Nauman ZAHEER, Muhammad KASHIF, Samo KROPIVNIK*

EXPLORING FACTORS AFFECTING PAKISTANI STUDENTS' INTENTIONS TO ACCEPT AND USE MOBILE ADVERTISING: A UTAUT2 PERSPECTIVE**

Abstract. *The article aims to explore factors that influence respondents' intentions to accept and use mobile advertising by proposing an extension of the Unified Theory of Acceptance and Use of Technology (UTAUT) with perceived enjoyment, perceived irritation, and personalisation. To identify the factors affecting the acceptability of mobile advertising, the intentions and behaviours of respondents regarding mobile advertising are reviewed. The study was conducted in Pakistan by using online survey. Partial Least Squares Structural Equation Modelling (PLS-SEM) was applied to examine the sample size of 446 respondents. The findings revealed certain crucial factors (such as effort expectancy, performance expectancy, perceived enjoyment, perceived irritation, and personalisation) that can affect respondents' intentions to accept mobile advertising. Also revealed was the relationship between respondents' intentions to accept and use behaviour regarding mobile advertising. It is established that respondents expect more personalised promotional messages to be shown to them in line with their needs and preferences. Here, advertisers must pay attention to the contextual relevance of the ads while noting the element of irritation that can be felt among consumers, as such ads create negative attitudes and intentions towards mobile advertising.*
Keywords: *mobile advertising, consumer intentions, use behaviour, unified theory of acceptance and use of technology (UTAUT), Partial Least Squares Structural Equation Modelling (PLS-SEM), Pakistan.*

   *   Nauman Zaheer, PhD, Assistant Professor, School of Business Administration, Rashid Latif Khan University, Pakistan; Muhammad Kashif, PhD, Assistant Professor, Faculty of Social and Basic Sciences, Mohammad Ali Jinnah University, Pakistan; Samo Kropivnik, PhD, Associate Professor, Faculty of Social Sciences, University of Ljubljana, Slovenia.

INTRODUCTION

At the start of the new millennium, the world has witnessed tremendous technological advancements in wireless communication. These not only enable users to communicate with others but also present a range of opportunities for marketers to deliver their messages in innovative ways. The practices of mobile advertising are rapidly growing due to the high penetration rate of mobile phones among consumers around the world. According to Rosenkrans and Myers (2012), the mobile phone as a medium of marketing communications is different from conventional media like radio, TV, outdoor advertising, and magazines. Murillo-Zegarra et al. (2020) state that consumers are more prone to hold negative attitudes towards mobile advertising compared to traditional means of advertising.

Mobile devices have become a personal fashion statement for users, and a symbol of a user's social status (Lou et al. 2022). Second, the most important characteristic of mobile devices is their mobility as they can be carried around most of the time, making the users accessible to marketers at any time of the day (Garcia 2023). Users do not need to turn their TV or radio on to be exposed to advertising. The recent advancements in mobile technology enable marketers to trace the geographical location of consumers and this allows them to send precise information and appropriate advertising material (Oven et al. 2012). Third, the distinctive features of mobile devices, such as touchscreens, cameras, and audio/video multimedia, provide a unique and interactive experience for consumers, which thereby increases consumers' participation in persuasive communication (Taneja 2021).

Some negative aspects of this new medium of advertising must be considered. For example, consumers sometimes feel irritated when faced with numerous unwanted/uninvited ads without their consent, which causes them to develop a negative attitude to mobile advertising (Dwivedi et al. 2021; Sharma et al. 2021). There is an urgent need to explore the negative aspects in order to limit the chances of consumers having negative attitudes towards advertising. Further, various factors have a strong impact on creating positive and negative attitudes to mobile advertising, and these also need to be explored. Accordingly, the main objective of the article is to uncover the effects of different factors on consumers' intentions to use mobile advertising.

The relevant literature shows that consumers have started to become indifferent to mobile advertising due to inappropriate ad content, unsolicited promotional messages, bad timing of message delivery, and the lack of rational, emotional or entertaining appeal in promotional messages (Alwreikat and Rjoub 2020; Chung and Kim 2021; Morimoto 2021; Niu et al. 2021; Oven et al. 2012). All of these issues have negatively affected consumers' intentions to use mobile advertising. The central problem of the research is hence to discover the factors that not only affect consumers' intentions but also have the ability to convert present negative intentions into positive ones.

THEORY AND HYPOTHESES DEVELOPMENT

In the area of technology acceptance and adoption, the unified theory of acceptance and use of technology (UTAUT) is one of the latest and most comprehensive theories. Many recent research studies have applied UTAUT to explore consumers' acceptance of new technologies. Examples of such studies come from areas such as mobile banking (Zhou et al. 2010), electronic learning (Tan 2013), course management software (Marchewka and Kostiwa 2007), online shopping (Celik 2016), mobile commerce (Min et al. 2008), computer applications (Al-Gahtani et al. 2007) and mobile advertising (Wong et al. 2015). UTAUT was developed by Venkatesh et al. (2003) with the goal of analysing consumers' intentions to use/accept a particular technology.

Venkatesh et al. (2012) further extended UTAUT to explore consumers' acceptance and use of technology. The authors added three more constructs and named the extended theory UTAUT2. These additional constructs are habit, hedonic motivation, and price value of technology. Venkatesh et al. (2012) found substantial improvements in variance (56% to 74%) explaining consumers' intentions to use and use behaviour towards mobile Internet (40% to 52%). The major difference between UTAUT and UTAUT2 lies in the unit of analysis of the study. UTAUT was in an organisational context whereby employees of different companies were surveyed; in contrast, in UTAUT2 Venkatesh et al. (2012) focused on consumers by questioning them regarding their use of mobile Internet. Therefore, the current research is based on UTAUT2 as the unit of analysis of this study refers to consumers.

In an attempt to extend UTAUT2, the theoretical model of this research also includes factors like perceived enjoyment, personalisation, and perceived irritation as direct factors of consumers' intentions to accept/use mobile advertising in order to obtain extensive predictive explanations. Perceived enjoyment was conceptualised as "hedonic motivation" in the Venkatesh et al. (2012) UTAUT2 model, whereas the present study conceptualises it as perceived enjoyment. The research model incorporates perceived enjoyment based on the suggestions made by Bagozzi (2007). Perceived enjoyment is an intrinsic motivational factor in motivation theory, which states that satisfaction in the shape of enjoyment gained from performing an activity can be a significant predictor of consumers' intentions to use new technology (Davis et al. 1992).

Consumer Attitude Towards Mobile Advertising

Attitudes play an important role in shaping consumers' behaviour and buying decisions and thus while assessing and exploring the effectiveness of any new medium of advertising it is important to research how the attitudes to that particular medium can be affected, changed and modified to make promotional campaigns successful (Karjaluoto et al. 2002). Elliott and Speck (1998) point out that commercial clutter and the increasing number of promotional messages foster negative attitudes concerning advertising. However, Noor et al. (2013)

conclude that consumers actually like mobile advertising. Saadeghvaziri and Hosseini (2011) found in their study that attitudes to advertising depend highly on the channel of advertising, and further conclude that attitudes to mobile advertising are more positive than those to advertising through conventional media. Moreover, Blanco et al. (2010) established in their research that mobile advertising is more informative, entertaining and trustworthy than advertising through conventional media. The nature of attitudes is complex to understand and explore, which means better understanding thorough research is needed to assure efficient promotional campaigns (Petty and Brinol 2010).

Hypotheses Development

The theoretical framework is comprised of a two-stage model (see Figure 1). First, the relationship between independent concepts (such as social influence, effort expectancy, performance expectancy, facilitating conditions, perceived enjoyment, perceived irritation, and personalisation) and intentions to use (the first dependent construct) is suggested. Second, the relationship between intentions to use and use behaviour (the second/final dependent construct) is implied. Independent theoretical constructs are defined as follows:

Social Influence: The social influence in terms of using a new technology is defined by Venkatesh et al. (2003) as "the degree to which an individual perceives that important others believe he or she should use the new system". Several research studies have asserted the importance of social influence in influencing consumers' choices, attitudes, and purchase patterns. For example, López-Nicolás et al. (2008) found that users' instructors, superiors, colleagues, peers, friends and relatives had a strong impact on consumers' behavioural intentions. These findings should be considered also when exploring intentions to use mobile advertising. Thus, we hypothesise:

H1: Social influence is positively related to intentions to use mobile advertising.

Effort Expectancy: Venkatesh et al. (2003) describe effort expectancy as the level of effort a person perceives a technology or system requires to be used or understood. Rogers (2003) argues that the level of effort involved in learning or using a system or technology acts as a major barrier to the acceptance of such a system or technology. If an individual believes that a particular system or technology is easy to use, their acceptance of that technology/system will then be higher (Tero et al. 2004). Any technology that calls for considerable effort to learn and operate is believed to be less useful (Venkatesh and Davis 2000). It can thus be said that the more a user perceives mobile advertising to be easy to use and access, the more users are likely to perceive mobile advertising as a useful platform. This leads us to hypothesise:

H2: Effort expectancy is positively related to intentions to use mobile advertising.

Performance Expectancy: Venkatesh et al. (2003) explain performance expectancy as the level to which a person perceives that using a technology or system

will improve his/her overall performance for a given activity. The construct of performance expectancy in UTAUT is equivalent to the construct of perceived usefulness (PU) in the technology acceptance model. Various past studies (Celik 2016; Marchewka and Kostiwa 2007; Tan 2013) applied the construct of performance expectancy and validated the construct's significance in exploring behavioural intentions. Park et al. (2007) conducted a study to explore the adoption of mobile technologies. The authors sampled Chinese nationals and applied structural equation modelling during their research. The results of the study show that performance expectancy has a significant impact on consumers' intentions to adopt mobile technologies. With the results of these studies in mind, it is strongly believed that performance expectancy and intention to use mobile advertising have a positive relationship. We thus hypothesise:

H3: Performance expectancy is positively related to intentions to use mobile advertising.

Facilitating Conditions: Venkatesh et al. (2003) define facilitating conditions as "the degree to which an individual believes that an organizational and technical infrastructure exists to support use of the system". The authors add that there is a greater chance of a new technology or system being accepted when the user believes there is easy access to the resources and technical infrastructure required to use the system. These resources can be in the shape of easy access to technical support (Chang et al. 2007), IT knowledge (Taiwo and Downe 2013), hardware and software resources (Chang et al. 2007), Internet facilities, assistance from others, and compatibility between the technology and system (Bhattacharjee et al. 2003). Wu et al. (2007) conducted a study that explored 3G mobile communication services. The authors established a strong positive relationship between facilitating conditions and consumers' behavioural intentions to use 3G mobile communication services. Noting the results of such past studies, it is believed that consumers' intentions to accept mobile advertising are positively affected when consumers have adequate resources. Thus, we hypothesise:

H4: Facilitating conditions are positively related to intentions to use mobile advertising.

Perceived Enjoyment: Davis et al. (1992) explain that perceived enjoyment is the extent to which a certain activity of using a product/system/technology is perceived to be enjoyable in addition to the anticipated performance outcome. Sung and Yun (2010) regard perceived enjoyment as a dimension of intrinsic motivation as it provides a crucial intrinsic drive to perform a particular action or activity. Van der Heijden (2004) argues that people are more likely to adopt a new technology if using it brings them immediate pleasure. The authors further note that if a technology is personally enjoyable, people will more extensively use it. Davis et al. (1992) view perceived enjoyment as an important predictor in the acceptance and usage of new technology. Based on the results of previous studies, it is suggested that consumers will be more willing to accept mobile advertising that is enjoyable and playful. This leads us to hypothesise:

H5: Perceived enjoyment is positively related to intentions to use mobile advertising.

Perceived Irritation: Van der Waldt et al. (2009) describe irritation as a negative emotional reaction to advertising. Studies (e.g., Martí-Parreño et al. (2013)) have regarded irritation as an affective antecedent of attitude towards advertising in general and mobile advertising in particular. At the same time, Martí-Parreño et al. (2013) believe research is lacking on the irritation caused by advertising as a direct antecedent of consumers' overall attitude to mobile advertising. In fact, the study of emotions forms an important field in the area of marketing research. Wells et al. (1971) suggested six basic dimensions of emotions, including irritation, for analysing consumers' reactions to advertising. Aaker and Bruzzone (1985) explained irritating advertising as that which causes displeasure among viewers. Grant and O'Donohoe (2007) conducted a study on young consumers and determined that they were very concerned about commercial intrusion on their mobile devices. The authors further concluded that intrusiveness could lead to higher levels of irritation among consumers. Martí-Parreño et al. (2013) found that respondents were highly concerned about receiving unsolicited promotional messages or 'spam' on their mobile devices. It may therefore be expected that the perceived irritation of mobile advertising will have a negative influence on consumers' intentions to use mobile advertising. We accordingly hypothesise:

H6: Perceived irritation is negatively related to intentions to use mobile advertising.

Personalisation: Leppäniemi and Karjaluoto (2008) defined personalisation as the degree to which the contents of an advertising message are customised based on a consumer's geographical location, cultural background, lifestyle, needs, preferences and mindset. The concept of personalisation derives from congruence theory, which suggests that people tend to be more responsive to messages that are consistent with their own beliefs and attitudes (Dodoo and Wen, 2019). Aguirre-Rodriguez et al. (2012) stressed that an advertisement which is congruent with a person's self-concept and self-image is perceived as personalised, which eventually increases its perceived relevance and acceptance. Heckler and Childers (1992) viewed self-congruent promotional messages as being more relevant. Feng et al. (2016) concluded in their research that consumers prefer to receive highly personalised messages on their mobile devices that reflect their needs and wants. Smith (2019) argued that marketers can collect information related to consumers' preferences from consumers' feedback and shopping history in a way to customise/personalise the advertising messages and also to adjust the offerings accordingly. Smith (2019) added that the personalising of advertising messages enables marketers to build strong relationships with customers and reach customers in an individualised way. Feng et al. (2016) also established that consumers become more receptive to advertising when the content of advertising messages is more personalised. Considering the results of past studies, it is expected that personalisation positively affects consumers' acceptance of mobile advertising. Thus, we hypothesise:

H7: Personalisation is positively related to intentions to use mobile advertising.
The dependent theoretical constructs are defined as follows.

Intentions to Use and Use: The term "intention to use" has seen different uses by different authors. Taylor and Todd (1995) explored the concept and referred to it as consumers' behavioural intentions, which is defined as perceived attitude. Taylor and Todd (1995) also referred to use behaviour as consumers' actual behaviour. Several researchers (Hansen et al. 2004; Hartmann and Apaolaza-Ibáñez 2012; Hsiao and Chang 2014; Leong et al. 2013) indicated consumer intention as one of the major determinants for predicting use behaviour. In a study by Chang et al. (2019), UTAUT2 was utilised to explore factors influencing consumers' use behaviour and it was found that behavioural intentions are highly influential in determining use behaviour. This leads us to hypothesise:

H8: Intentions to use positively influence consumers' use of mobile advertising.

Figure 1: THEORETICAL FRAMEWORK
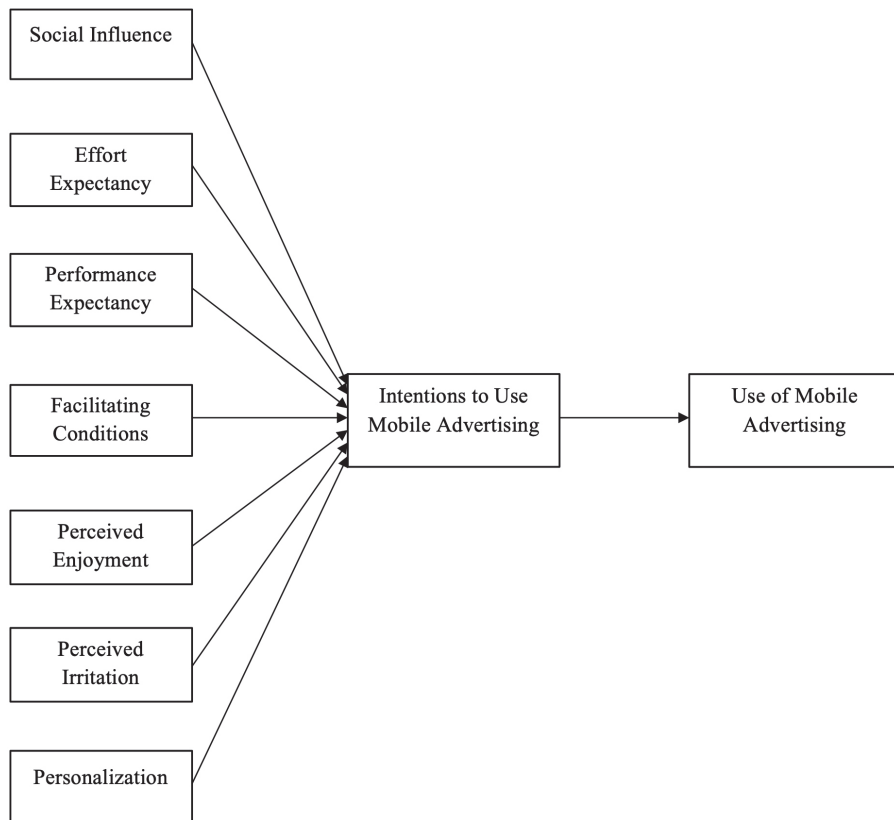
Source: Created by the Authors.

METHODOLOGY

Sampling Method and Procedure

The study participants were students aged 18–30 years from five major universities in various regions of Pakistan, i.e., Punjab, Sindh, KPK, Islamabad Capital Territory, and Balochistan. One university from each region was selected: Punjab University from Punjab, Karachi University from Sindh, Peshawar University from KPK, Quaid-e-Azam University from Islamabad Capital Territory, and University of Balochistan from Balochistan. The purpose of having respondents from all five regions of the country was to ensure people from across the country were represented, noting that students from all around the country are enrolled at these universities. The study focused on young people because they are known to be immersed in the digital world. Buckingham (2013) argued that young people are suited to the various different challenges posed by new technologies and new types of media. In addition, Van der Waldt et al. (2009) concluded in their research that young people are an attractive target for marketers around the globe since they are heavy users of mobile devices and more interested in using mobile devices than older consumers. A link to an online survey was sent to respondents via emails, personal messages, and social media posts, with a total number of 446 respondents answering all the questions. The study utilised non-probability sampling methods, i.e., judgmental sampling and convenience sampling.

Instrument Development

The research questionnaire was divided into three parts. The first part of the questionnaire contains six questions for assessing the usage pattern of mobile devices, mobile Internet, and mobile advertising. The second, i.e., the central, part of the questionnaire was further divided into three subsections where the first section was focused on assessing factors that may affect respondent's intentions to use mobile advertising. There were 27 items associated with 7 different factors (such as 4 items to assess social influence, 4 items for effort expectancy, 4 items for performance expectancy, 4 items for facilitating conditions, 4 items for perceived enjoyment, 4 items for perceived irritation, 3 items for personalisation). The responses concerning factors that can affect respondents' intentions to use mobile advertising were gathered on a five-point Likert scale, where 1 meant 'strongly disagree' and 5 'strongly agree'. The second subsection included three items to assess the dependent variable (i.e., Intentions to use). The responses regarding intentions to use mobile advertising were also gathered on a five-point Likert scale, where 1 meant 'strongly disagree' and 5 'strongly agree'. The third subsection was concentrated on assessing the respondents' use behaviour, where four items were included. The responses to use behaviour were gathered via a five-point Likert scale, where 1 meant 'never' and 5 'many times'. The final part of the questionnaire was related to the demographic profile of respondents where

five questions aimed to assess the respondents' age, gender, family income, education, and province. As per the suggestion of Hair et al. (1998), in order to assure the scale validity all of the instruments were adopted from previous literature (see Table 1).

Table 1: ITEMS OF SURVEY WITH SOURCES

Constructs	No. of Items	Question Items	Sources
Social Influence	4	People in my social circle influence me to buy from mobile ads	Teo and Pok (2003)
		People who buy from mobile ads are trendy	
		People in my social circle suggest me to use mobile ads for purchasing	
		Purchasing from mobile ads can improve my image within my social circle	
Effort Expectancy	4	I find mobile advertising easy to use	Venkatesh et al. (2012) and Yang (2010)
		It is easy for me to become skilful at purchasing from mobile advertising	
		Learning how to view and buy from mobile advertising is easy for me	
		My interaction with mobile advertising is clear and understandable	
Performance Expectancy	4	Using mobile advertising increases my productivity	Venkatesh et al. (2012)
		Using mobile advertising helps me to accomplish things more efficiently	
		I find mobile advertising useful in my daily life	
		Using mobile advertising increases the chances of achieving things that are important to me	
Facilitating Conditions	4	Mobile advertising for purchasing is compatible with other technologies I use in my daily life	Venkatesh et al. (2012)
		I have the appropriate knowledge needed to use mobile advertising	
		I have the resources needed to use mobile advertising	
		I can get help from people in my social circle when I have difficulties in purchasing from mobile advertising	
Perceived Enjoyment	4	It is fun to use mobile advertising for purchasing	Nysveen et al. (2005)
		It is pleasing to use mobile advertising for purchasing	
		It is exciting to use mobile advertising for purchasing	
		It is enjoyable to use mobile advertising for purchasing	

Constructs	No. of Items	Question Items	Sources
Perceived Irritation	4	It makes me annoyed upon receiving mobile advertising messages at odd times	Xu (2006) and Haghirian; Madlberger (2005)
		It makes me irritated upon receiving mobile advertising that are not related to me	
		It makes me irritated upon receiving multiple mobile advertising messages for the same product on the same day	
		It makes me irritated when I am forced to see a mobile advertising message while doing important tasks	
Persona-lisation	3	I would like to receive mobile advertising whose contents are more personalised	Feng et al. (2016)
		I would be willing to spend time providing my personal details and preferences to make mobile advertising to better match my needs	
		I would like to receive mobile advertising as per my previous search history of goods	
Intentions to use mobile advertising	3	1) I intend to see mobile advertising in my daily life	Venkatesh et al. (2012)
		2) I intend to use mobile advertising for shopping in the future	
		3) I intend to receive mobile advertising in the future	
Use behaviour	4	1) I have read the advertising content completely in mobile ads	Venkatesh et al. (2012)
		2) I have clicked on mobile advertising to check the offer of an advertised product/service	
		3) I have visited the website/social media page of the company to obtain more information after seeing the mobile advertising	
		4) I have bought products/services advertised in mobile ads	

Source: Created by the Authors.

Data Analysis
Profile of Respondents

The profile of the respondents is shown in Table 2 where it may be seen that there were more females (n = 270, 60.5%) than males (n = 176, 39.5%). The same participation trend can be observed in other similar studies (Ahmed and Qazi, 2011) where the share of female respondents was higher than for males. The current study sampled university students from Pakistani universities. It is observed that nearly half the respondents had an intermediate level of education, noting that the minimum entry requirement to attend university in Pakistan is the intermediate level education. Hence, the respondents who mentioned they had an intermediate level of education were enrolled in bachelor's programmes.

All the respondents in the study possessed a smart phone. In Table 2, one may see that over half the respondents came from Punjab, followed by Sindh, Khyber Pakhtunkhwa, and Balochistan. Punjab is the most populous province in Pakistan and is followed by Sindh, Khyber Pakhtunkhwa, and Balochistan. At the same time, it is important to mention that representatives of all provinces in Pakistan are included in the sample. The respondents of the study are regular Internet users, either through wi-fi or mobile data. More than half the respondents (53.8%) had access to wi-fi either at home or at their educational institutes, and 85.2% of them have a contract with a mobile data provider.

Table 2: DEMOGRAPHIC PROFILE OF THE SAMPLE (n = 446)

Demographic Variables		Frequency	%
Gender	Male	176	39.5
	Female	270	60.5
Education Level	Intermediate	212	47.5
	Bachelor's	132	29.6
	Master's	56	12.6
	Doctorate/PhD	46	10.3
Income Level (PKR)	30,000 or below	132	29.6
	30,001 to 50,000	118	26.5
	50,001 to 70,000	56	12.6
	70,001 to 90,000	42	9.4
	90,001 or above	98	22.0
Province of Residence	Baluchistan	31	7.0
	Khyber Pakhtunkhwa	62	13.9
	Punjab	266	59.6
	Sindh	87	19.5
Access to wi-fi	Home	194	43.5
	At Workplace/University	46	10.3
	All of the Above	74	16.6
	None of the Above	132	29.6
Buying Mobile Data	Only in urgent need	116	26.0
	Monthly	100	22.4
	Weekly	102	22.9
	Daily	18	4.0
	When previous package is consumed	44	9.9
	I don't buy mobile data	66	14.8

Source: Created by the Authors.

Testing Measurement Model

The relationship between independent and dependent variables was examined through Partial Least Squares Structural Equation Modelling (PLS-SEM). PLS-SEM was applied to data using SmartPLS software. Many of the recent research studies (Martins et al. 2014; Venkatesh et al. 2012; Wong et al. 2015) for an under-researched area employed the same technique and software due to its capability of handling a smaller sample size. Assessment of the presence of Common Method Bias (CMB) was done through Harman's single factor test. According to Hair et al. (1998), the value of Harman's single factor should be less than 50% to eliminate the chances of CMB. For this study, the result of the CMB test was 42.76%, namely, below the benchmark of 50%. The measurement model's validity was ensured before applying any further tools of analysis to the data. For this, three different tools such as factor loadings, Average Variance Extracted (AVE), and Composite Reliability were applied to data. As per the recommendation of Hair et al. (1998), the cut-off value of factor loadings should exceed 0.70. It was found that the values of factor loadings for all constructs (except SI2, i.e., slightly lower than 0.70) were over 0.70 (see Table 3). Second, the value of CR was found to be greater than the cut-off level of 0.60 recommended by Hair et al. (1998). Finally, the value of AVE was found to exceed the cut-off value of 0.50 recommended by Hair et al. (1998). Moreover, the internal reliability of all the constructs was assured by assessing Cronbach's alpha. As per the recommendation of Hair et al. (1998), the value of Cronbach's alpha should be greater than 0.70. The values of Cronbach's alpha for all constructs were found to be more than 0.70 (see Table 3). Regarding all the applied statistics, the measurement model can safely be confirmed.

Core Model Testing

Anticipated relations among the constructs were tested through PLS-SEM. With respect to respondents' intentions to use mobile advertising, the structural model explained 59% of the variance. In terms of use behaviour regarding mobile advertising, the structural model explained 50% of the variance.

Constructs-wise, the results (as shown in Table 3) indicate that five of the seven constructs affect the respondents' intentions in the anticipated way: EE (beta = 0.133, $p < 0.05$), PE (beta = 0.292, $p < 0.01$), PENJ (beta = 0.295, $p < 0.01$), PERSO (beta = 0.261, $p < 0.01$) have a significant positive relationship with respondents' intentions to use mobile advertising and PI (beta = −0.105, $p < 0.01$) has a significant negative relationship with respondents' intentions to use mobile advertising. However, two constructs, namely SI (beta = −0.011, $p > 0.05$) and FC (beta = −0.019, $p > 0.05$), are unable to predict respondents' intentions to use mobile advertising. Finally, the results indicate a strong and positive relationship between respondents' intentions to use mobile advertising and their use behaviour towards mobile advertising (b = 0.707, $p < 0.01$).

Table 3: FACTOR LOADINGS OF RESEARCH VARIABLES

Variables	Items	SI	EE	PE	FC	PENJ	PI	PERSO	INTEN	USE
Social Influence	SI1	0.747								
	SI2	0.669								
	SI3	0.730								
	SI4	0.777								
Effort Expectancy	EE1		0.839							
	EE2		0.862							
	EE3		0.856							
	EE4		0.779							
Performance Expectancy	PE1			0.824						
	PE2			0.895						
	PE3			0.906						
	PE4			0.856						
Facilitating Conditions	FC1				0.846					
	FC2				0.841					
	FC3				0.844					
	FC4				0.805					
Perceived Enjoyment	PENJ1					0.833				
	PENJ2					0.898				
	PENJ3					0.918				
	PENJ4					0.919				
Perceived Irritation	PI1						0.782			
	PI2						0.881			
	PI3						0.908			
	PI4						0.912			
Personalisation	PERSO1							0.834		
	PERSO2							0.859		
	PERSO3							0.850		
Intentions to Use	INTEN1								0.797	
	INTEN2								0.865	
	INTEN3								0.900	
Use Behaviour	USE1									0.761
	USE2									0.801
	USE3									0.830
	USE4									0.770
Cronbach's alpha		0.710	0.855	0.893	0.855	0.915	0.899	0.804	0.815	0.800
Composite Reliability		0.821	0.902	0.926	0.902	0.94	0.927	0.884	0.891	0.870
Average Variance Extracted		0.535	0.697	0.759	0.696	0.797	0.761	0.719	0.731	0.626

Source: Created by the Authors.

Figure 2: PLS-SEM Model
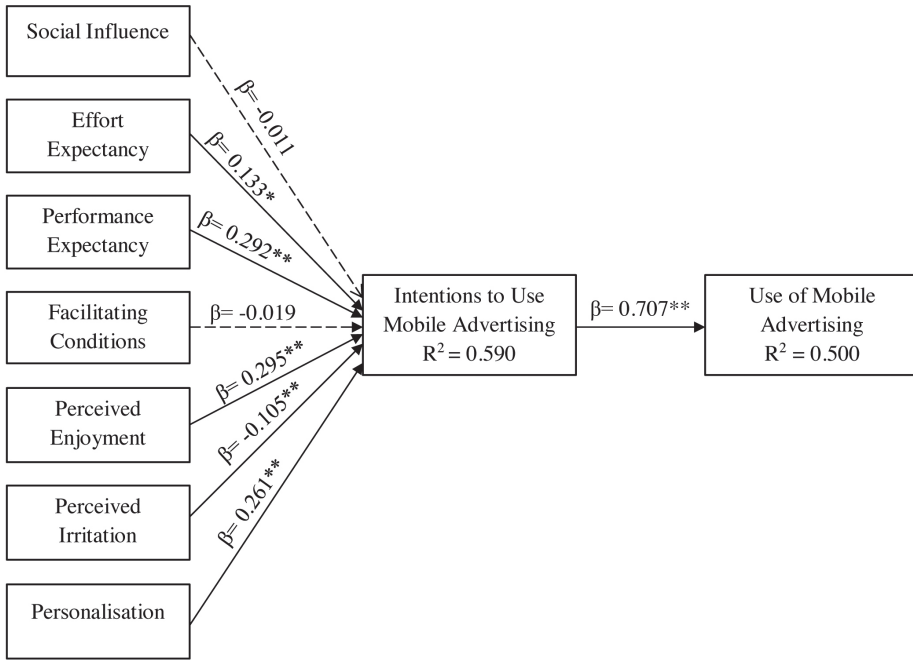
Source: Created by the Authors.

Notes: ——— Significant Path

‎ --------- Non-significant Path

** p < 0.01; * p < 0.05

Table 4: HYPOTHESES TESTING USING PLS-SEM

Relationship	Original Sample (O)	Sample Mean (M)	Standard Deviation (STDEV)	T Statistics (|O/STDEV|)	P-Values	Decision
H1: SI → INTEN	-0.011	-0.007	0.048	0.228	0.82	Not Supported
H2: EE → INTEN	0.133	0.133	0.054	2.458	0.014	Supported
H3: PE → INTEN	0.292	0.293	0.067	4.337	0.000	Supported
H4: FC →INTEN	-0.019	-0.02	0.058	0.324	0.746	Not Supported
H5: PENJ → INTEN	0.295	0.292	0.058	5.138	0.000	Supported
H6: PI → INTEN	-0.105	-0.105	0.035	2.964	0.003	Supported
H7: PERSO → INTEN	0.261	0.264	0.05	5.229	0.000	Supported
H8: INTEN → USE	0.707	0.707	0.029	24.139	0.000	Supported

Source: Created by the Authors.

DISCUSSION

The results show that social influence does not have a significant relationship with respondents' intentions to use mobile advertising. This is an important finding because it implies that respondents in Pakistan are not influenced by the people in their social circle when it comes to accepting or using mobile advertising. One explanation of this finding might be that an individual's intention to either accept or reject mobile advertising is not affected by the opinion of the people in their social circle. Moreover, Castañeda et al. (2009) also established in their research that if people hold negative attitudes to a certain phenomenon, then this is hardly affected by the opinions of others. Other studies (An et al. 2016; Setyahadi and Dewi 2019) also found no significant effect of social influence on consumers' behavioural intentions.

The results of this research point to a significant relationship between effort expectancy and respondents' intentions to use mobile advertising. This implies that the more respondents find mobile advertising usage easy, the more positive intentions they have towards the use of mobile advertising. Martins et al. (2014) also found that users tend to use such technologies that are easier to learn and involve less effort to handle. In addition, Venkatesh et al. (2012) also established a significant impact of effort expectancy on behavioural intentions.

A significant positive relationship was found between performance expectancy and respondents' intentions to use mobile advertising. This implies that the more respondents have expectations related to the performance of mobile advertising as a platform, the more they have positive intentions to use mobile advertising. Authors such as Carlsson et al. (2006) and Park et al. (2007) also determined that users tend to use technologies for which there are higher performance expectations. Further, Chang et al. (2019) found a significant impact of performance expectancy on behavioural intentions.

The findings do not show that facilitating conditions have a significant relationship with respondents' intentions to use mobile advertising. This finding implies that respondents' intentions to use mobile advertising are not affected even if they possess all the compatible resources to use mobile advertising. In the first version of UTAUT, Venkatesh et al. (2003) did not find a significant relationship between facilitating conditions and behavioural intentions. Saprikis et al. (2021) conducted a study to explore the determinants of intentions to adopt mobile augmented reality apps in shopping malls, and did not find any significant relationship between facilitating conditions and behavioural intentions.

Perceived enjoyment was found to have a significant positive relationship with respondents' intentions to use mobile advertising. Feng et al. (2016) conclude that the more the content of mobile advertising is entertaining and enjoyable, the more consumers will be intrinsically motivated to accept mobile advertising. In addition, Basak et al. (2015) established a significant impact of perceived enjoyment on behavioural intentions.

Perceived irritation was found to have a significant negative relationship with respondents' intentions to use mobile advertising. This implies that the more the content of mobile advertising is perceived to be irritating, the less respondents will intend to use mobile advertising. Boateng et al. (2016) concluded in their research that if the contents of mobile ads are irritating consumers have lower intentions to use such mobile ads.

The findings reported a significant positive relationship between personalisation and respondents' intentions to use mobile advertising. This implies that the more ad content is personalised to respondents' needs and matches their personality, the more positive intentions to use mobile advertising they have. Smith (2019) concluded that if the contents of mobile ads are more personalised and customised to suit the needs of the consumers then consumers develop more positive intentions to use such mobile ads. Feng et al. (2016) also found a significant impact of personalisation on behavioural intentions.

Finally, intention to use mobile advertising was shown to be significantly and positively related to respondents' use behaviour. This implies that the more respondents possess positive intentions to use mobile advertising, the more they will use mobile advertising for purchasing. Many previous studies (Jeong and Lambert 2001; Venkatesh et al. 2012) established a strong relationship between behavioural intentions and actual use behaviour.

Theoretical Implications

The current study made efforts to eliminate the gap between UTAUT2 and respondents' intentions to use mobile advertising. Venkatesh et al. (2003) came up with UTAUT, allowing users' acceptance of new technologies to be analysed. It is important to mention here that the first version of UTAUT was targeted at business users; the sample comprised employees of four organisations and examined their attitudes and intentions concerning the use of different new technologies in the workplace. Venkatesh et al. (2012) further extended UTAUT and introduced UTAUT2. The second version of UTAUT was focused on analysing consumers' intentions to use mobile Internet. The theoretical base for the present research derives from UTAUT2. This research attempted to validate UTAUT2 in the area of mobile advertising. Along with this, the current research extended UTAUT2 by including factors like perceived irritation and personalisation. Various studies (Brinson et al. 2018; Chen and Hsieh 2012; Smith 2019; Xu 2006) acknowledge the importance of personalisation and the element of irritation in shaping consumers' attitudes to technology adoption. Accordingly, this research empirically tested both personalisation and perceived irritation alongside the other constructs of UTAUT2 model. This research also contributes by providing insight into the complex relationship between mobile device users, their mobile devices, their intentions, and their use of mobile advertising.

Managerial Implications

The presented research holds several implications for marketers. First, advertisers must align their promotional messages and ad content with the needs and preferences of their audience. To that end, advertisers need to understand the relationship between users and their mobile devices in order to improve the advertising experience. The results identify several important factors and their relative impacts on respondents' intentions to use mobile advertising. Moreover, it was found that respondents expect more personalised promotional messages in line with their needs and preferences to be shown to them. The study findings underscore the need for advertisers to pay attention to the contextual relevance of ads and the element of irritation that can be felt among consumers, as such ads create negative attitudes and intentions regarding mobile advertising.

Research Limitations

The research aimed to reduce the number of limitations as much as possible so as to improve the generalisability of the results and ensure greater validity. However, there are always some limitations attached to any study. First, it is important to mention that the research did not record actual behaviour; instead, the respondents were asked to recall their previous experiences with mobile advertising. This means there was a possibility of variability in the results. In order to address this situation and assure the uniformity of responses, all the scales used in the research questionnaire were statement-anchored Likert scales. According to (Hair et al. 1998), Likert scales with anchor points help the results gain a higher level of reliability and reduce the chances of variability. Yet, it remains a limitation of the study. Second, the sample of study is composed of people aged 18 to 30 years. It is recommended that future research include a more diverse population by employing respondents from different age groups, with different income levels, or different professional backgrounds.

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