Young Women's Continuance Intentions to use Communication and Social Media Apps

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Abstract

The rapid adoption of smartphones in the last few years indicates the changing scenario of communication patterns. The mobile app market is taking prime space in the digital world with high adoption and year-on-year growth rate. Out of all the categories, social media and communication (instant messaging apps) consume more than half of the digital time in most of the countries across the world. Generally, men and women have different patterns for preferences and usage of any particular thing. Similarly, preferences for mobile applications and usage styles also differ amongst them. Literature supports the fact that the usage of mobile apps among women is high compared with men. Thus, this study focused on the impact of satisfaction and attitude on the continuance intention of usage for communication and social media apps among young women. A hypothesized model was developed by the authors to find out the impact of perceived usefulness, enjoyment, and confirmation of expectations on satisfaction and attitude for the continuance usage of communication and social media apps. The data were collected by circulating the questionnaire on online and offline platforms. A total of 263 respondents from four different regions of Gujarat were considered for the analysis, and model validation was done by adopting the structural equation modelling method. The results confirmed that satisfaction was the strongest predictor for the continuance usage of communication and social media apps led by perceived usefulness and confirmation of expectations, while attitude significantly affected continuance usage led by perceived enjoyment.

Keywords: women, mobile applications, TAM, ECM, communication and social media apps

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he rapid adoption of smartphones in the last few years indicates the changing scenario of the communication patterns. It moves beyond from its primary role of communication to online payment, internet surfing, engaging on social media to express thoughts and feelings, search for information and locations, and what not. Consumers are addictive to this instrument in such a way that marketers need to understand the nitty-gritties of using mobile apps considering huge downloads from different platforms. The mobile app market is taking prime space in the digital world with high adoption and year-on-year growth rate. There is a clear cut growth of 60% on downloaded apps in the year 2017 compared to 2015. India overtook the USA in terms of mobile apps download by 20% growth from 2016 to 2017, and it was driven by the 4G launch of Jio in September 2016 (App Annie, 2018).

Out of all the categories, social media and communication (instant messaging apps) consume more than half of the digital time in most of the countries, and in India, that accounts for more than 80% (Comscore, 2018).

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Moreover, according to the report (App Annie, 2018), the top 10 mobile apps as per the monthly users in India were: WhatsApp, Facebook, Facebook messenger, Truecaller, Shareit, MX Player, UC Browser, Amazon, Paytm, and Instagram. Apart from this, analysis by Verto Analytics (2017) revealed that an average consumer in the USA (adult 18+) spent more than 22.5 hours per month on communication and social media apps the most followed by games (15 hours), web browsers (11 hours), and entertainment (10 hours).

Generally, men and women have different patterns for preferences and usage of any particular thing. Similarly, mobile application preferences and usage styles also differ among them. There is evidence in the literature which backs the reason to choose women as a target group for this study. Despite the number of subscribed smartphones among women is less, the usage rate is quite high compared to men and this is supported by the following literature.

According to Verto Analytics (2017), millennial women are some of the most cross-device consumers around, especially compared to their male counterparts: nearly a third (30%) of women aged 26–35 years owned at least three devices compared to just 11% of men of the same age. Moreover, they also found that women were the super gamers, which means a user who spent more than twice as much time on mobile games as the average users. The top games were Pokemon Go, Candy Crush Soda Saga, and Candy Crush Saga. The report data also revealed that 36-year-old women were typically superior, where they spent an average of 15 hours per month on gaming apps. Along with this, it was found that women were the super shoppers, which means, users who spent more than twice as much time on shopping and e-commerce apps as the average user. They were found to spend an average of 5 hours per month on shopping apps. The above statistics clearly state how much role women play as far as technology acceptance and its expansion is concerned. Further, a study done by Rungta (2015) stated that women spent more time on WhatsApp than men, with women being part of a larger number of groups, using emoticons, and changing profile pictures and status often. Hence, it becomes necessary to study this group of society for leveraging the market size for any product or service related to them.

As far as the mobile acceptance and usage are concerned, past studies address the usage of mobile technology by the consumers in terms of online news consumptions, the impact of technology on health, and also post-adoption behaviour (Park et al., 2011; Wu et al., 2014; Xu et al., 2014; Zhou & Lu, 2011).

Scholars nowadays are focusing more on the intention and post-adoption behaviour of different mobile applications (Kang, 2014; Kim et al., 2014; Lee & Chen, 2014; Noh & Lee, 2016) as that plays a major role in the determination of preferences among various mobile applications available in the market. Thus, this study focuses on the factors affecting the continuance intention of usage for mobile apps, specifically the communication and social media apps as they are highly used apps across all age groups (App Annie, 2019). Once the consumers are satisfied with the products and services, they continue with their usage. It is believed that satisfaction builds a positive attitude towards the usage of a particular product or service. Considering this, the objective of the present study is to find out the impact of satisfaction and attitude on the continuance intention of usage for communication and social media apps among young women.

Literature Review and Hypothesis Development

In recent years, scholars (Lai, 2017; Momani & Jamous, 2017; Sharma & Mishra, 2014) have researched for articles related to the technology acceptance models and theories. They found that certain famous theories and concepts such as technology acceptance model (TAM), the theory of planned behaviour (TPB), innovation diffusion theory (IDS), expectancy confirmation theory (ECT), and unified theory of acceptance and use of technology (UTAUT) have been accepted by scholars to study the technology acceptance and behavioural studies. This study focuses on the ECT and TAM model to integrate the variables that affect satisfaction and attitude leading to the continuance intention of usage for communication and social media apps.

The expectancy confirmation theory (ECT), which is also known as the confirmation of expectancy theory, is extensively acknowledged by researchers to study consumer satisfaction and intentions (Chou et al., 2013). This theory was developed by Oliver (1993) who mentioned that consumers' intention to repurchase a product or reuse a service is determined primarily by their satisfaction with the prior use of that product or service. Satisfaction is jointly determined by confirmation and expectation. The ECT model elaborates that consumer satisfaction is derived from five stages. Firstly, the consumers form expectations for the outcome of a particular product or service before use. After that, they accept and use that product or service. By consuming that, they form perceptions about its performance on the prominent characteristics. In the fourth stage, they compare this perception with their prior expectation level, which leads to a feeling of satisfaction or dissatisfaction.

Now, there are two major directions considering the continuance intention of information system. The theories intended towards this are: theory of reasoned action (TRA), theory of planned behaviour (TPB), and theory of acceptance model (TAM). TRA consists of three variables namely, attitude, subjective norms, and behavioural intention, while TPB adds in a new variable, that is, perceived behavioural control. Further, TAM talks about how consumers embrace and use technology and was developed by Davis (1989), where he stated that perceived usefulness and perceived ease of use affect the attitude of users which builds up the intention to use and lead to the actual usage. Over a while, scholars experimented with these models by incorporating other variables such as habit, information, and system qualities, etc.

Considering the mobile apps' distinct nature, that is, usually freely available to customers, many researchers have extended these models to study consumer behaviour. For instance, Islam et al. (2013) studied users' adoption of advance mobile phone services by integrating the TAM and diffusion of innovation model and concluded that perceived usefulness and compatibility were the prominent factors for the adoption of mobile services; whereas, a study was done by Verkasalo et al. (2010) that examined the adoption of new mobile apps, that is, mobile game apps' internet use and use of maps among users and non-users and found out that perceived enjoyment and perceived usefulness were the significant variables. Further, Park et al. (2014) studied factors affecting satisfaction and usage intention for the mobile social network games by developing the proposed model incorporating TAM and concluded that perceived usefulness, enjoyment, mobility, and control were the stimulus for the consumers for adopting mobile games. Kim et al. (2014) examined the key determinants of continuance intention and recommendation intentions for mobile communication applications. They found that user satisfaction and perceived switching cost played a major role in the post-adoption behaviour, while perceived usefulness and enjoyment were significant factors. Furthermore, Yang (2013) conducted an interesting study on the acceptance of mobile applications by young American consumers. The model was designed on three well-established theories – TAM, TPB, and uses and gratifications. The results of the study disclosed that out of seven constructs, usefulness, ease of use, subjective norms, and perceived enjoyment were the key dominant predictors for young consumers' attitude towards mobile apps, and out of them, perceived enjoyment was the most preferred one. Moreover, consumers adopted mobile applications if they had a positive attitude toward the same.

Recently, Setyawan et al. (2017) studied continuance intention usage and recommendations of information-based applications in Indonesia. The study proposed a model consisting of variables like information quality, perceived usefulness, system quality, confirmation, perceived enjoyment, and satisfaction. The results revealed that perceived usefulness and satisfaction played a major role in continuance usage and satisfaction only majorly affected the recommendations. Confirmation affected perceived usefulness and enjoyment as well as satisfaction.

Based on the literature review, it is found that continuance intention of using communication and social media apps has not been measured through satisfaction and attitude by solely targeting young women. Thus, this study has proposed a hypothetical model with three independent variables – perceived usefulness, perceived enjoyment, and confirmation of expectations to measure the impact on user's satisfaction and attitude, which leads to the continuance intention usage of communication and social media apps.

Perceived Usefulness and Perceived Enjoyment

Hedonic motivation is generally defined as the fun obtained from any technology's use and thus it plays an important role in technology acceptance and use (Brown & Venkatesh, 2005). Communication and social media usage are one of the interactive hedonic systems for the consumers which they use as a communication tool. The favourable and pleasure experience leads to high satisfaction, which leads to continuing the app usage. Bhattacherjee (2001) observed that continuance of IS related positively with satisfaction. Coursaris and Sung (2012) observed that perceived enjoyment and usefulness were generally treated as the major hedonic and utilitarian components, respectively.

Based on the motivation theories, several studies found that intrinsic and extrinsic factors of motivation such as perceived usefulness and perceived enjoyment were likely to satisfy the users' needs and led to the continuance intentions of usage (Choi & Chung, 2013; Gupta & Mathad, 2017; Lin et al., 2005; Nagdev & Rajesh, 2018; Qin et al., 2011), while Teo et al. (2012) and Lee and Quan (2013) studied that perceived enjoyment had an extrinsic motivation which reflected behavioural intention towards attitude and initial usage. Moreover, a study done by Reddy and Rao (2019) found that perceived ease of use had an impact on the satisfaction and continuance intention to use mobile wallet apps. Apart from this, Davis et al. (1992) found that perceived playfulness had a positive impact on the attitude of users' continuance intentions. Thus, the following hypotheses are proposed:

🖔 **H1:** Perceived usefulness has an impact on satisfaction.

🖔 **H2:** Perceived usefulness has an impact on attitude.

🖔 **H3:** Perceived enjoyment has an impact on satisfaction.

\$\to\$ **H4:** Perceived enjoyment has an impact on attitude.

Confirmation of Expectations, Satisfaction, and Attitude

The third construct – confirmation of expectations in the case of mobile application usage is nothing but to measure whether the performance of an application meets the expectations or not. Oliver and Swan (1989) stated it as, "confirmation is a degree to which performance exceeds, equals, or falls short of an individual's expectations, resulting in positive, zero or negative disconfirmation, respectively" (p. 26). Many studies found that the factor – confirmation of expectations significantly affected satisfaction, perceived usefulness, and perceived enjoyment (Chea & Luo, 2008; Kim, 2011; Kim & Han, 2009). Therefore, the following hypothesis is proposed:

\$\Bar{\tau}\$ H5: Confirmation of expectations has an impact on satisfaction.

Satisfaction, Attitude, and Continuance Intention of Usage

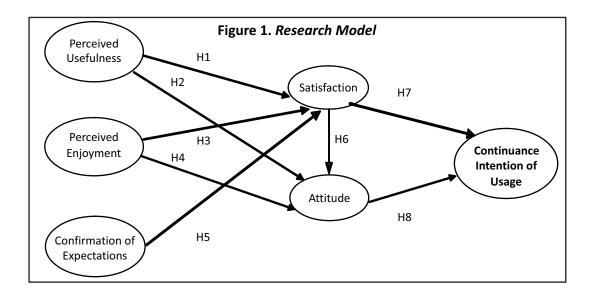
Bhattacherjee (2001) validated the direct relationship between satisfaction and continuance intention of IS system (online) and it was well accepted by many scholars in the areas of IS. Past studies on mobile services also suggested satisfaction was a reliable predictor for the continued IS (information systems) usage intention (Kim et al., 2011; Wang et al., 2010; Zhou, 2013).

Moon and Kim (2001) observed that users' attitude in using the World Wide Web (www) positively influenced the continuance intention and later on actual usage. Dickinger and Kleijnen (2008) investigated how perceived usefulness, perceived ease of use, and attitude affected users' intention to redeem mobile coupons and found that attitude of the consumers strongly affected their intention to redeem mobile coupons. Kumar et al. (2016) observed that for continuing online retail shopping, satisfaction led to the attitudinal behaviour of consumers. A

study done by Noh and Lee (2016) observed that attitude was an essential factor in determining the continuance intention of usage. Cheng (2011) and Lin et al. (2015) observed from their research that satisfaction had an impact on users' attitude toward the continuance intention. Thus, the following hypotheses are proposed:

- \$\Box\$ **H6:** Satisfaction has an impact on attitude.
- \$\Box\$ H7: Satisfaction has an impact on continuance intention of usage.
- **H8:** Attitude has an impact on continuance intention of usage.

Based on previous research studies, this study proposes the model as shown in Figure 1. The model was acquired from the ECT theory and accumulated based on literature related to the continued usage of mobile applications.



Research Methodology

Measurement Development

Considering the previous pieces of literature, the measurement items of each construct were adopted. These items were measured on a 5 - point Likert scale starting from 1 as 'strongly disagree' to 5 as 'strongly agree'. The scale of perceived usefulness (PU) was adopted from Lin and Lu (2011); perceived enjoyment (PE) was adopted from Ghani et al. (1991); confirmation of expectations (CE), satisfaction (S), and continuance intention of usage (CIU) were adopted from Bhattacherjee (2001); and the scale of attitude (A) was adopted from Venkatesh et al. (2003). This initial instrument consisted of 21 items in addition to the demographic information of respondents such as age, marital status, profession, and family type.

Sample and Data Collection

In this study, young women from the age group of 18-24 years were considered as a sample from the four cities of Gujarat namely, Ahmedabad, Vadodara, Surat, and Rajkot. A structured questionnaire was developed and used for the data collection that was prepared in Gujarati (local language of the studied region) and English languages.

These questionnaires were circulated on online social media platforms as well as offline. For the offline data collection, two grass-root researchers were trained, and a total of 350 responses were collected from the four cities during November 2018 – February 2019. In the questionnaire, it was mentioned that this study was limited to academic purposes only. After the data cleaning process, 263 samples were taken into consideration for the analysis as partially filled responses were omitted.

Data Analysis and Results

The data were analyzed using MS Excel, SPSS 18, and AMOS 18. The first measurement model and validity of it was tested followed by the SEM (structural equation modelling) to check the relationship among the defined variables. To measure the model fit, goodness-of-fit index (GFI), adjusted goodness-of-fit index (AGFI), normed fit index (NFI), comparative fit index (CFI), and root mean square error of approximation (RMSEA) are used.

At the beginning of the study, certain demographic details were taken and a few questions related to the communication and social media apps were posed to the participants. The analysis derived from that is mentioned in Table 1. Majority of the respondents were students (82%), while 11% were salaried and 5% were housewives and the maximum number of participants were unmarried (96%). They had approximately 11 - 20 mobile apps downloaded on their smartphones, and they all had communication and social media apps where most of them had WhatsApp (99%), Instagram (86%), Facebook (71%) and TikTok (62%). It was found that the targeted group spent 2-3 hours a day on these mobile applications.

Measurement Model and Validity

Reliability of the scale was tested by considering the Cronbach's alpha value. The alpha value for all the variables

Table 1. Characteristics of Respondents		31–40	36	
Demographic Details	Frequency	More than 40	33	
City of Residence		Communication and Social Media		
Ahmedabad	60	Apps on Smartphones		
Vadodara	77	WhatsApp	261	
Surat	61	Facebook	187	
Rajkot	65	Facebook Messenger	139	
Profession		Instagram	225	
Student	216	Twitter	57	
Salaried	28	Snapchat	140	
Looking for work	4	LinkedIn	67	
Self-employed	3	TikTok	162	
Housewife	12	UC Browser	137	
Marital Status		Google Duo	135	
Married	11	Others	6	
Unmarried	252	Time Spent on These Apps in a Day		
No. of Apps They Have on Their Smartphones		Less than an hour	39	
Less than 10	43	2 – 3 hours	140	
11–20	92	4 – 5 hours	63	
21–30	59	6 + hours	21	

Table 2. KMO and Bartlett's Test

KMO and Bartlett's Test			
Kaiser–Meyer–Olkin Measure of Sampling Adequacy.			
Bartlett's Test of Sphericity	Approx. Chi-Square	2.653E3	
	Df	210	
	Sig.	.000	

Table 3. Model Fit Indices

	Α	В		
Test	Measurement Model Values	Structural Model Value	Reference Value	Reference
CMIN/DF	2.031	2.196	Less than 3	Chin & Gopal (1995)
GFI	0.888	0.875	More than 0.90	Hair et al. (2006)
CFI	0.929	0.916	More than 0.90	Hair et al. (2006)
TLI	0.914	0.901	More than 0.90	Hair et al. (2006)
RMSEA	0.063	0.068	Less than 0.1	Browne & Cudeck (1992)

was above 0.7 and hence considered for further analysis (Nunnally, 1978). For the factor analysis, one of the primary measures is KMO and Bartlett's test for sphericity. Result of the same (Table 2) obtained value for Kaiser – Meyer – Olkin (KMO) as 0.896 and Bartlett's test of sphericity value is significant (p = 0.000).

Based on this, exploratory factor analysis (EFA) was conducted, where the factor loadings for each item is above 0.7 and hence considerable (Hair et al., 2006). After that, the confirmatory factor analysis was performed by using a maximum likelihood method. The model fit value is exhibited in Table 3, where the value of CMIN/Df is 2.031, GFI is 0.888 (near to 0.90), CFI is 0.929, TLI is 0.914, and RMSEA is 0.063. The values are within the limit of their desired values; so, it can be said that the model is appropriate and has significant value.

To check the internal consistency of the scale, average variance extracted (AVE) and composite reliability (CR) are calculated. The results of post-CFA Cronbach's alpha, factor loading, CR, and AVE are exhibited in Table 4.

Table 4. Post CFA Cronbach's Alpha, Factor Loading, CR, and AVE

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Factors and Items	Cronbach's	Post CFA	CR	AVE
	Alpha Values	Factor Loadings		
Perceived Usefulness (PU)	0.826		0.834	0.628
Usage of apps enables me to acquire more information.		0.685		
Usage of apps improves my efficiency in sharing information		0.840		
and connecting with others.				
Usage of apps is beneficial for interaction between members.		0.842		
Perceived Enjoyment (PE)	0.846		0.849	0.589
I feel the usage of these apps is fun.		0852		
I feel the usage of these apps is exciting.		0.851		
I feel the usage of these apps is enjoyable.		0.628		
I feel the usage of these apps is interesting.		0.714		
Confirmation of Expectations (CE)	0.722		0.726	0.572

My experience with using apps is better than what I expected.		0.746		
The service level provided by apps is better than I expected.		0.726		
Overall, most of my expectations from using apps were confirmed.	i	0.576		
Satisfaction (S)	0.859		0.861	0.554
I am very satisfied with using apps.		0.704		
I am very pleased by using apps.		0.774		
I feel contented by using apps.		0.776		
I am absolutely delighted by using apps.		0.782		
My choice to use the apps is a wise one.		0.681		
Attitude (A)	0.837		0.838	0.634
Using apps is a good idea.		0.783		
Usage of apps makes the work more interesting.		0.748		
I like using these apps.		0.854		
Continuance Intention of Usage (CIU)	0.809		0.770	0.696
I want to continuously use these apps rather than discontinue.		0.851		
I intend to continue using apps rather than any alternative means.		0.879		
(e.g. rather than using SMS, I will use WhatsApp to chat.)				
If I could, I would like to discontinue the usage of these apps.		0.738		

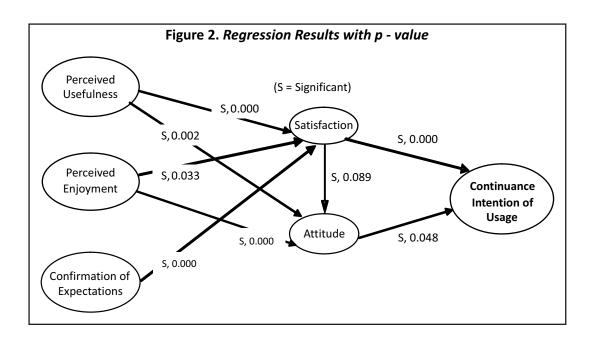
Structural Model Measurement

To evaluate the hypotheses, structural equation modelling is used in this study. The model fit values are shown in Table 3, where the value of CMIN/Df is 2.196, GFI is 0.875 (near to 0.90), CFI is 0.916, TLI is 0.901, and RMSEA is 0.068, which are acceptable values. The perceived value – perceived usefulness, perceived enjoyment, and confirmation of expectations are hypothesized to see the impact on satisfaction and attitude of the users.

Results derived from the data indicate (as shown in Table 5) that hypotheses H1, H2, H3, H4, H5 of the study are accepted and they have significant impact as antecedents on satisfaction as well as on attitude: PU -> S ($\beta = 0.284$, p = 0.000), PE -> S ($\beta = 0.196$, p = 0.033), and CE -> S ($\beta = 0.383$, p = 0.000), PU -> A ($\beta = 0.254$, p = 0.002), and PE -> A ($\beta = 0.342$, p = 0.000). As a result, it can be said that perceived usefulness and confirmation of expectations (highest beta value = 0.383) are the strongest predictors for satisfaction, while perceived

Table 5. Regression

Independent Variables	Dependent Variables	Beta Value	t - value	p - value
Perceived Usefulness	Satisfaction	0.284	3.579	0.000
Confirmation of Expectations	Satisfaction	0.383	3.320	0.000
Perceived Enjoyment	Satisfaction	0.196	2.136	0.033
Perceived Usefulness	Attitude	0.254	3.038	0.002
Perceived Enjoyment	Attitude	0.342	3.461	0.000
Satisfaction	Attitude	0.152	1.703	0.089
Satisfaction	Continuance Intention of Usage	0.752	6.048	0.000
Attitude	Continuance Intention of Usage	0.227	1.973	0.048



enjoyment is for attitude as the p-value for this relationship is 0.000. Moreover, hypotheses H6, H7, and H8 are also accepted as the outcome indicates that satisfaction has a significant impact on attitude (p = 0.089) and satisfaction and attitude play a significant role in the continuance intention of usage, where satisfaction has a strong impact on continuance intention of usage (p = 0.000). Figure 2 represents the outcome of the hypothesized relationships among the variables.

Conclusion and Implications

The objective of this study is to examine the factors affecting the continuance intention of usage for communication and social media apps among young women. It was assumed by us that once the users are satisfied and have a positive attitude, it leads them to use the apps regularly. So, satisfaction and attitude are taken as mediators which are affected by the perceived values, that is, perceived usefulness, perceived enjoyment, and confirmation of expectations based on past literature. The results of the study illustrate that all three constructs are significant as the antecedents to satisfy the customers and impact the users' attitude for the persistence usage of communication and social media apps. As the analysis of data reveals that perceived usefulness and confirmation of expectations are the main predictors to satisfy the users, the findings are similar to the results obtained from the study done by Kim et al. (2014), who studied the determinants of the post-adoption behaviour of mobile communication applications. Another result of this study states that perceived enjoyment and usefulness impact the attitude of the users and leads to regular usage, which is supported by the results obtained by Yang (2013), who examined the factors for acceptance of mobile apps among young consumers of America.

Further, the two mediators – satisfaction and attitude – play a major role in determining the regular usage of communication and social media apps by the users and that is proven by the findings of this study. The results also support the research conducted by Amoroso and Lim (2017), who studied the mediating effects of habit on continuance intention, and Setyawan et al. (2017), who examined the factors affecting continuance intentions and recommendation for the information-based mobile applications. Once the consumer is satisfied, it creates a positive attitude and hence the hypothesis H6 is accepted and is significantly supported by the study results of Amoroso and Lim (2017).

Generally, communication and social media apps are used to connect with friends and family members to acquire more information and share information, emotions, and feelings with others. Perceived usefulness contains the same items in this study and is proven as the most significant factor for satisfaction, which means that once these expectations are satisfied, the users are mostly bound to get habituated for the usage and they use these apps ceaselessly. Moreover, when the expectations related to services and experiences are served in a better manner by the app developers, this pleases the users for non-stop usage of the apps. Besides this, consumers adopt communication and social media apps out of interest for fun and entertainment. These are the characteristics of perceived enjoyment, which once satisfied, form a positive attitude. This is also proven in this study as perceived enjoyment is the most significant construct for building up a positive attitude for the relentless use of communication and social media apps by young women.

To mitigate the gender gap in the usage of mobile applications, mobile app developers can take note of these proven factors while developing an app which leads young women towards the persistent use of apps. By gratifying these factors, marketers and app developers can grab the attention of women for the adoption of mobile apps and make them habituated for their continuous usage. Further, they should also keep in mind that the apps must be fun-loving and engaging enough to entertain the customers so that they bound to use the apps daily and the purpose of marketers to use mobile apps as a communication channel and of developers for forming these apps is served.

Limitations of the Study and the Way Forward

This study has covered young women aged 18 – 24 years only, while the scope is not limited to this age group as the usage of communication and social media apps may differ in the middle aged and senior women (above age 55 years). Moreover, the adoption of these apps is also growing in the rural market, which is also an interesting area to be examined with the same group or the other one. Furthermore, it is imperative to see the behaviour of women in adopting and using other categorical apps such as video streaming apps like Youtube, TikTok, etc. as these categories of apps are getting wide acceptance across all age groups.

Authors' Contribution

Dr. Palak Gadhiya conceived the idea to undertake this study. She extracted research papers with high repute, filtered these based on keywords, and generated concepts and codes relevant to the study design. Both the authors designed the research and collected data from the respondents. Dr. Nilam Panchal helped in data entry and data analysis using MS Excel, SPSS 18, and AMOS 18. Dr. Palak Gadhiya wrote the manuscript in consultation with Dr. Nilam Panchal.

Conflict of Interest

The authors certify that they have no affiliations with or involvement in any organization or entity with any financial interest, or non-financial interest in the subject matter, or materials discussed in this manuscript.

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