



RESEARCH PAPER

Offline versus Virtual Socialization Patterns and Smartphone: A Study of Pakistani Youth

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PAPER INFO

Received:

April 12, 2020

Accepted:

June 15, 2020

Online:

June 30, 2020

Keywords:

Socialization,
Smartphone,
Demographics,
Triangulation of
Theories, Survey

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ABSTRACT

The current study contributes by researching the associations of levels of offline socialization patterns with the virtual socialization ones. The controlled effects of time for Smartphone usage and gender are also explained. The study utilizes the convenience sampling technique and selects the students (N=215) from the two educational institutes of Lahore. By using quantitative approach of cross-sectional survey the data is collected through offline survey with the help of a questionnaire. Descriptive statistics reveal that the students are gratifying smart phone to virtually socialize with their friends, class fellows and teachers. The medium levels of correlations are found for the offline and virtual socialization patterns for seeking news and interaction with the class fellows. The significant controlled effects are visible for the time for Smartphone usage and the gender. The triangulation of theories enriches the analysis. The teachers should use Whats' App effectively for teaching purposes.

Introduction

There is an influence of the social networking sites on interaction patterns of youth in Pakistan, excessive use of these sites for interaction with strangers and their effect on the strong relationships like family, friends and colleagues has revealed that there is a strong correlation between time spent on social networking sites and the isolation(Saleem, Malik, Ali, & Hanan, 2014). The cyber or virtual socialization is the reason for the social transformation. The impact of social networking sites on face-to-face socialization; the involvement in online relations and activities; and the trends of virtual socialization are researched and it is found that communication through traditional mail and face-to-face communication has decreased(Saleem, 2016).

There is an increase in the social media in urban Pakistan and the internet use affects the youth and displaces them physically from social capital but they are also getting closer virtually (Muzaffar, et. al 2019 & Siraj, 2018). The virtual socialization in

the literature is also known as cyber socialization, online socialization, internet socialization and the digital socialization (Lenkov & Rubtsova, 2019). Smartphone has changed the socialization patterns, face-to-face communication is decreasing and people like to communicate online. There is confusion related to whether offline socialization is displaced by the virtual socialization enabled by time spent for smart phone usage on daily, Saturday and the Sunday among the categories of male and female gender and age groups.

Literature Review

The friend-ship in the virtual spaces is thoroughly different from real-world friendship. In the traditional sense friendship means sharing of mutual interests, reciprocity, trust and the revelation of the intimate details over time with specific social or cultural context but the virtual friendship is the bureaucratized, and focuses on collecting, managing and raking the people (Rosen, 2007).

The rationale or the selection of the smart phone is that the smart phones have multiple features and resemble an average computer, can engage students in dynamic ways than a lap top or the tablet, in this context, the universities will have to continue to shape their curriculum to meet the demand of virtually connected students (Hingorani, Woodard, & Askar-Danesh, 2012). The smart phone is a hybrid medium for the gratifications of mass communications and the entertainment among youth, users of smart phone can make calls, send, receive text and photo messages including short message services (Wei, 2008).

The smart-phone is multimodal because it affords mobile synchronous text assisted forms of communication with the aid of messaging applications through which individuals can communicate through e-mail, social network sites and the messaging (Chan, 2015). The different smart phone usage in the previous research have been conceptualized as voice, email, small message service, Facebook and WhatsApp (Chan, 2018). Individuals with the extrovert personality have reported an emphasis on the texting function of the smart phones and the individuals with the agreeable personality trait are reported to place greater emphasis on smart phone usage for making calls (Lane & Manner, 2011).

The global social network increased until young adulthood and then decreased steadily, the family network is stable in size from adolescence to old age but people of different ages differ in the strength of relational ties, motivational goals for the social communication (Wrzus, Hänel, Wagner, & Neyer, 2013). There is a challenge how people will adapt to technological innovations in order to enact relationships (Stafford & Hillyer, 2012).

The heavy communicators have larger and diverse personal networks compared to light communicators and these individuals use the communication technology in a large communication system to stay socially connected (Boase, 2008).

The socializing factor and the privacy are found to be prominent elements and female gender use their cell phones more to socialize (Balakrishnan & Raj, 2012).

Theoretical Framework

The current study triangulates the theories of uses and gratifications, belongingness hypothesis, media multiplexity theory and the displacement theory. The audience gratifications can be derived from at least three distinct sources like content of the media, the exposure to it and the specific social context that typifies the situation of the exposure to different media (Katz, Blumler, & Gurevitch, 1973). Previously it is reported that mass communication is used by the individuals to connect or sometimes disconnect themselves via instrumental, affective or integrative relations with different kinds of others like the self, family, friends or even nations (Katz, Haas, & Gurevitch, 1973).

Today the new medium of smart phone is the reason to expose to various contents in contexts. According to belongingness hypothesis, first the individuals require frequent cordial social interactions with others and on the second level they feel that these relationships are meaningful and sustainable (Baumeister & Leary, 1995). It is argued in a recent research that by affording anytime anywhere communications, mobiles enhance relationship quality and gratifies the need to belong (Chan, 2018).

Individuals usually prefer to use a variety of communication channels to maintain relationships with people who are emotionally close to them which is called media multiplexity (Chan, 2014).

In context of Pakistani culture youth are observed to be attached with their family, friends, teachers and the class fellows with the help of smart phone usage.

To study displacement in contexts of media, communication and humans, there are three distinct approaches reported which are media displacement, time displacement and the functional displacement. The functional displacement (Lee & Lee, 2015) is "if new media fulfills needs and purposes similar to those fulfilled by an old medium, the new media are likely to replace the old media." The time spent with the books and newspapers might be negatively correlated with time spent for watching television which is a kind of displacement of activities with functional similarity in view of Neuman (1988).

The smart phone provides many a functions like virtually communicating with the family, friends, class fellows, teachers, doing online banking, doing online shopping and the reading. The functions of offline socialization are observed to be displaced by the smart phone enabled virtual functions which are termed as virtual socialization. Therefore the hypothesis is formulated.

H₁: Levels of offline socialization are likely to be negatively correlated with the virtual socialization.

There is a possibility of the difference in the offline and virtual socialization processes for the time spent for the smart phone usage and the demographics of students, therefore, the following research questions are formulated to enrich the analysis.

RQ₁ What is the controlled effect of time for smart phone usage for the relationships of the levels of offline socialization with the virtual socialization?

RQ₂ What is the controlled effect of gender for the associations of offline and virtual socialization patterns?

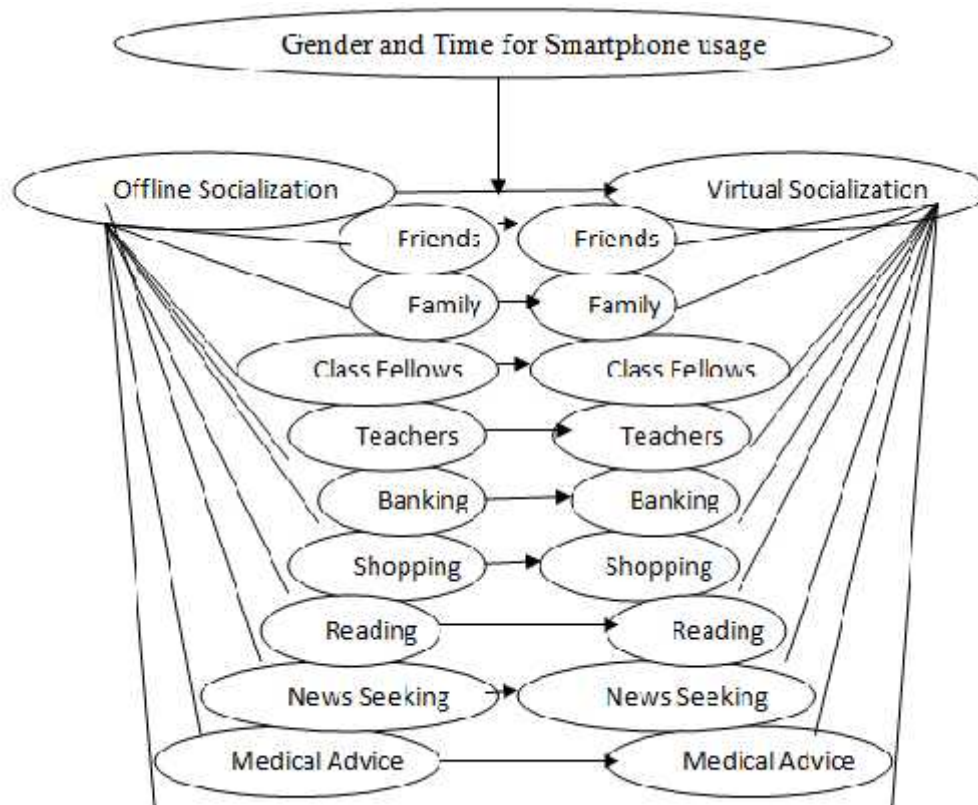


Figure 1. Extended Model for the Correlations of Diverse levels of Offline Socialization to Virtual Socialization and the effect of Gender and Time for Smart Phone Usage

Material and Methods

The population for the study is the youth between the ages of 18 and 33. By using the convenience sampling technique the current study selects students from two universities i.e. University of the Punjab and University of the Central Punjab in Lahore. The sample size is 200 students. The study utilizes the cross sectional design. The three major constructs for the study are offline socialization, smart phone usage and virtual socialization.

The smart phone usage is conceptualized as the use of smart phone on daily basis and on Saturdays as well as on Sundays either in minutes or hours. The offline socialization for the study is conceptualized as the offline socialization for the functions like communicating with the friends, family, teachers and the class fellows, for doing banking, doing shopping, reading, seeking news and looking for the medical advice.

The virtual socialization is conceptualized as the use of smart phone applications like Facebook, Whats'App, You Tube, Google and Internet to communicate with friends, family, teachers, class fellows; and the mobile applications enabled smart phone usage for banking, online shopping, online reading, online news seeking, and seeking the online medical advice.

The smart phone usage is proposed to be operationalized on three items with 9 point nominal scale. The offline socialization is proposed to be operationalized on twenty seven itemson five point ordinal scale. The virtual socialization is proposed to be operationalized on twenty one itemson five point ordinal scale. The gender is proposed to be measured on two point nominal scale. The age of the respondent is measured on four point nominal scale. The preferred residence is measured on four point nominal scale. The marital status is measured on 2 point nominal scale. The educational level is measured on 4 point nominal scale. The belonging to province is proposed to be measured on a 4 point nominal scale. The belonging to city is measured on two point nominal scale.

The mobile phone ownership is measured on the two point nominal scale.

The descriptive statistics like mean and standard deviation are reported for the variables. To research the hypothesis, the reliability test is performed to check the internal consistency among items for the continuous indices and scales of offline socialization and virtual socialization by using Cronbach Alpha on Statistical Package for Social Sciences 21. The correlation test is applied to see the levels of correlations for the 9 independent variables of offline socialization with friends, offline socialization with family, offline socialization with class fellows, offline socialization with teachers, offline shopping, offline banking, offline reading, offline news seeking, offline medical advice with the dependent variables of virtual socialization with friends, virtual socialization with family, virtual socialization with class fellows, virtual socialization with teachers, virtual shopping, virtual banking, virtual reading, virtual news seeking and the virtual medical advice. Next, the partial correlation test is used to research the

controlled effect of time for smart phone usage and the gender for the associations of independent variables of offline socialization and the dependent variables of virtual socialization patterns.

Results and Discussion

Table 1
Demographics of Respondents (N = 215)

Variables	Attributes	F	%
Gender	male	105	49
	female	110	51
Age	18-22	88	41
	22-25	89	41
	26-29	17	8
	30-33	13	6
	other	8	4
	preferred residence	home	80
educational institute		75	35
hostel		27	13
job		26	12
other		7	3
marital status	single	26	12
	married	184	86
	divorced	5	2
educational level	undergraduate	103	48
	masters	49	23
	M.Phil	63	29
monthly income	low	143	66
	middle	36	17
	high	36	17
province	Punjab	205	95
	Sindh	3	2
	Balochistan	2	1
	NWFP	3	2
city	Lahore	149	69
	Other	66	31

Table 1 presents that there is almost equal number of male (49%) and female (51%) respondents. Majority of these respondents are between the ages of eighteen and twenty five years (82%). For most of the students the preferred residence is home (37%) followed by educational institute (35%). Majority of students are married (86%) and most of them are the undergraduate students (48%) and remaining are the post graduates enrolled either in masters (23%) and M.Phil programs (29%).

Table 2
Smartphone Usage and Offline versus Virtual Socialization Patterns (N = 215)

Variable(s)	Items	M	SD	Total Mean	α
smartphone usage	On an average day how often do you happen to use smart phone?	4.874	2.366	5.164	.883
	How often do you happen to use smart phone on Saturday?	5.251	2.476		
	How often do you happen to use smart phone on Sunday?	5.367	2.635		
offline friendship	I do face-to-face conversation with friends on daily basis	2.921	1.390	2.890	.646
	I do face-to-face conversation with friends on Saturday	2.814	1.361		
	I do face-to-face conversation with friends on Sunday	2.935	1.423		
virtual friendship	I use smart phone to communicate with friends	3.507	1.450	3.340	.713
	I use Facebook application on smart phone to communicate with friends	2.749	1.431		
	I use WhatsApp on smart phone to communicate with friends	3.763	1.382		
offline socialization with family	I do face-to-face conversation with family on daily basis	3.367	1.513	3.521	.785
	I do face-to-face conversation with family on Saturday	3.502	1.346		
	I do face-to-face conversation with family on Sunday	3.693	1.417		
virtual socialization with family	I use smart phone to communicate with family	3.177	1.393	3.020	.562
	I use Facebook application on smart phone to communicate with family	2.502	1.318		
	I use WhatsApp on smart phone to communicate with family	3.381	1.409		
offline socialization with class fellows	I do face-to-face conversation with class fellows before the classes at the educational institute	2.874	1.367	2.836	.577
	I do face-to-face conversation with the class fellows after the classes	2.921	1.252		
	I do face-to-face conversation with the class fellows either on Saturdays or Sundays	2.712	1.343		
virtual socialization with class fellows	I use smart phone to communicate with my class fellows	3.307	1.329	3.178	.617
	I use Facebook application on smart phone to communicate with class fellows	2.670	1.318		
	I use WhatsApp on smart phone to communicate with class fellows	3.558	1.372		
offline socialization with teachers	I do face-to-face conversation with the teachers in the class room	2.940	1.374	2.727	.690
	I do face-to-face conversation with the teachers after the class hours	2.456	1.175		
	I do face-to-face conversation with the teacher because it assists me in my studies	2.786	1.367		
virtual socialization with teachers	I use smart phone to communicate with teachers	2.758	1.328	2.746	.620
	I use Facebook application on smart phone to	2.391	1.266		

	communicate with teachers				
	I use WhatsApp on smart phone to communicate with my teachers	3.088	1.363		
offline banking	I like to write a bank cheque	2.335	1.357	2.420	.661
	I like to give a bank cheque to others when required	2.465	1.328		
	I like going to bank for offline banking	2.461	1.423		
virtual banking	I like to transfer money through banking application on smart phone	2.651	1.483	2.854	.810
	Banking on smart phone is convenient	2.963	1.469		
	I like to send or receive money through smart phone application	2.949	1.529		
offline shopping	I like to go to market for shopping	3.447	1.403	3.203	.647
	I like window shopping	2.842	1.372		
	I can explore new products by shopping in the market	3.321	1.389		
virtual shopping	I like to search for new products online on my smart phone	2.967	1.499	2.995	.796
	I like to select the online product with the help of my smart phone	3.102	1.417		
	I like to purchase the online products with the help of applications on the smart phone	2.916	1.451		
offline reading	I prefer reading the print version of newspaper	2.847	1.367	3.079	.726
	I prefer reading the print version of book	3.144	1.382		
	I prefer reading the print version of educational notes	3.247	1.440		
virtual reading	I like to read online news paper on smart phone	2.707	1.402	2.916	.686
	I like to read online book on smart phone	2.861	1.293		
	I like to read educational material on smart phone	3.181	1.404		
offline news seeking	I watch television news between 7 to 10 pm	2.526	1.363	2.884	.745
	I watch television news to know what is happening around	3.056	1.366		
	I watch television news at home	3.070	1.498		
virtual news seeking	I like to subscribe news on with the help of smart phone	2.995	1.382	3.019	.739
	I read news on the screen of smart phone	3.074	1.358		
	I like to receive notifications for news on the smart phone	2.986	1.362		
offline medical treatment	I like to visit a doctor whenever I am sick	2.902	1.471	3.073	.719
	The doctor can suggest better medicine with the face to face discussion	3.274	1.499		
	There is no substitute to personally meeting a doctor for treatment	3.042	1.454		
virtual medical treatment	I like to use you tube on smart phone for the treatment whenever I am sick	2.474	1.384	2.657	.760
	I use internet on smart phone for searching doctor advice	2.549	1.317		
	I google the treatment on smart phone	2.949	1.451		

Table 2 presents that the mean score for smartphone usage on Sunday ($M = 5.367$, $SD = 2.635$) in particular and Saturdays ($M = 5.251$, $SD = 2.476$) as well is found to be slightly higher than the smart phone usage on an average running day in a week ($M = 4.874$, $SD = 2.366$). The smartphone usage on these three occasions is three hours of use (average mean = 5.164). These statistics mean that students on average are spending three hours for smart phone usage in Lahore. There is observed an upward trend from the offline socialization patterns to virtual socialization patterns. Students prefer virtual friendship, virtual interaction with their class fellows and teachers when compared with the offline friendship and offline interaction. The WhatsApp application on smart phone is the major reason for such virtual

socialization. These students like to use the virtual sources for news seeking and like to read news on the screen of smart phone. The Facebook application is less preferred when compared with the WhatsApp among students.

The correlation tests are applied to research the associations of offline socialization patterns with the virtual socialization patterns. In view of (DeVellis, 2003) Cronbach Alpha Coefficient of scales should be above .7. The Cronbach Alpha value of the scales had ranged between .810 and .577. In case of short scales there is possibility of low reliability. In this case Briggs and Cheeks (1986) have recommended to check the optimal range for the inter-item correlation of .2 to .4. This condition is satisfied in the scales. The variables are transformed for running correlation tests to see whether there is change in direction in the correlations.

Table 3
Associations of Offline Socialization Patterns with Virtual Socialization Patterns and the Effect of Gender and Time for Smartphone Usage in these Correlations

Socialization		Correlations		Partial Correlations	
Offline	Virtual	r	p	Gender	Time for Smartphone Use
friends	friends	.282**	.000	.329	.203
family	family	.298**	.000	.281	.275
class fellows	class fellows	.328**	.000	.327	.300
teachers	teachers	.223**	.000	.222	.228
banking	banking	.084	.222	.087	.068
reading	reading	.109	.111	.111	.229
shopping	shopping	.276**	.000	.278	.113
news seeking	news seeking	.404**	.000	.405	.397
medical treatment	medical treatment	.059	.390	.058	.041

** Correlation is significant at 0.01 Level (two tailed)

According to Table 3, there are no negative correlations found between the offline and virtual socialization patterns among students. In light of Cohen's (1988) recommendations, the correlation size between the range of .30 and .49 are interpreted as medium size of correlations. The medium level of correlations are found between offline news seeking and the virtual news seeking with the help of smart phone ($r = .404, p = .000$). The medium level correlations are also found for the offline and virtual socialization with class fellows ($r = .328, p = .000$).

According to Cohen (1998) the correlation size which range between .10 to .29 is the small one. The small levels of correlations are found for the interaction with family, friends and teachers. The correlations between offline socialization with family and the virtual socialization are $r = .298, p = .000$. The correlations between the variables of offline socialization with friends and the virtual socializations with friends is $r = .282, p = .000$. The correlations between offline shopping and the virtual shopping are $r = .276, p = .000$. The offline socialization with teachers correlates with the virtual socialization

at the level of $r = .223$, $p = .000$. No significant findings are found for the offline and the virtual patterns for reading banking and medical treatment.

The relationship between offline socialization with friends, family and teachers with the virtual socialization with these relationships decreases to a great deal when the effect of time for Smartphone usage in minutes and hours is statistically controlled for. However, the relationship between offline reading and virtual reading increases when the effect of time for smart phone usage is controlled for. The same upward trend is found for the associations of offline socialization with teachers when the effect of time for Smartphone usage is controlled.

The descriptive statistics reveal that the smart phone is the medium which is used by students for the gratifications of virtual socialization with friends, class fellows and teachers. The students are spending an average of three hours for smart phone usage. The students are using it for the virtual friendship. The WhatsApp application is mostly used by students to communicate with friends. The WhatsApp is growing in popularity and has replaced the Facebook application on smart phone for the interaction with friends. The second prominent finding is that the selected student population is also using it to communicate with the class fellows. In context of communication with class fellows the WhatsApp application has also replaced the Facebook application. The third prominent finding is that students are also using it to communicate with teachers. The findings are consistent with Chan (2014 & 2018) that individuals prefer variety of communication channels (in this study Smartphone with the help of WhatsApp) to maintain relationships and by affording the mobile possibilities for communication, the mobiles enhance relationship quality and gratify the belongingness. However, students prefer the virtual socialization with friends and class fellows and not with the teachers and family to a great deal.

The findings of the study are consistent with Chan (2018) who had not found the significant change in the face-to-face communication and the mobile communication. The limited items were considered by Chan (2018), but current study had used more variables related to face-to-face communication and the diverse offline situations. It is found that students are seeking news through means of both channels of offline (e.g. television and newspaper) and virtual like smart phone. They are also socializing with class fellows with the offline and online means.

There is found to be the significant controlled effect of time for smart phone usage and gender between the associations of offline and virtual news seeking patterns. The controlled effect is also visible for this time for smart phone usage and the gender between the associations of offline communication with class fellows with the virtual socialization with class fellows. The controlled effect of gender is also visible for the associations of offline and virtual socialization with friends.

The small correlations for offline and virtual socialization with teachers; and the insignificant correlations between offline and virtual reading are the indicators that reflect the lack of communication of students with teachers and their lack of interest in

reading. Because students are actively seeking news therefore the news is the source of knowledge for them which is constructing the reality for them. The interaction of students with the class fellows and less with the teachers reflect that students rely on their class fellows for the understanding of educational concepts. If there is less reading it means that students will not be in a position to critically evaluate the news. The interaction with only class fellows and friends will only lead to gossips and not the knowledge acquisition. This is a concern for the teachers because these students are also not found to be communicating with them. Therefore, there is a need to fill this communication gap with the mentorship role of teachers who can invite students for more useful class discussions with the help of interpersonal communication.

Conclusion

The study found that students are actively seeking news through the television, newspaper and the smart phone. They are socializing with class fellows and friends. However, their communication with the parents and in particular with the teachers is less. They are also reading less and watching more. The teachers will have to fill this gap by communicating with them interpersonally.

Recommendations

The teachers should share the academic material with the help of smart phone by using the WhatsApp because students are using it to a great deal. The teachers should suggest students the literature for analyzing the genres of offline and online news. This will make them the critical evaluators of the news texts rather than merely consumers.

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