Effects of Smart Phone Addiction on Family Communication in Pakistan

Wajeeha Arif[1] Abdul Rasheed[2] Hummera Hassan[3]

Abstract

The use of smartphones has become common in Pakistan. A smartphone is a combination of communication devices that has internet accessibility. The current study aims to find out the relationship between smartphone addiction and family communication under the theoretical framework of family communication pattern theory (FCPT). A sample of 300 adults was taken and analyzed through the Smartphone addiction scale (SAS-SV) developed by Kwon, Lee, Won, Park, Min, Hahn, and Kim (2013) and the family communication scale (FCS) developed by Olson & Barnes, (2004). The data was collected online through snowball sampling. The results show that there is a relationship between smartphone addiction and family communication and there is a significant difference in the demographic variable for education and smartphone use on weekdays for smartphone addiction. Additionally, income showed a significant difference in family communication.

Keyword: *Family Communication, Smartphone, Smartphone addiction, Family Pattern Theory*

Introduction

Smart phones are an important element of our daily lives. It is used as alternative of cellular phones, computers and many other multimedia devices (radio, gaming console etc.). They are widely spread and have become extremely popular among its users. According to statistics of 2014-2020, it is shown that in the year 2018, 34% of all telecommunication connections in Pakistan were smart phones and is expected to be 51% in the year 2020

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[1] Resource Person, School of Communication Studies, University of the Punjab, Pakistan
[2] Lecturer, School of Law, University of Okara, Okara, Punjab, Pakistan
[3] School of Communication Studies, University of the Punjab, Pakistan

("Smartphone penetration in Pakistan 2014-2020 | Statistic," n.d.). Additionally, in a research conducted by Grappetite ("Smartphone usage in Pakistan," n.d.), it was found that in Pakistan more than 60% people use more than one cell phone and 68% smart phone users use Android phones. Therefore, these devices are being used by people of all age groups. 77% of smart phone users in Pakistan lie under the age bracket of 21 -30 years and 21% users under the age bracket of 31-40. The penetration of smart phone has affected our lives in different ways. Smartphone is a device formed by the convergence of communication and computing and is equipped with advanced features and functionality than traditional mobile phones. It has a ability to play games, display photos, navigation, built in camera, recording, audio/video playback, send/receive mail, built in apps for social websites, apps for web surfing, wireless internet and much more (Gowthami & Kumar, 2016). Hence, smart phones are not only a cellular device that help to connect with other people but also has access to internet and the excessive use of internet may leads to internet addiction or technological addiction (Lin, Chang, Lee, Tseng, Kuo, & Chen, 2014). As it was found that technological addition is one of the strongest behavioral addiction that engage human beings however, it is non-chemical in nature (Griffiths, 1996). Additionally, Statistical Manual of Mental Disorders edition IV (SHAPSE, 2008) has recognized internet addiction as an impulse control disorder. Internet addiction is identified as terribly controlled urges regarding the use of internet or computer use. It may also cause impairment or distress. However, Smartphone

addiction is hard to define as it is more closely associated with internet addiction. Young (1999) described internet addiction "as an impulse control disorder that does not use any intoxicant" (p. 3). The literature shows that smartphone addiction is the excessive use of smartphones that hinders the daily routine of its user. It causes psychological features like withdrawal, tolerance, depression, loneliness, shyness, etc. (Kwon et al., 2013; Bian and Leung, 2015). Smartphone addiction is described as "the type of behavioral addiction that negatively affects a person's occupational, social, and interpersonal life. It is evolved through intense behavior for example checking, posting, or interacting on social media platforms and it is found that if the smartphone or application is removed from the addicted person, it may cause panic attacks or feeling of discomfort (Shaffer, 1996; Young, 1999

With the rising use of smart phones in Pakistan the study at hand tries to understand the consequences of smart phone addictions on family communication. As the Family Communication is serves as a means through which one develops relationship with other family members and the rest of the world. It is defined as any verbal and non-verbal exchange of words and information between family members (Epstein, Bishop, Ryan, Miller & Keitner, 1993). Effective communication within a family equips the individual to deal with problems as they arise. The key to effective communication depends on many factors including clear and direct communication. Similarly, Galvin, Braithwaite & Bylund (2015) described family communication as important as eating food. Communication in the family is an important tool to form identity. Hence, it can be

concluded that family communication is very important to maintain a balanced family environment.

Aman, Shah, Hussain, Khan, Asif & Qazi (2015) explored the impact of phone addiction on medical students in Khyber Pakhtunkhwa, Pakistan. They found that if mobile phones are appropriately used its unhealthy effects can be minimized. Further, it is found that increased mobile addiction have not only direct and indirect effects on economic and social horizons but it is also observed on some level of gender discrimination (Ali, Rizvi & Qureshi, 2014). Therefore, it is evident that smart phone effects its user's life.

By considering the above context, it is important to explore the impact of smart phone addiction on family communication in Pakistan. In order to do so, this study is designed under the Family communication Pattern theory. The theory predicts family communication patterns based on conversation orientation or conformity orientation and developed family communication pattern by classifying families into different category (Koener & Fitzapatrick, 2006). Therefore, in this study the aim is to analyze the effects of smart phone addiction in the light of family communication pattern theory.

Literature Review

Family communication has been drastically changed by the presence of technology in our lives. Kim, LaRose & Peng (2009) suggested that people that have unhealthy communication skills end up using an internet-regulated application that has a negative effect on its user. Additionally, it is found that massive usage of cell phone calls interrupts physical communication

resulted in a significant reduction of face-to-face communication (Turkle, 2008). Galvin, Braithwaite and Bylund (2015) suggested that the relationship within the family is maintained through communication by sharing feelings and experiences. The new technology is expected to affect the relationship between parents and children (Dalsgaard, Skov, Stougaard & Thomassen, 2006). Although, smartphones have extended our social interaction but have also negatively affected its users (Ling & McEwen, 2010). Busy parents provide their children with smartphones. The overuse of smartphones leads to addiction in young children (Park & Park, 2014). Similarly, Haug et al., (2015) explored that smartphone addiction is more prevalent in young adolescents than young adults. Although, teens felt the mobile technology as a medium to stay in touch with their parents and other members of their social circle (Ling & Mcewen 2010). Furthermore, McDaniel & Coyne (2016) added that massive usage of cell phones among romantic couple leads to less communication that ultimately causes lower life satisfaction. Although, mobile telephones have contributed towards micro-coordination i.e., changing last minutes plans via message or a phone call, etc., and has resulted in increase efficiency in the daily lives of people (Castells, Fernandez-Ardevol, Qiu & Sey, 2009). However, it may have caused incapacitating the conventional roles of parental authority and also towards premature social and psychological liberation of young adults (Castells et al. 2009, p.90). Further, mobile phones have negatively affected the students. As now they are more dependent on their phones and are much inclined

towards procrastination (Liu, Gao-Min, Yue & Cheng, 2018.) which has resulted in changes in their communication behaviors.

In addition, studies have revealed that overuse of mobile phone communication leads to mental health problems i.e., depression, anxiety, poor sleep quality, loneliness etc. Smartphone addiction is closely associated with internet addiction. The social function of the internet results in problematic internet use than the information function of the internet (Li & Chung, 2006). They added that problematic internet use leads to internet addiction. Likewise, parental education and parental involvement also affect internet addictive behavior (Tsitsika, Janikian, Schoenmakers, Tzavela, Olafsson, Wójcik & Richardson, 2014). Parents' higher education and higher involvement in adolescent lives lead to lesser internet addictive behavior than those parents who have low education and less involvement in adolescent lives. Moreover, parents are able to keep check on their children and monitor their whereabouts through cell phones (Weisskirch, 2009). These technologies are altering our relationships with one another. Also, socioeconomic status affects mobile usage in families (Clark, 2013).

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discrimination (Ali, Rizvi & Qureshi, 2014). Therefore, it is evident that smartphone affects their user's life.

Theoretical Framework

This study seeks to find out the relationship between smartphone addiction and family communication under the umbrella of Family Communication Pattern theory. The theory is based on parent-child communication that focuses on establishing shared social reality (Korner & Fitzpatrick, 2006). It recognizes the processes of coming to the social reality that is in accordance with contemporaneous circumstances and its prolonged information processing, psychological and behaviors as well. Further, Korner & Fitzpatrick (2006) developed four types of communication patterns based on which they classified families as protective families, consensual families, laissez-faire, and pluralistic families.

Family communication is referred to as the exchange of information, ideas, thoughts, and viewpoints with other members of the family (Olson & Barnes, 2004). Mcleod and Chaffe (1972, 1973) initially developed the model to understand the patterns of family communication to describe the family's inclination in developing quite stable and foreseeable ways of communication with one another. The researchers explained how families construct and share their social reality. They suggested that steady communication is achieved through two orientations i.e., social orientation and concept orientation. Social orientation is the family member's focus on the evaluation of other members of the family regarding some object and embrace that evaluation. It highlights the relationship between family's

members thus, referred as social orientation. However, the concept orientation is that the family members focus on the object in their environment and share their views about it and its properties and come out with the same shared perception of that object. As this process focuses on how a member of the family conceptualizes the object it is known as conceptual orientation. McLeod and Chaffe (1972) suggested that families may vary in the use of these orientations to achieve stable communication. Therefore, children interact in different ways while processing mass media. Children of the families that depend on socio-orientation rely on others to process the mass media information. Contrarily, the children of families that use concept-orientation discuss information, share viewpoints regarding information in order to understand the true meaning of the message. To put it another way, these two strategies use different behaviors to achieve stable communication. The researchers realized that families that share the same social reality use different communication patterns and strategies and behaviors. These insights helped them to develop an instrument known as the family communication pattern (FCP) instrument, which is applicable to media effects. Later, Ritchie & Fitzpatrick (1990) formulated a revised family communication pattern (RFCP) instrument to measure the patterns of family communication in a more general sense. Therefore, they re-conceptualize initial strategies of social orientation and concept orientation as conformity orientation and conversation orientation respectively. Conversation orientation focus on the encouragement provided by parents to their children to form

opinions, express them and be able to accept the diverse opinions and conflict. However, the conformity orientation focuses on discouragement of diverse opinions and discussion. In other words, children look up to their parents for the meaning of messages. Divergent views and opinions are discouraged, and children are expected to be more obedient to their parents.

Koerner & Fitzpatrick (2006) further explored the intersection of these to orientation and developed four types of communication pattern i.e., consensual family, protective family, pluralistic family, and laisse-faire family as shown in Table no 1. The consensual family has high conformity orientation and high conversation orientation which suggests that parent encourage their children to form opinions and present them but they also comply with their parents' rules. If the idea is against parents' rule it will be forbidden. On the other hand, the protective family has high conformity orientation and less conversation orientation which indicate parents focus on harmony by discouraging their children's views or opinion that are opposing to their point of view. Therefore, there is little understanding between parents and their children, they are afraid to discuss their opinions and are more likely to hide their secrets. However, a pluralistic family has low conformity orientation and high conversation orientation which shows that parents and children have frequent conversation and exchange of ideas but parents are in less control. There is active participation in communication by parents and children. Similarly, Laisse-faire families have low conformity orientation and low conversation orientation which suggests that there is a lack of mutual

cooperation, understanding, behavior, and emotions. There is no communication between parents and their children. Children may feel free from their parents but that comes from the point of ignorance. Furthermore, Tadpatrokar, Sharma & Viswanath, (2021) linked the social and concept orientations with the use of technology and explored those protective families will tend to monitor and control the use of technology rather than calling it a shared experience. On the other hand, pluralistic families will encourage technology-mediated communication and there will be less focus on rules and regulations. However, laisse-faire families will have a problem in monitoring and setting healthy boundaries regarding the use of technology. Thus, in the light of mentioned context, researchers found this theoretical frame more appropriate for the study in hand.

RQ1. Is there a difference among the population for smartphone addiction and family communication for selected demographic variables?

H1: There is a relationship between smartphone addiction and family communication.

H2: There is a smartphone addiction present in the selected population.

H3: There is satisfactory family communication among the selected population.

Methodology

A cross sectional research design was applied to investigate the relationship between smart phone addiction and family communication. Non-probability snowball sampling technique is used and sample was collected online. A sample of 300 adults

was taken. Adults from middle class families were included between the age of 19 to 40 who own their personal smart phones. Married couples with or without children (within the above-mentioned age bracket) were included. The minimum education criteria were matriculation. Young children and teenagers were excluded. Husband and wife who were separated or divorced were excluded. An instrument comprised of 29 items measuring independent and dependent variables and demographics of the population was administered. For the independent variable smart phone addiction scale is used and for dependent variable family communication scale is used. Demographic information included age, gender, education, socio economic status and marital status etc.

Smartphone Addiction Scale (SAS). Smart phone addiction will be assessed through smart phone addiction scale short version (SAS-SV) developed by (Kwon et al., 2013). The scale has been translated into many different languages i.e., Italian (Pasquale, Sciacca & Hichy, 2017), Spanish and Belgian (Lopez-Fernandez, 2017).The scale consists of 10 items divided into three sub scales i.e., daily life disturbance, withdrawal, and tolerance. Each item has 1-6 points on Likert scale. The score of an individual is calculated by adding up all the responses to each statement. The Cronbach alpha is 0.97.

Family Communication Scale (FCS). Family communication will be assessed through family communication scale, which was developed by (Olson & Barnes, 2004). The initial scale was PAC (Parent-adolescent communication) which was later short down FCS family communication in 2004.Then

five-point scale was modified to six-point Likert scale by replacing "Neutral" with "slightly agreed" and "slightly disagreed" options. However, for this study the initial five-point Likert scale is utilized. The scale consists of items 10 items and participants will rate themselves from 1 (strongly disagree) to 5 (strongly agree). The score of an individual is calculated by adding up all the responses to each statement. The score range is from 10-50, with higher scoring indication higher family communication and vice versa. The Cronbach alpha value of the scale is 0.9

Findings

To find the differences among the population for smartphone addiction and family communication for selected demographic variables as mentioned in RQ1, one-way ANOVA was performed.

Table 1: *Family communication pattern*

Concept orientation (Conversation orientation)	Social orientation (Conformity orientation)	
	High	Low
High	Consensual family	Pluralistic family
Low	Protective family	Laisse-faire family

There is no significant difference among the population for smartphone addiction for purpose of smartphone use, income, gender, marital status, and time spent on a cell phone during weekends. Similarly, for family communication there is no significant difference was found among the population for purpose of cell phone use, education, gender, marital status, time spent on a cell phone during weekdays, time spent on a cell phone during weekends. A significant difference was found

among the population for the cell phone addiction for education, Time spent on a cell phone during weekdays. Similarly, there is a significant difference among the population for the family communication for income.

Table 2: *Relationship between smartphone addiction and family communication among the selected population*

Mode l	R	R Squar e	Adjuste d R Square	Std. Error of the Estimate	Change Statistics				
					R Square Change	F Chan ge	df1	df2	Sig. F Chang e
1	.188ᵃ	.035	.030	.83537	.035	7.254	1	198	.008

Predictors: (Constant), smartphone_addiction

To test H 1 which stated that there is a relationship between smartphone addiction and family communication among the selected population, a simple linear regression was performed.

The results revealed that smartphone addiction is present in the collected sample, and it affects family communication. In order to measure the relationship between smartphone addiction and family communication linear regression analysis was applied. The results show that 3.5% of family communication is explained through smartphone addiction in the selected sample. The hypothesis H1 is accepted, which says that there is a relationship between smartphone addiction and family communication because p is 0.03 which is lesser than 0.05 for the coefficient at 95% confidence interval.

One sample t-test is applied for both H2 and H3 and the obtained values are p<0.05. The cut-off value is 3.1. The results in Table 3 show that the family communication mean is 4.5 which is higher than the cut-off value indicating that there is satisfied family communication among family members.

Additionally, the average score for smartphone addiction is 3.4 which is higher than the cut-off value indicating that there exists smartphone addiction in our sample. Hence, it is deduced that both null hypotheses are rejected. H2 and H3 are corroborated, which shows smartphone addiction is present in the selected population and there is a satisfactory family communication. Therefore, it can be inferred that smartphone addiction has a positive relationship with family communication.

Devitt & Roker (2009) explored that mobile phone communication has changed some important characteristics of relationships and family communication. Parents and young people consider mobile phones a key to stay in touch with their families.

Table 3: *One sample t- test*

Variable	t-value	p-value	Remarks
Smartphone addiction	2.90	0.004	Significant
Family communication	22.88	0.000	Significant

Conclusion

This study helped us to understand that smart phone addiction does not hinders family communication but it may be leads to better family communication and also demographic variables that were not studied in depth that may help in better understanding of dynamics of technological use and smart phones. It was also observed that there is no consensus among the researchers regarding the positive and negative effects of smartphones in the light of family communication. So, it is hard to assume that the effects of smartphones are only negative or only positive. Therefore, it is important to monitor smartphone

use in our households and there is a need for additional research in this domain to better understand the use of smartphones in the context of family communication.

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