6, the results indicated an excellent model fit (CMIN/DF = 1.94, GFI = 0.877, AGFI = 0.849, CFI = 0.928 and RMSEA = 0.061). The values of all the fit indices were within the recommended range.

Table 6: Model Fit Indices of the Structural Model

Index of Fit	CMIN/df	GFI	AGFI	CFI	RMSEA
Value	1.94	0.877	0.849	0.928	0.061
Source	[30]	[31]	[31]	[31]	[31]



The results of the structural model analysis are shown in Table 7. As seen in Table 7, the price had a significant positive impact on the mobile phone shopping behavior of young adults (H1: $\beta = 0.436$, $p < 0.001$). Convenience was found to have an insignificant relationship with the mobile phone shopping behavior of young adults (H2: $\beta = 0.02$, $p > 0.05$). The analysis further revealed that avoidance of core service failure and response is statistically insignificant on the mobile shopping behavior of young adults (H3: $\beta = -0.05$, $p > 0.05$). Service encounters showed an insignificant relationship with mobile phone shopping behavior of young adults (H4: $\beta = 0.049$, $p > 0.05$). Attraction by competitors was also found to have a significant positive impact on the mobile phone shopping behavior of young adults (H5: $\beta = 0.155$, $p < 0.05$). Therefore, H1 and H5 were accepted, while H2, H3, and H4 were rejected.

Table 7: Results of Hypotheses Testing

Proposed Relation		*Standard Estimate*	*p-value*	*Hypotheses Supported*
Price →	Mobile Phone Shopping Behavior	0.436	***	H1 Accepted
Convenience →	Mobile Phone Shopping Behavior	0.02	0.682	H2 Rejected
Avoidance of Core Service Failure and Response →	Mobile Phone Shopping Behavior	-0.05	0.401	H3 Rejected
Service Encounter →	Mobile Phone Shopping Behavior	0.049	0.265	H4 Rejected
Attraction by Competitors →	Mobile Phone Shopping Behavior	0.155	0.008	H5 Accepted

5. Discussion of Findings

The results of the study revealed that there is a significant effect of price on the mobile phone shopping behavior of young adults. The findings of the study are consistent with previous studies, which suggest that price plays a significant role in the mobile phone shopping behavior of young adults [52, 53, 54]. We did not find any significant influence of convenience on the mobile phone shopping behavior of young adults. The findings are consistent with the study of [55], who reported that convenience did not contribute to explaining the mobile phone shopping behavior of university students. Avoidance of core service failure and response was also found to have an insignificant influence on the mobile phone shopping behavior of young adults. This finding is also consistent with the study of students of private universities of Peshawar [56, 86-90]. The author concluded that post-purchase services comprising of guarantee, emergency repair, and software services are the least influential in youth's choice of mobile phone. Attraction by competitors was also found to have a significant influence on the mobile phone shopping behavior of young adults. The findings corroborate the results of existing studies on the switching behavior of consumers in the mobile phone industry [57,58]. It also aligns with the findings of [59, 60, 91-97] that customers mainly switch to other service providers in case the competitors are providing more benefits as compared to the service providers that already exist.

6. Conclusion and Recommendations

With the rapid advancement in technology, mobile phone use has been increased among young consumers. In this context, the present study has examined the factors influencing mobile phone buying decisions and behaviors among young adults in Pakistan. The factors determined in this study include price, convenience, avoidance of core service failure and response, service encounter, and attraction by competitors. The study

employed purposive sampling, and data were collected from young adults in Pakistan. For the data analysis, the EFA has been conducted to reduce the data to a smaller set. Furthermore, CFA was employed to test the reliability and validity of the measurement model. Finally, we used SEM to test the hypothesized relationships.

Moreover, with respect to the results of the study, the service encounter and convenience have coefficients of 0.049 [P=0.265] and 0.02 [P=0.682], suggesting statistically insignificant influences of service encounter and convenience on the mobile phone buying behavior. Similarly, avoidance of core service failure and response has a coefficient of -0.05 [P=0.401]. It suggests that avoidance of core service failure and response has a very weak negative and statistically insignificant influence on the mobile phone buying behavior in Pakistan. However, factors like price and attractiveness have the coefficients 0.436 [P=0.00] and 0.155 [P=0.00], suggesting that price and attractiveness are two key factors having a positive and significant influence over the mobile shopping behavior in young adults in Pakistan. In addition, it has been determined that there is an insignificant effect of convenience, avoidance, and service encounter on the mobile phone shopping behavior of young adults.

From a theoretical point of view, the study contributes to the consumer buying behavior literature by identifying factors influencing the choice of mobile phones. By examining the mobile phone shopping behavior of young adults, the study contributes to the growing demand of studying the buying behavior of youngsters [61, 62]. The study also has important implications for mobile phone companies. Price is found to have a significant influence on the mobile shopping behavior of young adults. Therefore, it is suggested that the companies selling mobile phones targeting young adults should focus more on price. For this purpose, the price of the mobile phones needs to be in accordance with the target market, and the product category should also be identified according to the characteristics of the target market. The companies should target young adults by offering an attractive pricing strategy. Attractive credit facilities can be offered to attract young adults. The study also found the significant effect of attraction by competitors on the mobile phone shopping behavior of young adults. Since youngsters are attracted to competing offerings, companies should develop an attribute-based branding strategy to create a unique image in the minds of young adults. Mobile phone companies should focus on product features like technical quality, appearance, and after-sale support. Companies can use an integrated communication strategy to build brand image and reduce switching intentions.

7. Limitations and Future Implications

This study has been conducted to determine the mobile phone buying behaviors of young adults in Pakistan. Consequently, the major limitation of this study is that the results of this study are restricted to the young adults of Pakistan. In addition, the factors that have been considered for testing the effect on mobile phone buying behavior are limited. However, several other factors influence the mobile shopping behavior of young adults in Pakistan may also be considered. In this manner, it is suggested the future studies would expand the scope of the

study by considering the young adults from other countries in the region. Thus, it would help to present the broader findings and significant contribution to the existing literature. In addition, it is suggested that future studies should include other factors like cultural and social factors that could help further understand mobile phone buying decisions by consumers in Pakistan.

Annexure - I

Factor	Item Label	Item
Service Encounter	SE1	I think the main problem is when the customers do not obtain the desired product.
	SE2	The buying decision of youth relies on the quality of service.
	SE3	In mobile shopping, customers expect high service quality.
	SE4	In mobile shopping, I believe that the risk of quality issues is high
Price	PRC1	I think people change their buying decisions based on price.
	PRC2	Leverage in price helps in developing consumer loyalty.
	PRC3	Lower prices attract more customers.
Avoidance of Core Service Failure and Response	ASFR1	Due to service delivery failure, the companies increase their customer churn. Therefore, it should be avoided.
	ASFR2	I think if the company is not able to meet the failures, the customers will switch from the brand.
	ASFR3	I avoid buying products from mobile shopping if I had encountered service failure.
	ASFR4	If the company promises to avoid service failure, I can take the risk to shop again.
Attraction by Competitors	AC1	For youth, I believe that they compare the products from different brands before purchasing.
	AC2	I consider that customers mainly switch to other service providers in case the competitors are providing more benefits.
	AC3	I consider the marketing of products by competitors as a key factor that urges consumers to switch.
	AC4	I believe that to attract more youth, each brand should work on a competitive advantage.
Convenience	CON1	If people face inconvenience, they change the brand of their phone.
	CON2	For the convenience of the customers, the companies should offer services that are based on location.
	CON3	Mobile shopping is a convenient way because it limits interaction with a salesperson.
	CON4	Mobile shopping is more convenient than in-person shopping.
Mobile Phone Shopping Behavior	MSB1	I feel that mobile phone technology has been penetrated every aspect of daily.
	MSB2	I consider the trend of mobile commerce to be very important for the industry.
	MSB3	Mobile phone shopping is knowledgeable.
	MSB4	I consider the purchase intentions of youth depend on smartphone use relies on the purchase intentions of consumers.

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