

# Discrepancy in Uses and Gratifications for Smartphone and their Effects on Online Socialization Patterns among University Youth

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# ABSTRACT

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The objectives are to explain the effects of political, business, educational, religious, communication, companionship, social interaction, passing time, escapist, relaxation, and entertainment uses and gratifications for smartphone (independent variables) use on online socialization patterns (dependent variable). Current study is done with the background of uses and gratifications in context of smartphone use to explain the increasing online socialization and less offline communication. By using quota sampling technique university students are selected from the four provinces of Pakistan (N = 763) through online questionnaire. The social interaction uses and gratifications for smartphone use make the strongest contribution to the virtual socialization patterns. However, the educational motives uses and gratifications do not significantly predict the virtual socialization patterns. It is suggested to teachers to use smartphone as a tool in pedagogy with caution.

# **KEYWORDS** Effects, Smartphone Use, Uses and Gratifications (U&G), Online Socialization Introduction

The rapid development of communication technology has affected culture globally and changing how societies socialize and communicate. This advancement is diffusing rapidly in the society. The mobile phone era is divided into three main phases. First phase began with the dawn of The Simon from International Business Machines (IBM) in 1993 where Blackberry was an innovation and targeted enterprise (Niccolai & Gohring 2010). In the second stage, there was marketing of iPhone in 2007 by Apple for its general consumers (Qureshi, 2012). At the same time Google uncovered android operating system to reach smartphone consumer market by introducing new features at lower cost that enticed many customers for usage (Costello, 2012). Smartphone is one such technology and its usage is expanding in the whole world. There are so many features in the mobile phones and the advent of Android technology is the most new inclination in this series whose usage is growing by leaps and bounds (Kumar & Rathi, 2013). The smartphone ownership is growing rapidly around the world, but not equally, because in the emerging economies, the technology use is still common among youth and those who are highly qualified (Silver, 2019).

Smartphone is the main source of social change. It will not be wrong to say that it has worked as a catalyst. Social patterns in youth are changing and some of the social and cultural changes are taking place due to the expansion of technology. Simple mobile phone facilitates the individuals to send and receive small message service but with the help of smartphone the user can switch to small message service to social networking sites (Bertel, 2011). Zulqarnain and Hassan (2017) explored the preferred sources of news in the social and traditional media among university students in Pakistan and they found that 67% students are spending more than four hours in a day for social media (Muzaffar, et. al 2020)

The contemporary era of smartphones is the one in which "smartphones and social media are enabling the continuous stream of social contact online with the changes in sociality to pervasive and perpetual mediated presence of friends" (Thulin, Vilhelmson, & Schwanen, 2019). Smartphone have become predominant in recent years among many age groups specifically youth in Pakistan. The respondents were found to be using social networking applications with the help of smartphone (Muzaffar, et. al 2019; Malik & Shahzad, 2016).

While people of various ages find it expedient and useful but young generation have a tendency to hang on it for the gratifications of different needs of lives. These innovations are impacting cultures, creating sub-cultures and bringing changes in the social patterns of youth. Such research is the focus of academia in context of youth and specifically the university students because the educational institutes are integrating these technologies for pedagogy. It is therefore aimed to research the use and gratifications for smartphone use and how they are changing the virtual socialization of youth in Pakistan.

## **Literature Review**

Goggin (2012) writes about usage of cell phone culture, explains the usage of cell phone and its link with culture:

"Cell phones, mobile technologies, and wireless networks play an essential role in the everyday lives of cellphone users. A lot of cultural activities turn around cell phones remaining in constant contact, text messaging, fashion, identity-construction, music, mundane daily work routines, remote parenting, interacting with television programs, watching video, surfing the Internet, meeting new people, dating, flirting, loving, bullying, mobile commerce, and tracing people (p.17)."

Westlund, (2010) argues that mobile phone has evolved from essentially an interpersonal communication device to a multimedia machine providing always on Internet connection. This article focuses on questions related to usability and cost for using the mobile as a news medium, drawing upon cross-cultural data gathered in Sweden and Japan during fall 2007. Although Japan and Sweden have superficially equivalent news media systems, the Japanese more favorably perceive the usefulness of accessing news on the mobile than do Swedes. However, the Japanese judge mobile news as more expensive and are less willing to pay for it. In reporting on this research, the article illustrates some of the methodological challenges in doing cross-cultural comparisons.

Many Information and Commnication Technologies (ICTs) had a deep impact on cultures and life styles in the past. What are commonly referred to as mobile phones clearly represent such an ICT. The article by Westlund (2010) uses the term 'mobile device' (rather than 'mobile phone') to emphasize that the mobile has developed into a technology that integrated multimedia functions. Multimedia functionality means that the mobile device can handle audio, video, graphics, text and animation in an interactive manner. The diffusion of handsets capable of functioning as mobile multimedia devices is constantly increasing worldwide. This diffusion is a consequence of the improved technological architecture of mobile devices and the pace of replacements

Mobile phones with the Internet access and multimedia capabilities, also known as "smartphones," have become ubiquitous. Modality can refer to communication channel (i.e. text) and its temporal (e.g., synchronous versus asynchronous) and spatial characteristics for example the distance and the location (Chan, 2014, p.5).

Smartphone is used in minutes and hours with difference in the frequency for diverse functions and multiple features (Haug et al., 2015). Smartphone has all these multimodal characteristics. Chan (2018) has researched the most common uses of smartphone for social interactions with close friends including social media platforms such

as Facebook and Whats' App; and Whats' App is found to be the most frequent form of communication for 18-34 and 35-55 cohorts.

Smartphone is not only a technological device but rather has turned into an emotional digital companion because youth today keep constantly in touch with its screen thus the human-human-relationships are turning into human-smart phone-relationships (Thulin, Vilhelmson, & Schwanen, 2019). Smartphone merges everything, especially the phone and the internet into a single device. On the other hand, it includes text messaging, voice calling, sharing pictures, listening music, arranging personal schedules, checking emails, exploring social networking applications as defined by Kukulska-Hulma and Traxler (2005). A smartphone or a cellular phone may perform many of the functions of a computer. These functions include having a touchscreen interface, Internet access, and an operating system capable of running and downloading apps.

The above literature enlightens that smartphone (s) are the devices used by the people for communication and interaction with each another. Smartphones are the mobile phones which have different functions as compared to old mobile phones. With the help of smartphones individuals can use social networking services like Whats' App, Twitter, Facebook, and Viber etc. It needs more attention of users as compared to simple phone. Smartphone aid the people and it is an important part of their daily live. Simple mobile phone facilitates the individuals to send and receive the Small Message Services (SMS) but smartphone facilitate the user for multi-tasking.

According to the sociologists, the process of human socialization is a combination of two factors: nature and nurture (Collins et al 2000). The nurture is related to environment. The online environment of internet enables the utilization of smartphone and youth are socialized into. The meaning of socialization is in fact the manner of becoming social. Socialization is an elementary humanoid characteristic. As explained by Aristotle, man is a social animal and cannot survive in loneliness without any social bonding (Gilje & Skirbekk, 2001).

In the context of knowledge-creation communities, socialization has been defined in terms of knowledge-sharing communication process. Specifically, Nonaka and Takeuchi (1995, p.62) have defined socialization "as a process of sharing experiences and thereby creating tacit knowledge such as shared mental models and technical skills." This study relies on this view of socialization and examines socialization in terms of communication. The process of communication has been defined as one "in which a message acts as a linkage between people" (Applbaum, Bodaken, Sereno & Anatol, 1974, p.8). In the process of socialization is key because it provides both the cause and effect.

McCreery, Vallett, Clark (2015) found the bi-directional nature of social interactions, socio interactivity, social affective association, community cohesion, interaction intensity, knowledge and experience of users in virtual environments. In virtual world an individual does not like and does not feel need of peer group. He or she is captured in digital socialization and likes to make associations in virtual community.

In Pakistan, people exclusively the youth are getting more intricate in virtual socialization. Now-a-days, youth stay in contact with their family and friends at every moment even though any remoteness, commitments or busy plan. Online communication via smartphone predominantly with the aid of applications like Facebook, Twitter, LinkedIn and Instagram is progressively becoming more common as well as simply turning handy (Muzaffar & Javaid, 2018; Hussain & Saleem, 2016).

People love to share their status, pictures, videos and any interesting information on their profile. Youth of nowadays does not hesitate to share their personal status and pictures publicly, which is not socially acceptable a generation ago. Technology is leading the society towards virtual socialization leaving the face-to-face communication far behind. This dependency on virtual relations is driving the society towards social transformation and change in social patterns of communication from face-to-face to virtual (Saleem, 2015).

Domahidi, Scharkow & Quandt (2012) conclude that despite public fear of community life replacement by virtual life, there is an expansion of social connectivity among youth in America. People are more comfortable in virtual networking platforms. They are virtually alive by communicating through the Internet, checking on each other's status and feeling that they all are in touch. This dependency on virtual life results into social isolation because the virtual life is so different from real life. While interacting in a virtual community, people may feel that in spite of knowing each other, they really do not. In fact, they have no idea who the real person behind the window is. Most of the time, the youth is in online communication with family and close friends. There is a direct relation between weak offline relations and heavy exposure to social networking sites (Saleem, Malik, Ali, & Hanan, 2014).

Handheld smartphone device engage students in more dynamic ways than a lap top or tablet computer (Hingorani, et al. 2012). Smartphone today is perceived as the most useful communication device as a mean to contact friends and families (Ahad & Anshari, 2017).The significant number of undergraduate students have reported that they use apps to find academic information (Bomhold, 2013). Saleem, Malik, Ali and Hanan (2014) researched with the objectives that excessive use of social networking sites create isolation amongst the youth from their strong relationships like family, friends and colleagues and they find that heavier users of these sites tend to be more isolated, however, social networking sites are used more for interaction with strong ties rather than weak ties. Smart phones differs from traditional mobile telephones because smart phones have diverse applications which the users can customize and these smart phones enable people to use advanced functionalities (de Reuver, et al., 2016).

It is extended from the literature that the individual motives for smartphone usage enabled by the social media applications like Facebook and What's App is leading to social continuous engagement online. In fact, mobile digital media have afforded new motives of socializing in space and time for youth. The virtual groups enabled by smartphone usage are the online groups which are always-open places where youth and students in particular can socialize not only with family at the domestic level but also with outside friends, teachers and the class fellows and this process of socialization with the help of smartphone applications like Facebook, What's app is conceptualized as the virtual socialization for the current study.

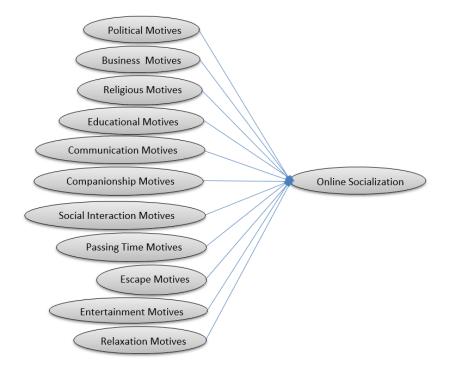
## **Theoretical Framework**

Keeping in view the "Smartphone usage as the predictor of Social Patterns and Monadic Culture" The "Uses and Gratification Theory" is quite appropriate to gauge technology use in society. So, for this study researcher will chose assumptions of this theory. By knowing the aspect of this theory will help in pilot study to investigate which type of needs is gratified by the usage of smartphones by youth.

McQuail (2005) summarized the concept of Uses and Gratifications theory as follows:

- The choice of Media and its content is cogent. Audience is active and use media for convinced objectives and pleasure.
- Audience is sensible to media related needs which rise in individual and social shared surroundings.
- Generally, cultural and aesthetic features of content play much less part in attracting audiences as compare the fulfillment of numerous private and social needs like relaxation, shared experience, passing time etc. (McQuail 2010, p.424).

Content of uses and gratifications is about the audience's usage of media. Audiences use media to gratify their certain needs such as needs for information, companionship, relaxation, diversion etc. Audience's approach is different to use new media and even usage of telephone. Different media is associated with differences of expectation and gratification. In this way researcher's thinking belong to research known as the usage and gratification approach. For the last 50 years various list of the motives have been submitted by people and researchers have been complied them. Why people voluntary expose themselves to different media. Rubin (1984) explained eight motives reported by people for Uses and Gratifications or why they watch television? These motives are: pass time; companionship; escape; enjoyment; social Interaction; relaxation; information and excitement (Griffin, 2012, p.361).



**Figure 1.** Extended Model for Discrepancy in Uses and Gratifications for Smartphone Use and their Effects on Online Socialization Patterns among University Youth

Information is generic category and it is not selected for the current study. The motives for television viewing are extended and motives for smartphone usage for the current study are political motives, business motives, and religious motives, educational motives, communication motives, and companionship motives, social interaction motives, passing time motives, escape motives, entertainment motives and relaxation motives. Although, individuals are empowered but uses and gratifications theory does not define the effects. The current study hypothesizes that dependency on certain gratifications may affect the virtual socialization patterns of university students. It is of importance to know that which motives lead to more virtual or online socialization patterns. It is therefore, the hypothesis for the study is:

**H.** Uses and Gratifications for smartphone use are likely to predict virtual socialization patterns of university students.

## **Material and Methods**

The study utilizes the cross-sectional design. The universe for the current study is youth of Pakistan between the ages of 15 and 30. The United Nations Development Programme has also defined youth in this category (Ahmad, 2018). Following points would

illustrate how this segment of the society is important for the study keeping in view the topic of the study.

- Youth population is most likely to have usage of smartphone in relation with other segments of the society. Hence, it is important for the researcher to choose youth as the population of the study.
- Secondly youth is more easily available and in bulk accessible to the researcher which made data collection smooth and running.
- Some of the domains of the dependent variables are most suitable for youth like the virtual socialization patterns and the absent-presence situations.

Keeping in view the objectives and scope of the study university students are selected as the population of the study. The primary reason is that the study needs knowledgeable and those respondents who have a sense of the use of digital technology. Hence, university students are the most appropriate unit of analysis for the study. Pakistan is a bi-lingual nation and in most of the universities the curriculum is in English language and filling questionnaire in this language is not difficult for the university students.

The study utilizes the quota sampling technique for the selection of sample of youth. The well-designed "quota sampling" is an acceptable non-probability substitute method for producing a quasi-representative sample and the criteria for the sample selection through this technique is:

- Identification of relevant categories among the population;
- Determining the number of cases in each category (Neuman, 2014).

In order to ensure the representation of all students of Pakistan who roughly correspond to the category of youth between the ages of 15 and 30, at first, the categories of one university from four provinces of Pakistan (e.g. Balochistan, Khyberpakhtunkhawa, Punjab and Sindh) are established. The method used for the study is survey. The tool for the data collection is the questionnaire. The Table 4.1 below shows the hierarchy of first order (outer model), second order variables (inner models), independent and dependent variables aligned with the objectives, research questions and the hypotheses.

The previous research is extended (Rubin, 1984, Hussain & Saleem, 2016, Saleem, 2016) for the conceptualization. In this way the face validity is ensured. The conceptualization and operationalization of variables will be provided upon request.

The response format for all the continuous variables is the 9-point ordinal scale ranging from, "1 = strongly disagree;" "2 = disagree;" "3 = moderately disagree;" "4 = mildly disagree;" "5 = undecided;" "6 = mildly agree;" "7 = moderately agree;" "8 = agree;" and "9 = strongly agree."

The Statistical Package for Social Sciences version 21 is utilized to analyze data. The Cronbach Alpha values of the continuous scales are reported. The descriptive statistics like frequencies, percentage are reported for the sample characteristics or the demographics of the students. The means, standard deviations are used to explain the items of scales. The multiple regressions are applied to see the impact of independent variables on dependent variable.

## **Results and Discussion**

For checking the reliability of the scales, the sample size taken is 50 students. The Cronbach alpha coefficient of a scale should be above 0.7 (DeVellis, 2003). It is evident that the reliability of the scales ranges between 0.716 and 0.970 which are above 0.7.

The respondents had ranged between less than 18 years of age and more than 26 years; however, the mean age of respondents was 21 years (M = 21, SD = 2.736). The respondents (N = 763) had belonged to Punjab (26%), Sindh (25%), Khyber Pakhtunkhawa (25%) and Balochistan (24%). The male students (52%) are more than the female respondents (48%). Most of the university students are from urban areas which is 60% and remaining 40% are from the rural areas. Sixty nine percent (69%) respondents belong to bachelor level of studies and 31% belong to other levels of educational studies. Majority of university students with 20% belong to eighth semester, 18% belong to fourth semester, 17% belong to second and rest of the students belong to other semesters.

First of all the conditions for regression are met by taking guidelines from Pallant (2007). The correlations of all independent variables with the dependent variable of absence presence situations are near and above .3 and all the correlations are not above .7. It is therefore all variables are retained. There are no multi-collinearity issues. The tolerance values are below 10 and the variance inflation factor values are above .10. The outliers are identified from scatter plot and are removed.

Table 1
Model Summary for Uses and Gratifications as Predictors of Virtual Socialization
Pattorns

Model	R	R	Adjusted	•	Change Statistics						
		Square	R Square	of the	R	F	df1	df2	Sig. F	Watson	
				Estimate	Square	Change					
Change											
1	.771ª	.595	.589	4.37444	.595	96.192	11	721	.000	1.970	
a. Predictors: (Constant). Escapist Motives. Business Motives. Political Motives. Religious Motives. Passing Time											

a. Predictors: (Constant), Escapist Motives, Business Motives, Political Motives, Religious Motives, Passing Time Motives, Companionship Motives, Educational Motives, Entertainment Motives, Social Interaction Motives, Relaxation Motives, Communication Motives

b. Dependent Variable: Virtual Socialization Patterns

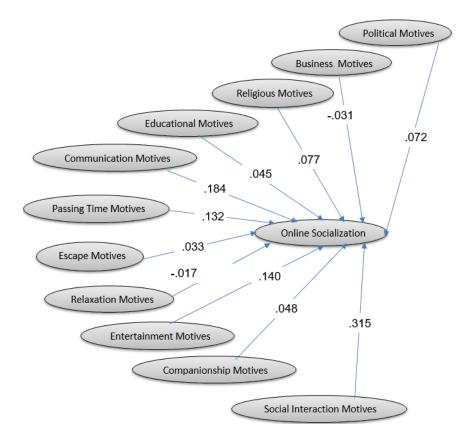
Table 1 reflects that the proposed model—which includes the independent variables of political, business, educational, religious, social interaction, communication, escapist, entertainment, relaxation passing time and companionship for smartphone use—explains the variance of 58.9 percent in the dependent variable of virtual socialization patterns among university students in Pakistan.

Table 2																		
Uses and Gratifications as Predictors of Virtual Socialization Patterns Coefficients																		
Model	Unstandardized Coefficients		Standardized Coefficients	– t Sig	95.0% Confidence Interval for B		Со	relations	Collinearity Statistics									
Model	В	Std. Error	Beta	t Sig.	Lower Bound	Upper Bound	Zero- order	Partial Part	Tolerance	VIF								
(Constant)	5.711	1.017		5.616.000	3.715	7.708												
Political	.052	.020	.072	2.562.011	.012	.091	.360	.095 .061	.707	1.413								
Business	027	.033	031	817.414	091	.038	.552	030019	.392	2.553								
Educational	.038	.030	.045	1.255.210	021	.098	.569	.047 .030	.428	2.334								
Religious	.058	.022	.077	2.633.009	.015	.102	.464	.098 .062	.653	1.532								
Communication	.164	.037	.184	4.459.000	.092	.237	.640	.164 .106	.330	3.027								
Companionship	.036	.024	.048	1.508.132	011	.084	.494	.056 .036	.546	1.832								
Social Interaction	.324	.042	.315	7.796.000	.242	.405	.696	.279 .185	.344	2.908								
Entertainment	.105	.027	.140	3.867.000	.051	.158	.585	.143 .092	.428	2.339								
Passing Time	.101	.027	.132	3.817.000	.049	.153	.577	.141 .090	.474	2.112								
Relaxation	011	.024	017	461.645	059	.037	.355	017011	.395	2.532								
Escapist	.022	.025	.033	.895 .371	026	.070	.349	.033 .021	.419	2.389								
a Dopondont Var	iable Vi	rtual Socializ	ation Pattorns				a Dependent Variable: Virtual Socialization Patterns											

a. Dependent Variable: Virtual Socialization Patterns

Table 2 elaborates the predictors of virtual socialization patterns. The political, religious, social interaction, communication, passing time and entertainment motives or the uses and gratifications for smartphone usage are the significant predictors of virtual socialization patterns among university students in Pakistan. The variable of social interaction motives makes the most unique contribution to the variable of virtual

socialization patterns. Besides, the variables of communication, passing time and entertainment also make unique contributions to the variable of virtual socialization patterns. However, the variables of political and religious uses and gratifications make the least contribution to the dependent variable of virtual socialization patterns.



**Figure 1.** Findings for the Extended Model for Discrepancy in Uses and Gratifications for Smartphone Use and their Effects on Online Socialization Patterns among University Youth

The educational uses and gratifications for smartphone use are not found as the significant predictor of virtual socialization patterns. It is inferred from the results that the potential of smartphone use for educational uses and gratifications is not yet realized among university students in Pakistan. The smartphone is empowering university students for social interaction and communication in online space. But smartphone's use for entertainment and passing time is a concern especially when university students in Pakistan are in question.

## Conclusion

The study has implications for teachers and the students themselves. The university students are virtually socializing with the motives of social interaction, communication, passing time entertainment, religious and political uses and gratifications. The smartphone and its integration in pedagogy is a vital concern. Since, it is found that university students are using smartphone more for social interaction, communication, passing time and entertainment, it means that integrating smartphone in pedagogy will lead to useless discussions by university students on smartphone. Here, the teacher's role will be of importance because he or she will have to use smartphone with cautions to communicate with university students. They can apply privacy settings to avoid useless discussions. There is no substitute to offline communication, it is therefore the students should be encouraged to communicate in face-to-face discussions for refinement of argument and useful discussion in context of lesson.

#### Recommendations

The smartphone is used more for the social interaction than for the educational and business motives. It is therefore suggested that teachers should focus more on the face-toface discussions and smartphone can only play a supportive role for such discussions. Teachers should realize the fact that they cannot fully depend on the smartphone for educational purposes because there is no substitute to face-to-face discussions. The smartphone for using social interactions may comprise the use of smartphone and Whats' App more for rumors, backbiting, and bullying rather than for educational uses and gratifications. Therefore teachers should focus less on using smartphone for educational purposes. It can only be used for sharing supportive academic material not for discussion.

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