Study on psycho-social predictors of smartphone addiction among adult females

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Abstract---This study was conducted to examine the psychosocial predictors of smartphone addiction. Social Support, Leisure Boredom and Life Satisfaction were the predictor variables. For this purpose, a sample of 100 participants was taken. It consisted of adult female population between 45 to 60 years of age from the Punjab state. Data was collected through standardized questionnaires namely Life satisfaction scale (Diener et al., 1985), Leisure Boredom Scale (Aloha & Weissinger, 1990), Interpersonal support evaluation list (Cohen et al., 1985) and mobile addiction scale (Kwon et al., 2013). Results revealed that there exists negative relationship between social support and smartphone addiction and leisure boredom is positively correlated with mobile addiction. Furthermore, social support and leisure boredom came out to be significant predictors of smartphone addiction, social support being the stronger predictor out of the two. Results are discussed as per implications.

Keywords---leisure boredom, life satisfaction, smartphone addiction, social support, good health, well-being.

Introduction

With the increase in emergence of technology availability the use of smartphone has increased to large extent. Especially in developing nations like India high increment is detected in usage of smartphones in young and urban population (Frost & Sullivan, 2017). Smartphones and internet have become very affordable which led to exponential growth in use of and spending time on the cell phone. Many people report being overly dependent on smartphones having a continuous irresistible urge to use mobile phone. Such a scenario is taking toll on both physical and mental heathof individuals (McDaniel & Coyne, 2016; MatarBoumosleh&Jaalouk, 2017). The emergence of latest technology, undoubtedly, hasmodified the lifestyles across globe. India has become second
largest user of smartphones with 220 million active users (Pathak, 2016). Increasing use of smartphone has captivated all, across age and sectors and the free internet schemes by internet providers have added to the issue. Smartphone utilization is noticeably incorporated into younger consumer behavior as signs and symptoms of behavioural dependency on smartphones are interrupting their day after day activities. The dependency on smartphones is usually linked to adolescent and younger population.

Social support is an important factor in everyone’s life as need to affiliate with others is an inherit need of every human being. Essentially, social support involves having a support network of either family or friends to whom one can rely on in the time of need. Sometimes in the need of immediate assistance during personal crisis, these relations can play an important role in daily life. Konan et al. (2018) studied smartphone addiction in relation to perceived social support. In the result it was concluded that there is significant but negative and low correlation exist between smart phone addiction and perceived social support. Wang and Wang (2013) found that internet addiction is increased from social support and social interaction ties we get virtually or from online platform, whereas offline social support and offline social ties show opposite result that is mobile phone addiction is reduced with increase in offline support. Akturk and Budak (2019) found that increased level of mobile addiction among the nursing students of the university affect their social life negatively.

Leisure boredom is the combination of two words leisure and boredom. Leisure can be defined as free time which we find during routine and boredom can be defined as unpleasant feeling which arises due to lack of stimulation in task. Leisure should be arousing to optimum level to be psychologically rewarding (Isahola, 1980). The optimum level is achieved when there is match between available skill and available leisure. So there is a possibility that boredom will occur if the leisure skills are greater than challenges faced. There should be balance between novelty and familiarity of experience. Wang (2019) found in a study that management of free time has a negative relationship with leisure boredom and boredom in the leisure time increases the mobile phone addiction. Divband (2013) found in a study that boredom of leisure and seeking of sensation have significant relation with mobile phone addiction, moreover seeking of sensation can also predict the smartphone addiction.

Life satisfaction can be defined as component which tells us that of how much satisfied an individual is with his life (Shin & Johnson, 1978). Deiner (1984) defined it as a global assessment of an individual in accordance to his own chosen way or criteria. The choice aspect here is of utmost importance and the reason behind why life satisfaction is measured in global terms rather than comparing individual domains independently (Diener et al. 1985). Volkmer and Lermer (2019) found in their study that use of mobile phone have negative correlation with mindfulness, satisfaction of life and wellbeing. Dayapoğlu, Kavurmaci and Karaman (2016) in their study on nursing students found that life satisfaction and mobile phone addiction are negatively related to one another. Another study measuring the impact of internet addiction and engagement of life also found similar results of negative correlation between these variables (Shanaz & Karim, 2014).
As all the three selected variables namely are related with smartphone addiction, it becomes necessary to explore them further. Therefore, present study measures the impact of these variables on smartphone addiction. Most of the smartphone addiction researches are done on adolescents and there is dearth of researches that measure the aspects related to mobile phone addiction among older adult population. Present study thus, focuses on older adult population and non-working female population is chosen as final sample because they remain at home all day and after finishing the daily chores there is plenty of time for leisure which if not spent meaningfully can lead to boredom. Moreover, non-working female population have less people around with whom they can have face to face social interaction on daily basis as compared to working population. With this in mind, following objectives are proposed.

**Objectives**

1. To study the relationship between social support and smartphone addiction among female adult population.
2. To study the relationship of leisure boredom and smartphone addiction among female adult population.
3. To study the relationship of life satisfaction and smartphone addiction among female adult population.
4. To examine whether social support, leisure boredom and life satisfaction can predict smartphone addiction among female adult population.

**Hypotheses**

1. There exists significant relationship between social support with smartphone addiction among female adult population.
2. There exists significant relationship between leisure boredom with smartphone addiction among female adult population.
3. There exists significant relationship between life satisfaction with smartphone addiction among female adult population.
4. Social support, leisure boredom and life satisfaction will predict smartphone addiction among female adult population.

**Methods**

The sample for the study is 100 females in the age range from 45 to 60 years. The sample was collected from Punjab state, India. Females who stay at home and have partners who work outside the house were selected.

**Tools**

Satisfaction with Life Scale (SWLS): The Satisfaction scale with Life Scale has been developed by Diener in 1985. It has 5 items and 7 point Likert scale is used. It has Cronbach’s alpha of 0.87 and 2-month test-retest reliability of 0.82.

Leisure boredom scale (LBS): The Leisure boredom scale has been developed by Aloha and Weissinger in 1990. It has 16 items and uses 5 point Likert scale. This test has high internal consistency as Cronbach's alpha 0.85, 0.88 and 0.86 in the three studies respectively.
Interpersonal support evaluation list (ISEL): Interpersonal support evaluation list has been developed by Cohen, Mermelstein, Kamarck and Hoberman, in 1985. It has 12 items on four point likert scale is used. This test has Cronbach alpha of .83. Smartphone Addiction Scale (SAS): Smartphone Addiction Scale has been developed by Kwon in 2013. It has 48 items on 6 point likert scale The Cronbach’s alpha for this was found to be 0.96. This scale is very reliable and is high in validity.

**Statistical Techniques**

The statistical technique of correlation is used to find the relationship between social support, leisure boredom, and life satisfaction with mobile phone addiction. Additionally, regression analysis was applied to ascertain the predictors of smartphone addiction among adult female population.

**Results**

Table 1 showing the co-relation coefficients of social support, leisure boredom and life satisfaction in relation to Smartphone addiction

<table>
<thead>
<tr>
<th>Variables</th>
<th>Coefficients</th>
</tr>
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<tbody>
<tr>
<td>Social support</td>
<td>-.45**</td>
</tr>
<tr>
<td>Leisure boredom</td>
<td>.25*</td>
</tr>
<tr>
<td>Life satisfaction</td>
<td>.06</td>
</tr>
</tbody>
</table>

** Correlation is significant at the 0.01 level (2-tailed), *Correlation is significant at 0.05 levels (2-tailed)**

The correlation coefficient of social support is -.45 which is significant at 0.01 level and correlation coefficient of leisure boredom is .25 which is significant at 0.05 level.

Table 2 showing results of regression analysis

<table>
<thead>
<tr>
<th>Predictor variables</th>
<th>Standardization coefficient</th>
<th>t-value</th>
<th>R²</th>
<th>F value</th>
</tr>
</thead>
<tbody>
<tr>
<td>Social support</td>
<td>-.45</td>
<td>-4.9</td>
<td>.20</td>
<td>24.6*</td>
</tr>
<tr>
<td>Leisure Boredom</td>
<td>.25</td>
<td>2.5</td>
<td>.06</td>
<td>6.57*</td>
</tr>
<tr>
<td>Life Satisfaction</td>
<td>.06</td>
<td>0.6</td>
<td>.00</td>
<td>0.40</td>
</tr>
</tbody>
</table>

Among the three variables entered as predictors that are social support, leisure boredom and life satisfaction social support (-.44) came out to be a significant predictor of smartphone addiction. It explains 20 percent ($r^2=0.20$) variance in criterion variable that is smartphone addiction. Leisure Boredom also came out to be another significant predictor of smartphone addiction. Though it only explains ($r^2=.06$) a miniscule variance in criterion variable.

**Discussion**

The study was conducted to find the psychosocial predictors of smartphone addiction among female population. Additionally, relationship
between psychosocial variables namely social support, leisure boredom and life satisfaction was also calculated. Results reveal that social support has negative correlation with smartphone addiction whereas leisure boredom has positive correlation with mobile addiction. However, it is revealed that life satisfaction does not have significant relationship with smartphone addiction. These findings of social support being negatively correlated with smartphone addiction is in line with previous studies (Tas&Oztosun, 2018; Al-Kandari& Al-Sejari, 2020; Herreroa et al., 2019) . Another significant finding of the study is that social support came out to be a significant predictor of smartphone addiction. The possible reason for this finding is that when a person has a less social support, they try to obtain it from online sources (Zhao et al., 2021) which increase the probability of developing an addiction. Another reason for the inverse relationship between these two variables can be that individual having adequate social support is already engrossed with people who have enriching impact on their lives and therefore are left with less time for mobile phone usage. However, for individuals with less social support the need to obtain reassurance in affective and close relationships lead users to extensive and probably addictive use of the smartphone (Wang, 2019). Another reason as explained by Du et al. (2014) in reference to interpersonal relationship theory model that if person encounter life event full of stress and not enough social support is available ,this increase the probability of a person to search social support from virtual mediums like social media . This can lead to increased dependency on mobile phone and internet. Another reason for this inverse relationship has been found to be related with loneliness. The decrease in levels of social support increase loneliness and addictive behavior are found to be more common in lonely individuals(Taşdemir, 2016). While having more face to face interactions with others who stand being an individual providing social support can alleviates the feeling of isolation and in turn reduces the dependency on outer support such as mobile phone (Kim, 2017).

Additionally it has been reported that adults older in age are lonelier as compared to younger people (Nicolaisen&Thorsen, 2014). Therefore, there reason for indulging in overuse of smart phone is more closely related to alleviate the feeling of loneliness rather than scrolling social media or playing smart games. Older generation use mobile phones to get information about surrounding events and members of extended family. Smart phone provide them with sense of belongingness (Singh&Kiran, 2013) even while physical distance is large among them and their loved ones. For this reason they tend to devote more time on smart phone as smartphone cover their social needs (Mahapatra, 2019). Also women in India especially in rural areas face more restriction on going out and forming friendships and social ties beyond their family members. So they might use smartphones to fill this void of social interaction.

Results revealed that leisure boredom also predicts smartphone addiction though it is a very weak predictor. However, it does have positive relationship with smartphone addiction. This finding is supported by various previous researches (Leung, 2007; Allaby& Shannon, 2021; Kil et al., 2021; Serdar et al., 2022). One of the reasons for this finding can be the optimum pleasure that an individual find in the virtual world of internet through the medium of mobile phone as oppose to other leisure activities like physical exertion activities (Chou & Hsiao, 2000). When an individual is bored by the traditional leisure activities that may
require more efforts and less stimulation especially the visual stimulation the tendency to indulge into stimulating virtual world is increased (Lin, Lin & Wu, 2009). An individual prone to leisure boredom might tilt towards excessive usage of mobile phone as it provides ample types of opportunities to indulge in which ranges from interacting with others through social media, playing various games that suits once interest or even go for online shopping. Leisure Boredom has also found to enhance the use of mobile for indulging in impulsive buying behavior (Bozaci, 2020). These two variables are positively correlated as individuals often use smartphones to overcome their boredom by attaining the physiological arousal or positive internal states (Wang, Yang & Zhang, 2020) that the world of internet provides through the mobile phones. Also people engage themselves into mobile phones to reduce the emotional distress (Kil et. al, 2020) which adult female population staying at home and living alone with working husbands are prone to. When too much leisure time is available and leisure activities through which one can derive pleasure are less individual experiences boredom and (Chen et. al, 2017) spends more time on mobile phone. As mentioned previously women especially in rural areas face more restrictions in indulging in leisure activities for their own sake and thus face leisure boredom which they might want to avoid through indulging in use of smartphones.

**Conclusion**

On the basis of this study one can conclude that social support and leisure boredom are closely related to smartphone addiction. Social support is negatively related to smartphone addiction and also is a significant predictor of it. This shows the need for creating awareness among general population about the importance of enriching social relationships. As the sample is based on non-working women population, the need for this social support can be fulfilled by creating social groups for women that can meet every now and then and indulge in various enriching hobbies and activities (Gardening, yoga, walk, storytelling, painting and art etc.) along with having regular social interactions especially with people of their own age group. At the same time this will reduce the issue of leisure boredom among women, which has a direct relationship with mobile phone addiction as the study has found. Therefore it can be concluded that findings of the study are very insightful as it can help the people struggling with mobile addiction. We can provide people with social support which will help to reduce this addiction and also effective ways could be taught to people so that they can manage leisure time efficiently and avoid leisure boredom which further reduces mobile addiction.

**References**


