Impact of Smartphone usageon Youngsters well-being.

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Abstract:
The objective of this research is to examine the relationships between smartphone addiction, technostress, and conflict behavior. We also wanted to know whether technostress significantly impacts conflict behavior or mediates the relationship between smartphone addiction and conflict behavior. We also tried to find out which dimension of conflict behavior (inter, intra and academic) is largely impacted by smartphone addiction.The study conducted among the respondent of 17 to 66 years representing various social strata. This research is quantitative and used SEM to validate the relationship between smartphone addiction, technostress and conflict behavior.The findings of the study supported the objectives of the research concluding that smartphone addiction measurably drives technostress among heavy users and give a reason for developing conflict behavior. Also, technostress significantly mediates the relationship between smartphone addiction and conflict behavior rather than having a direct impact on it. Finally, we concluded that smartphone addiction largelyleads to intra-personal conflict among individuals than inter and academic conflicts.This research has strong implications for online Gaming Industries to revise their gaming rules and conditions, for HR Managers to redesign various OD Interventions for employees, for Philanthropist/ Counselors to start movements for Youngsters and oldies to harmonize their intra-personal issues.

Key Words: Smartphone Addiction, Technostress, Conflict Behavior.

1. **Introduction:**

   Availability and accessibility of smartphones and internet has enhanced the life of everyone allowing individuals to communicate through a variety of different channels including voice calls, and instant messaging, etc. (Montag, Kannen, Lachmann, Sariyska, Duke, Reuter, & Markowetz, 2015, p. 23). The existing researches on the smartphone addiction have primarily focused on either of the physical and mental disorder like technostress (Brod, 1984) or compulsive behavior (Bianchi & Phillips, 2005; Takao, Takahashi, & Kitamura, 2009). Subsequently, we have made substantial move in understanding the comprehensive impact of smartphone addiction on physical as well as on mental health through extensive literature review.

   However, our understanding of whether smartphone addiction leads to technostress (Brod, 1984),or compulsive behavior (Bianchi & Phillips, 2005; Takao, Takahashi, & Kitamura, 2009) is very limited and ambiguous. Many researchers argued on this that, excessive usage and habitual checking on missed calls or messages may result in compulsive behavior and even lead to mobile phone addiction for smartphone users

(Bianchi & Phillips, 2005; Oulasvirt, Rattenbury, Ma, & Raita, 2012; Takao, Takahashi, & Kitamura, 2009). Still the dark side of these technological enhancement brought number of problematic behavior issues among users (Kwon, Lee, Won, Park, & Min, 2013; Lapointe, Boudreau-Pinsonneault, & Vaghefi, 2013), and inappropriate use of smartphones in everyday life is one of them (Porter, 2010). Thomee, Harenstam & Hagberg (2011) remarked that excessive use of smartphone can crop instant gratification; inducting volitional control and tenacious activity (as cited by Lee, Chang, Lin & Cheng, 2014, p. 373). Chesley (2005) mentioned that, regular and heavy use of technology leads to psychological distress. Individual's use smartphone for entertainment or to relieve stress is still dubious.

Thus this research up to some extent partially tries to address the ambiguous state of mind by systematically examining the results of smartphone addiction whether only technostress is its outcome, whether compulsive behavior is another outcome or altogether it builds relationship between smartphone addiction, technostress and compulsive behavior. Being theoretically grounded in the exhaustive literature on smartphone addiction we explicitly try to answer few questions like: First, what if an individual gets addicted to smartphone? Will smartphone addiction lead to technology stress (technostress)? Whether technostress results into compulsive behavior or mediates the relationship between smartphone and compulsive behavior? If yes, then which dimension of compulsive behavior is largely impacted?

Henceforth, our research tries to report the above stated questions by contrasting the outcome of smartphone addiction- technostress and compulsive behavior. We have proposed the flow of the relationship among: Smartphone addiction leads to psychological or physiological issues like technostress (Brod, 1984) and results into compulsive behavior (Bianchi & Phillips, 2005; Takao, et al., 2009) also concluded that technostress partially mediates the relationship between smartphone addiction and conflict behavior.

Several studies have undertaken this subject as an area for the research, exploring the outcomes of smartphone addiction and its relation to behavioral issues. For our study we have considered sufficient empirical support using final data set of 325 from Delhi NCR, to conclude that, if an individual uses a smartphone in excess, he/she will definitely face a negative impact on wellbeing (Aunger and Hacker, 2012; Leung, 2008).

Most of the studies in the past preliminary focused on determining what happen if an individual excessively uses a smartphone. Does it lead to physical and mental disorders or any other behavioral issues? Alternatively, does it impact their productivity? However, this study has gone a step ahead by examining the relationships between smartphone addiction, technostress, and compulsive behavior. Initially, we tried to investigate what type of stress (technostress) does smartphone addiction creates, and further that stress (technostress) is a cause of conflict behavior or not. Hence we try to establish a direct relationship between smartphone addiction, stress (technostress) and compulsive behavior. Also we tried to check whether technostress mediates the relationship between smartphone addiction and compulsive behavior or not. Secondly, we also tried to investigate which dimension (inter, intra and academic) of compulsive behavior is largely impacted by technostress.

2.   Literature Review

2.1.Research Gap.

The main objective of the study is to find out the path relationship between smartphone addiction, technostress and conflict behavior. Secondly,we like to determine whether technostress directly leads to conflict behavior or it mediates the relationship between smartphone addiction and conflict behavior. Thirdly, we also wanted to know that if technostress leads to conflict behavior, then which dimension of conflict behavior (inter, intra and academic/professional) is largely impacted by it. In the coming section, hypotheses are proposed through an extensive review of literature in the fields of technology, smart phone, and stress and behavioral conflict. The following section will discuss the literature explaining the relationship of applied constructs with the hypothesis formulated in the study.

2.1 Smartphone Addiction.

The worldhas become one platform; possibly the way technology has introduced itself in various fronts. Eventually, mass media was one of them. Mobile Phones have connected people from different walks of life to one platform. Conversely, there is growing apprehensions for smartphones, which sometimes take away, rather than supporting social interactions. A report published by Gartner in 2012, shows that the number of mobile phone users in the world is approx. 5 to 6 billion, comprising 79.9per cent of the world's population. Technology has its advantages and disadvantages, and one of them is that excessive use can inculcate addiction. Addiction is observedas an individual's approach towards managing relationship difficulties and has insecure attachment styles. This behavior is likely to result in addiction where an individual fails to regulate the emotions effectively (Flores, 2004). However, mobile applications,smartphones are presented with social media tools and games with internet facility increase the usage rate fast (Zheng and Lionel, 2010). Few antagonistic has strong support for smartphone usage, according to themsmartphones compliments many of the latter's functions of everyday life, portable and offers more enthralled "users value" to consumers (Park & Han, 2013). Massive use of Smartphone hasbecome the potential driver to develop an addictive behavior among users, which is inhibiting in their life. At the individual level, severe problems in everyday life may be the habit-forming nature of smartphone usage (Oulasvirta et al., 2012). Many researchers have diagnosed how addiction symptomology even applies to excessive smartphone use like; distortion of time spent on the phone, behavioral conflicts and negative effects on our social and work lives (Kwon et al., 2013; Lange et al., 2014; Lin et al., 2015). Many studies have concluded on the effects of excessive use of the smartphone on their mental and physical health (Jenaro et al., 2007). The researchproposed (Sim et al., 2012) that, increasing concern among people regarding suffering from pathological technology use with symptoms that resemble that of an addiction. Many works specify the vital characters of everyday life can be affected by the use of the smartphone (Misra & Stokols, 2012; Mumford & Winner, 2010). In the past, several studies proposed a theory stating that, usage of smart phone can interfere in an individual's life to an extent where there is a gradual loss of a relationship (Miller-Ott et al., 2012; McDaniel & Coyne, 2016) also resulting in addiction, reduced capacity to enjoy leisure (. Mok et al., 2014) (Jankovic et al., 2016; Lepp et al., 2015). It is very common in day's that, excessive usage and dependency on technology has proven to be unhealthy for human beings. One of the emerging cause of being physically or mentally unfit and give rise to many physical as well as psychological diseases. Many studies have concluded that at work or on the move

using smartphone has created technostress. Results inthe pastis well proven that technostress has a significant influence on work-life conflict. (Zach W.Y. Lee et, al: 2015) in their research concluded that, excessive use of MMOG results in behavioral conflicts.

2.2Technostress.

There are several apprehensions related to technology adoption and usage. As a result, there is a firmbelieve that work-life boundary and roles have become vague causing inter or interpersonal conflicts. A study conducted by (Oh et, al. 2016), concluded in their research that, technostress which may result from the use of new technologies even after work and during holidays (e.g., using a smartphone, checking emails or continuing work through a messenger after working hours'), influencing job satisfaction and work-life conflict.This research intends to explore howsmartphone addiction leads to Stress (technostress) as a result of the massive use of technology. (Bianchi & Phillips, 2005; Takao et al., 2009) they asserted that, heavy usage of smartphone resultsinpersonality disorders. An exhaustive study explored that excessive use of a smartphonecan lead to technostress and is measured in various dimensions (Ragu-Nathan et al; 2008). The popularity of the smartphone has emerged as one of the basic phenomena for one and all across the globe.Technostress is ''a modern disease of adaptation caused by an inability to cope with the new computer technologies in a healthy manner (Brod, 1984). Technostress is the phenomenon of end users experiencing stress due to information and communication overload (Rouge et al, 2008). The explosive growth of end-user computing and networking technologies enhances the severity of technostress (Brillhart, 2004).). In 1984 clinical psychologist Criag Brod derived a disease called as technostress as an outcome of over usage of technology, inability to deal with Information Communication Technology (ICT) in a healthy manner further resulting in disparaging forces for the employee as well as for a company also (Ayyagari, Grover, & Purvis, 2011). Technostress can be defined as the outcome of excessive usage of information technology and creates stress among the users. Unlike the coin, everything has two sides, so as information technology. Arnetz, and Wiholm (1997) also defined, "Technostress is a state of excitement experienced in certain people, heaving dependent on computers in their work." Contradictory to this Figueiredo (1994) defined technostress is a kind of computer literacy and acceptance of digital technologies. In prior research, technostress is defined as one of the aspects of stress about technological usage.

In light of the literature found in many research reviewed, especially by Salomon (1986) and Jain and Lyons (2008), which propose that smartphone addiction may lead to effects on individual stress level like technostress, conflict behavior, work-life imbalances, etc.The concept of technostress has acknowledged and emerged since the inception and the education of new technological devices introduced for hyper advance -connectivity.In laterstudies, Technostress is also defined as a phenomenon of end users facing stress due to information and communication overload (Ragu-Nathan, et al., 2008). In the past, several studies related to conflict behavior towards technology has primarily focused on determining the personality and psychological variables and their outcomes (e.g., Mueller et al., 2011; Roberts & Pirog, 2013; Takao et al., 2009), testifying that certain psychological traits might influence ability to endure stress or make a person vulnerable to stress (Ebstrup et al., 2011). Symptoms of frustration, overburdened with work and assigned responsibilities, or even end up by multiple kinds of stress diseases. The physical or behavioral disorderis namedas Technostress by many researchers. These disorders can happen in any given context where an individual lives or exists. Attributes and other pragmatic drivers of technostress are well examined and defined in many research. Eventually, in some research it has beenstarted out that, technostress even reduces job satisfaction, work

commitment, innovation, and productivity. An exhaustive literature study done by (Srivastava et at., 2015) highlighted that technostress is very common among employers because of heavy workload, many dependencies on technology, higher expectations from employers for being more productive, constant need to accustom by emerging ICT applications, functionalities, and other workflows. Many studies havesignified the effect of technostress vary across individuals. However, a handful contribution made by (Raghu-Nathan, et. al., 2008) worked on a definite set of measures based on age, gender, literacy, skills, etc.; propagating that, males undergo with more technostress than females; with growing ages individual feel more stressed then early stages of life, and however computer knowledge and expertise brings more stress knowledge than who share less expertise in the same. Hence it is very important for one to know the way of managing his/her phone usage, preventing technostress to take place in his/her behavior (Kuo Yu, J.C., et, al; 2009). Brod (1984) anticipated, "when human beings fail to cope with more advanced and upgraded technologies, the probability of having the new modern disease is possible to be encounteredby them in the form of technostress. Adding to this, he also averred that technostress is a difficult situation for adaptation, caused by the use of recent technology by either people or organization. Another definition of technostress is the state of (Ayyagari, R. et. Al; 2011) identified characters of technology which are directly proportionate to stress like heavy usability, intrusiveness, and dynamism.

H1: Smartphone addiction positively leads to Technostress.

2.3 Smartphone Addiction and Conflict Behavior.

As extracted from the literature one can profoundly say that heavy usage of a smartphone has its repercussions in life. Smartphone addiction has its consequences on an individual's personal and professional life, on his/her health and sometimes seriously it impacts mental or psychological status. Human interaction with information technology may result into many consequences probably with more negative outcomes such as attitude phobia and anxiety pertaining mobile/smartphones usage, behavioral disorders, etc. (T.A. Wright et, al; 1998). However, this study tries to investigate that in what terms the smartphone addiction can hamper the physical and psychological status of human beings. The core of the study refers to the heavy usage of smartphone impacting an individual'sconflict behavior as well asimpacting different dimensions of conflict behavior. Anticipating this, many pieces of researchhave statedthat heavy usage of the smartphone also leads to various psychological and physiological issues. Excessive use of the smartphone is regarded as problematic in everyday life (Oulasvirta et al., 2012). Smartphone use encompasses certain key dimensions of behavioral addiction: Salience, Mood Modification, Tolerance, Withdrawal, Conflicts (Zach W.Y. Lee, 2015). Few studies have identified the link between high internet addiction and low satisfaction from life (Nalwa & Anand, 2003). Problematic use of the cell phone is taken as a disorder, andaddictive behavior (Billieux, 2012). Eventually, usage of a smartphone can be associated with antisocial behavior, as well as with uncontrolled use and addiction indicators. Some researchers proposed how we can apply conventional addiction syndrome in the context of excessive smartphone usage indicated by loss of control, obsession with the use of a smartphone, adverse impact on social and work lives (Kwon et al., 2013; Lange et al., 2014, Lin et al., 2015). Though many studies have done significant work on identifying the impact of smartphone usage on social and work life, no significant study is there deducting comprehensive impact of smartphone addiction on the dimension of conflict behavior(Interpersonal/intrapersonal/academic).Many researchers also view conflict behavior as an outcome of smartphone addiction as a driver to relieve nervousness

and indulge in fun for others (Hirschman, 1992; O'Guinn & Faber, 1989; Roberts & Pirog, 2013; Takao et al., 2009).

H2: *Smartphone addiction positively impacts Conflict Behavior.*

2.4Technostress and Conflict Behavior.

In today's working environment, technology has become an integral part ofeveryone. It is detected that people are too addicted to technological devices that all their direct or indirect speech is influenced by this kind of devices and its usage. Many times people sitting around their social or personal group use a smartphone to talk, even if they are sitting next to them. This habit of using a smartphone, have a severe effect on their physical and mental health. The habit of smartphone usage sometimes gets converted into an individual's conflict behavior limiting him/her to outperform, work-lifebalance, and productive work and so on. Although studies were donein the pastin determining the effect of the over-using smartphone has gained significant importance,but still many aspects are still untouched. This research will also attempt to know whether smartphone generated technostress may also result in an individual's conflict behavior or not.
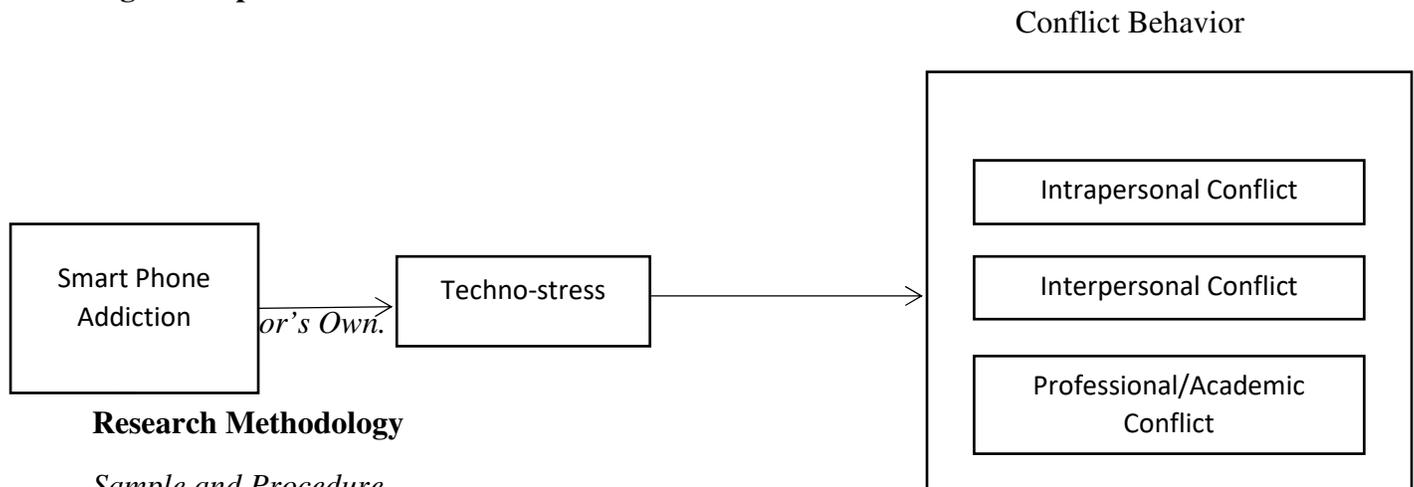
 (Hunter, G. and Perrault, W; 2007) Extensive research done by them reported that the use of smartphoneshas incremental effects on different aspects of an individual'sperformance. Therefore, it is important to investigate the effect of technostress on one's behavior. Some of the research extractshave well explained the way to manage the technostress,butmoreover, many of them has explained the physiological disorders like mental illness, followed by psychological disorders like indecisiveness, depression, anxiety, frustration or anger, lack of control and confidence, restless. In a working environment, using a mobile phone while working can result in multitasking and cause technostress that can lead to poor job performance.

Similarly, technostress can also affect users' satisfaction. (Lukoff and Gackenbach, 2004) mentioned that some individuals use the Internet in dysfunctional ways that lead to social isolation and deteriorating work performance. If technostress accounts for more stress on a more general level, we expect this form of general stress to influence organizational outcomes in the form of decreased job satisfaction.

H3: *Technostress positively mediates the relationship between smartphone addiction and Conflict Behavior.*

1. Research Gap.

The main objective of the study is to find out the relationship between smartphone usage, technostress and conflict behavior. Along with this the research majorly focused on determining, whether conflict behavior has any significant impact on individuals inter, intra or academic/work life or not and if yes then which out of these three majorly get impacted by this. In the following section, hypotheses are proposed through an extensive review of literature in the fields of technology, smart phone, and stress and behavioral conflict.

Fig. 1: Proposed Model.

Conflict Behavior

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┌──────────────┐        ┌──────────────┐        ┌─────────────────────────────┐
│ Smart Phone  │        │ Techno-stress│        │  ┌───────────────────────┐  │
│  Addiction   │ or's Own.│            │ ──────▶│  │ Intrapersonal Conflict│  │
│              │        │              │        │  └───────────────────────┘  │
└──────────────┘        └──────────────┘        │  ┌───────────────────────┐  │
                                                 │  │ Interpersonal Conflict│  │
                                                 │  └───────────────────────┘  │
                                                 │  ┌───────────────────────┐  │
                                                 │  │  Professional/Academic │  │
                                                 │  │       Conflict         │  │
                                                 │  └───────────────────────┘  │
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Research Methodology

Sample and Procedure

The study employed a descriptive research design wherein; a quantitative research methodology was used to test the proposed research model. A structured questionnaire consisting of 31 questions was used to collect data through an online survey. Snowball sampling is purposely used to have respondent having strong habit of using smartphone in excess to enjoy various applications/activities of smartphone, method was used to collect data from respondents, including students, homemakers and working professionals residing in India. A hyperlink to the online questionnaire is sent to 735 respondents via email,and the respondents were also requested to forward the questionnaire to their friends, colleagues,and relatives. The data collection process was carried out from December 2017 to February 2018. A total of 325 valid responses was received indicating a response rate of 44.2per cent, which was reasonable for studies of this scale. 49.5 of the respondents were females,and 50.5 percent were males. The age of the respondents ranged between 17 years to 66 years with mean as 29.8 years and a standard deviation as 10.5 years. Out of the total sample, 36per cent were students, 31.7per centwas working professionals,and 32.3per cent were housewives. The sample is an indicator group to test the research model as smartphones are very popular among students and homemakers. Moreover, working professionals excessively use smartphones for an online shopping while at work. Furthermore, including respondents from all over the country allow for a generalization of findings to represent the overall Indian context.

Measurement

The scales for all the constructs of the research model were adapted from previous studies carried out in the context of smartphoneaddictionand conflict behavior. Specifically, 12 items were used to measure smartphoneaddiction (SA) which were adapted from (Eengin Karadağet, al.); 6 items were adapted from (Yu-Kang Lee et al.,) used to measure technostress (TS). Conflict behavior (CB) was a multidimensional construct including three dimensions namely intrapersonal problems (IntraP), interpersonal problems (InterP) and academic/professional problems (APP). 9 items were adapted from (Schiein, Guerne, Stover, 1971)to measure interpersonal problems (IntraP), intra personal problem (InterP) and academic/professional problems (APP). The adapted measurement items for this construct, wherein three items were used to measure IntraP, four items for InterP and three items were used to measure the APP. Each item was measured using a 5 point Likert scale ranging from 1 (strongly disagree) to 5 (strongly agree). Apart from these items, three demographic questions (age, gender,and

profession) are also included in the questionnaire. Age was measured in years, whereas gender and profession were measured using a nominal scale.

The questionnaire was developed and administered in the English language and was checked for content validity by experts from a University. Before administering the questionnaire to actual respondents, pilot testing is done with 30 randomly chosen subjects in November 2017. Based on the pilottest results, fewer items are deleted,anda few items are modified in the questionnaire.

Analysis of Data and Findings.

Descriptive Analysis

The descriptive statistics for each construct in the proposed research model is sufficient evidence to support univariate normality of all the items as all values of skewness are below their cutoff point 3,and all kurtosis values are less than 8 (West et al., 1995; Kline, 2011). Moreover, except for a few items (SA3, SA4, SA6, SA7, SA9, SA11, SA12), the critical ratios for both skewness and kurtosis for all items were found to be within the recommended limits of -2 and +2 (Kline, 2011) which indicate support for multivariate normality in the data. However, these items are dropped from further analysis because of their low factor loadings.

Structural Equation Modeling (SEM)

The structural equation modeling (SEM) technique is employed in the study to test the relationships between the constructs within the proposed model. The two-stage SEM approach (Anderson and Gerbing, 1988; Schumacker and Lomax, 2010) was used, beginning with the measurement model for testing the reliability and validity of the instrument and then estimating the structural model.

Measurement Model
Model Fitness

The measurement model was examined to test the model fitness and to establish the reliability and validity of the model constructs. For testing the model fitness, firstly the confirmatory factor analysis (CFA) was conducted with the first order model on smartphone addiction and technostress. The main fit indices, including CMIN/DF, GFI, AGFI, CFI, NFI, RMR,and RMSEA were tested to evaluate the model fitness. As can be noticed from Table 1, all the indices could not reach their recommended threshold values in the initial first order CFA model. Therefore, certain reassessments are doneto increase model fitness (Bagozzi and Yi, 1988; Anderson and Gerbing, 1988). To ensure the indicator reliability, the items (SA3, SA4, SA12, TS3, InterP1) having standardized regression weights (factor loadings) less than 0.4 were dropped (Henseler et al., 2009). Apart from this, result extracted from modification indices, it was observed that SA7, and TS1 had higher unacceptable values.Hence, these items were also removed from the model. Besides, by inspecting standardized residual covariance, SA9 and SA11 were found to have higher values than their recommended threshold level of ±2. 58 (Anderson,Tatham, & Black, 1995). Therefore, these two items are also removed.

After these modifications, the first order CFA model is tested again,and the model fitness was improved significantly, as expected. Even though the value of chi-square (X^2 = 391.3, DF = 122, P = 0.000) was still significant, the remaining fit indices of the modified first order measurement model were found to be within their recommended values (table 1).

Once the first order CFA model was found to be fit, the second order CFA model was tested by hypothesizing conflict behavior (CB) as a higher order construct based on the three lower order constructs: IntraP, InterP,and APP. All the factor loadings were found to be greater than 0.7 which indicated that CB loaded well on its three constructs. As seen in table 3, the fit indices (except chi-square) of the second order model were found to be within their threshold values, indicating the adequate goodness of fit to the data.

Table 1: Measurement Model

Fit Index	Recommended Value	Initial First Order Measurement Model	Modified First Order Measurement Model	Second Order Model
X^2	NS at p<0.05	2691.75	391.3	406.55
δf	N/A	340	122	126
X^2 / df	<5	7.917	3.207	3.227
Goodness of Fit Index (GFI)	>0.90	0.643	0.903	0.901
Adjusted Goodness of Fit Index (AGFI)	>0.80	0.574	0.841	0.839
Comparative Fit Index (CFI)	>0.90	0.778	0.960	0.959
Normed Fit Index (NFI)	>0.90	0.754	0.944	0.942
Root Mean Square Residuals (RMR)	<0.10	0.187	0.065	0.068
Root Mean Square Error of Approximation (RMSEA)	<0.08	0.146	0.073	0.075

Items from SA (i.e. SA3, SA4, SA7 and SA12), two items from TS (i.e.TS1, and TS3) and one item from Interpersonal Problems (i.e. InterP1) are dropped because of low loading factor.

Reliability and Validity
As shown in table 2, all the constructs exhibited adequate levels of reliability with Cronbach's alpha coefficients (Nunnally, 1978) and composite reliabilities (Hair et al., 2010) greater than the cutoff point of 0.7. Also, the AVE values of all the constructs were greater than their threshold value of 0.5 (Hair et al., 2010) and all AVE values were less than the corresponding CR values indicating sufficient convergent validity (table 1). Also, as reported in table 3, all the correlation estimates between the constructs were found to be less than the maximum level of 0.85 (Kline, 2005) and all the constructs had $\sqrt{AVE}$ greater than their inter-correlation estimates with other corresponding constructs. These resultsprovided sufficient evidence to support the discriminant validity of the model constructs.

Table 2: Reliability and Convergent Validity

Construct	Cronbach's alpha	Composite Reliability (CR)	Average Variance Extracted (AVE)
Smartphone Addiction (SA)	0.935	0.862	0.724
Technostress (TS)	0.956	0.803	0.754
Intrapersonal Problems (IntraP)	0.812	0.788	0.702
Interpersonal Problems (InterP)	0.820	0.769	0.627
Academic/Professional Problems (APP)	0.875	0.768	0.660

Table 3: Discriminant Validity

|	SA	TS	IntraP	InterP	APP
SA	0.851				
TS	0.524	0.868			
IntraP	0.608	0.607	0.839		
InterP	0.551	0.659	0.742	0.791	
APP	0.607	0.604	0.791	0.723	0.813

Note: Factor Correlation Matrix with squared roots of AVE on the diagonal

Structural Model

After achieving satisfactory results of the measurement model, the constructs were used to examine the structural model for testing the hypothesized relationships. The fit indices of the structural model were found to be as follows: X^2 / df = 3.227, GFI = 0.989, AGFI = 0.839, CFI = 0.959, NFI = 0.942, RMR = 0.068, and RMSEA = 0.073. The fit indices indicated that the structural model has the adequate goodness of fit to the data.

The results of the path coefficients (see fig. 2) Indicated that all the hypotheses are supported. Particularly, technostress was found to be significantly affected by smartphone addiction (β = 0.524, C.R = 9.808, $p<0.001$) and conflict behavior was found to be significantly affected by technostress (β = 0.470, C.R = 9.040, $p<0.001$). Conflict behavior was also significantly influenced by smartphoneaddiction (β = 0.415, C.R = 7.583, $p<0.01$), thereby indicating that technostress partially mediates the relationship between smartphoneaddiction and conflict behavior. Therefore, all the hypotheses H1, H2,and H3 is supported. Moreover, the R^2 values indicated that smartphoneaddiction explained 27.5per cent variation in technostress and both smartphoneaddiction and technostress explained 59.7per cent variation in conflict behavior. Also, the R^2 values for IntraP, InterP,and APP were found to be 87per cent, 80per cent, and 73per cent, which reflected a good contribution of all three constructs in conflict behavior.

Fig. 2: Structural Model Results.
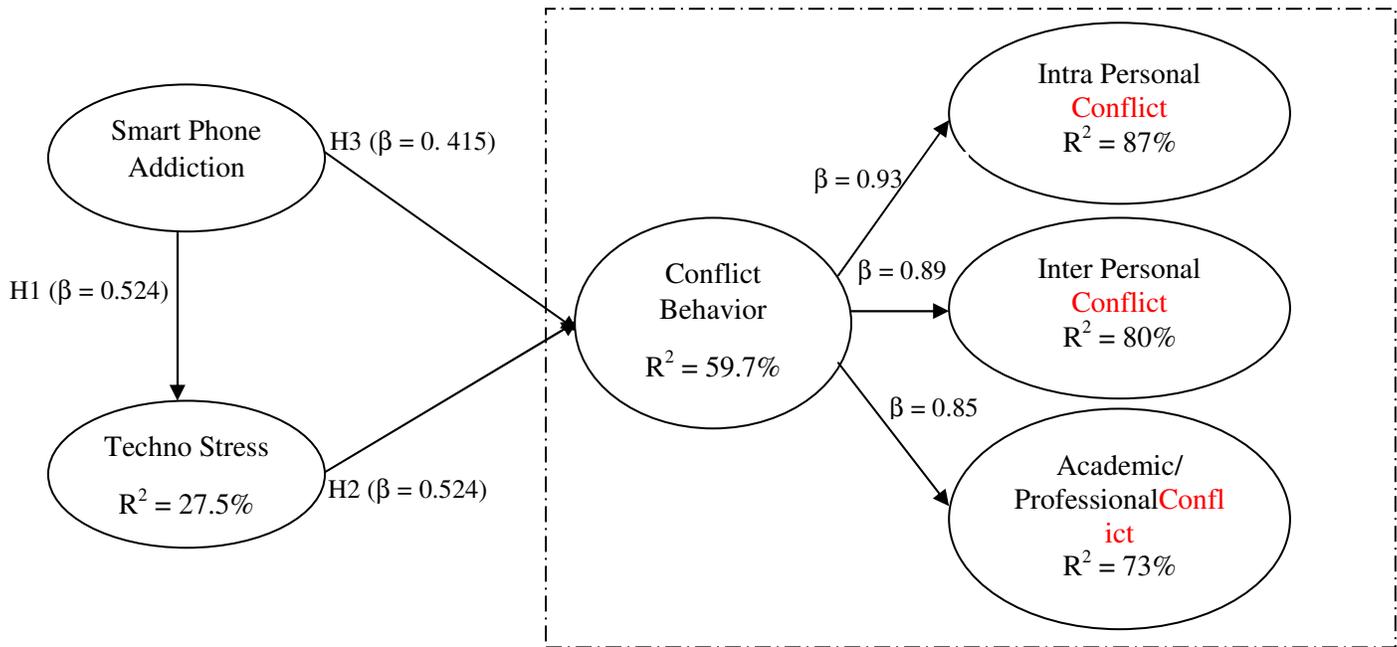
The model is also examined for analyzing the direct effects, indirect effects and total effects between the constructs. Table 4 indicates that the total effect of SA on CB is 0.661 out of which the direct effect is 0.415 and the indirect effect is 0.246. The indirect effect of mediating is attributed of TS in the relationship between SA and CB. Since the indirect effect is lesser than the direct effect of SA on CB, we can interpret that TS weakly mediates the relationship between SA and CB. Also, the direct effect of SA on TS is more than the direct effect of SA on CB.

Further, the indirect effect of SA on IntraP (0.616) is noticed to be more than that on InterP (0.591) and APP (0.564). Similarly, the indirect effect of TS on IntraP (0.438) is more than that on InterP (0.420) and APP (0.401). The results of study indicates smartphone addiction has significant impacted on intrapersoanl problems of an individual then inter/academic problems.

Table 4: Direct, Indirect and Total Effects

Path	Total Effect	Direct Effect	Indirect Effect
SA->TS	0.524	0.524	…
TS->CB	0.470	0.470	…
SA->CB	0.661	0.415	0.246
SA->IntraP	0.616	…	0.616
SA->InterP	0.591	…	0.591
SA->APP	0.564	…	0.564
TS->IntraP	0.438	…	0.438
TS->InterP	0.420	…	0.420
TS->APP	0.401	…	0.401

Conclusion.

The research purpose was to examine the relationships between smartphone addiction, technostress, and conflict behavior. The data were extracted from 325 respondents from the age group of 17 to 66 years, out of which 49.5per cent& 50.5 percent females and males respectively, representing Delhi-NCR Region. The total percentage of respondentscomprise of 36 students, 31.7 working professionals,and 32.3 homemakers. The prominent observations made in the research were: firstly, the result of research concludes that smartphone addiction is a strong predictor of technostress (Salomon, 1986; Jain & Lyons: 2008). Excessive use of smartphone leads to technostress among the users and further leads to conflict behavior.

Further, it is also observed that the smartphone has a direct impact on userconflict behavior as well (Kwon et, al. 2013; Lanaj et, at. 2014; Lin et al, 2015.). The results of the study also revealthe technostress partially mediate the relationship between smartphone addiction and individual's conflictbehavior.Secondly, on the agreeablenote, it was observed that there is a significant impact onconflict behavior on an individual's work-life (Zach W,Y; Lee et al, 2015). Further, the result also revealed that the effect of conflict behavior is more on intra-personal problems than interpersonal and academic professional performances.Taken altogether, the findings of the research indicate that smartphone addiction effects the technostress among individual's and further leads to conflict behavior, eventually smartphone addiction has a direct effect on individual's conflict behavior, whereas there is the lesser mediating effect of technostress on conflict behavior. One interesting finding of the study reveals that the conflict behavior has a strong impact on individual's intra/inter and academic performance, 87per cent,80per cent,73per cent respectively, and intra-personal issues are one of the major areas where there is the high impact of conflict behavior may lead to multiple health hazardous issues.

Research Contribution and Implications.

This research significantly contributes to the various theoretical aspects of the study on smartphone usage and its repercussions on users mental and health-related issues. In the past several types of researchwere done either to instigate the effect of smartphone addiction oncreating technostress or to determine whether smartphone addiction leads to conflict behavior or not. This research outstands with the past in a way it's not only tried to determine whether there is any significant relationship exists between smartphone addiction, technostress and conflict behavior forming a triangularrelationship, but also tried to determine the direct and indirect effect of Smartphone on conflict behavior. Secondly,we also tried to investigate if this triangular relationship exists, then whether technostress mediates the effect between smartphone addiction and conflict behavior or not, if yes then at what intensity it mediates between smartphone addiction and conflict behavior. Though few studies conducted in the past found the effect of smartphone usage on individual performances, (Hunter, G. & Perrault, W; 2007) reportedly said that there is the incremental effect of smartphone addiction on conflict behavior tampering different aspect of the performances, but fails to mention the variety of performances. On the otherhand,this research not only showed a significant relationship between smartphone addiction and conflictbehavior, but also mentioned the outcome effect of conflict behavior on performance indicators like inter/intra-personal, and academic professional performances. Out of these three variables,intrapersonal issues are strongly impacted by conflict behavior.

Practical implications:

- Device a promotional strategy where they can educate the users about the right usage of cell phones on right proportions.
- Their strategic team can work on the different aspects of cell phone features enabling users to limit the usage of phone.

Social implications:

Organization can also consider few suggestions like:

- HR Managers candesignvarious OD Interventions for employees where some indoor or outdoor recreational activities can help employees to manage their intra-personal issues.
- Philanthropist/ Counselors can conduct some health checkup camps or workshops for Youngsters and oldies to balance their intra-personal problems.
- Society can organize some sports event where they can orient young camps towards traditional indoor and outdoor games which India use to have in olden days, engaging people physically and keeping them away from cell phone usage.

References:
Arnetz, B. B., & Wiholm, C. (1997) Technological stress: Psychophysiological symptoms in modern offices. Journal of psychosomatic research, 43 (1), 35-42.
Ayyagari, R., Grover, V., & Purvis, R. (2011)Technostress: technological antecedents and implications. MIS Quarterly, 35 (4), 831-858.
Bianchi, A., & Phillips, J. G. (2005) Psychological predictors of problem mobile phone use. CyberPsychology & Behavior, 8 (1), 39-51.
Billieux, J. (2012) Problematic use of the mobile phone: a literature review and a pathway model. *Current Psychiatry Reviews*, *8* (4), 299-307.
Brod, C. (1984) Technostress: The human cost of the computer revolution. Addison Wesley Publishing Company.

Brown, R. I. F. (1997) A theoretical model of the behavioral addictions–applied to offending. Addicted to crime, 13-65.
Choi, Y. Y., &SEO, Y. S. (2015) The relationship between insecure adult attachment and smartphone addiction: the mediation effect of impulsiveness moderated by social support. Korean J Psychol Couns Psychother, 27(3), 749e72. http://dx.doi.org/10.23844/kjcp.2015.08.27.3.749

Chóliz, M. (2012) Mobile-phone addiction in adolescence: the test of mobile phone dependence (TMD). Progress in Health Sciences, 2 (1), 33-45.

Demirci, K., Akgönül, M., & Akpinar, A. (2015) Relationship of smartphone use severity with sleep quality, depression, and anxiety in university students. Journal of behavioral addictions, 4 (2), 85-92.

Figueiredo, J. R. (1994)An evaluation of People's Attitudes toward Technostress and Techniques on How to Overcome It".

Flores, P. J. (2004) *Addiction as an attachment disorder*. Jason Aronson.

Griffiths, M. (1999) Internet addiction: fact or fiction?. The Psychologist.

Hirschman, E. C. (1992)The consciousness of addiction: Toward a general theory of conflict consumption. Journal of Consumer Research, 19 (2), 155-179.
          http://dx.doi.org/ 10.1080/16066350701350247.

Hunter, G. K., & Perreault Jr, W. D. (2007) Making sales technology effective. Journal of Marketing, 71 (1), 16-34.

Janković, B., Nikolić, M., Vukonjanski, J., & Terek, E. (2016) The impact of Facebook and smartphone usage on the leisure activities and college adjustment of students in Serbia. Computers in Human Behavior, 55, 354-363.

Jenaro, C., Flores, N., Gómez-Vela, M., González-Gil, F., & Caballo, C. (2007) Problematic internet and cell phone use: Psychological, behavioral, and health correlates. Addiction research & theory, 15 (3), 309-320.

Kim, H. (2013) Exercise rehabilitation for smartphone addiction. *Journal of exercise rehabilitation*, *9* (6), 500.

Kuo, L. H., Chen, L. M., Yang, H. J., Yang, H. H., Yu, J. C., & Hu, W. C. (2009, May) Assessing mobile technostress. In WSEAS International Conference. Proceedings. Mathematics and Computers in Science and Engineering (No. 8). World Scientific and Engineering Academy and Society.

Kwon, M., Kim, D. J., Chou, H., & Yang, S. (2013) The smartphone addiction scale: development and validation of a short version for adolescents. *Plus one*, *8* (12), e83558.

Kwon, M., Lee, J. Y., Won, W. Y., Park, J. W., Min, J. A., Hahn, C.,...& Kim, D. J. (2013) Development and validation of a smartphone addiction scale (SAS). Plus one, 8 (2), e56936.

Lin, Y. H., Chang, L. R., Lee, Y. H., Tseng, H. W., Kuo, T. B., & Chen, S. H. (2014) Development and validation of the Smartphone Addiction Inventory (SPAI). Plus one, 9 (6), e98312.

Lee, Y. S. (2006) Biological model and pharmacotherapy in internet addiction. Journal of the Korean medical association, 49 (3), 209-214.

Miller-Ott, A. E., Kelly, L., & Duran, R. L. (2012) The effects of cell phone usage rules on satisfaction in romantic relationships. Communication Quarterly, 60 (1), 17-34.

Misra, S., & Stokols, D. (2012) A typology of people-environment relationships in the Digital Age. Technology in Society, 34 (4), 311-325.

Mok, J. Y., Choi, S. W., Kim, D. J., Choi, J. S., Lee, J., Ahn, H., ... & Song, W. Y. (2014) Latent class analysis on the internet and smartphone addiction in college students. Neuropsychiatric disease and treatment, 10, 817.

Nalwa, K., & Anand, A. P. (2003) Internet addiction in students: A cause of concern. *Cyberpsychology &Behavior*, *6* (6), 653-656.

Oulasvirta, A., Rattenbury, T., Ma, L., & Raita, E. (2012) Habits make smartphone use more

pervasive. Personal and Ubiquitous Computing, 16 (1), 105-114.

Park, J., & Han, S. H. (2013) Defining user value: A case study of a smartphone. International Journal of Industrial Ergonomics, 43 (4), 274-282.

Salomon, I. (1986) Telecommunications and travel relationships: A review. Transportation Research Part A: General, 20 (3), 223–238.

Schimmenti, A., Passanisi, A., Gervasi, A. M., Manzella, S., & Famà, F. I. (2014) Insecure attachment attitudes in the onset of problematic Internet use among late adolescents. Child Psychiatry & Human Development, 45 (5), 588-595. http://dx.doi.org/10.1007/s10578-013-0428-0

Sim, T., Gentile, D. A., Bricolo, F., Serpelloni, G., & Gulamoydeen, F. (2012) A conceptual review of research on the pathological use of computers, video games, and the Internet. International Journal of Mental Health and Addiction, 10 (5), 748-769.

Thomée, S., Härenstam, A., & Hagberg, M. (2011) Mobile phone use and stress, sleep disturbances, and symptoms of depression among young adults-a prospective cohort study. BMC public health, 11 (1), 66.

Wright, T. A., & Cropanzano, R. (1998) Emotional exhaustion as a predictor of job performance and voluntary turnover. Journal of applied psychology, 83 (3), 486.

Zheng, P., & Ni, L. (2010). Smartphone and next-generation mobile computing. Elsevier.