# Digital Overload: The Impact of Excessive Gadget Use on Young Adults

# Dr Yeshaswini V

Assistant professor, Department of Psychology, Christ (Deemed to be University)

Abstract- Studying technological addictive behaviours is a relatively new area of research among many psychological researchers. The Objective of the present study was to study the impact of excessive gadget use among young adults.

The study adopted a qualitative research method to identify the specific dimensions and sub areas of impact associated with the use and overuse of technological gadget. Using the Purposive sampling method a total of 405 data's, 341 between the age range of 18-25 years and 64 stalk holders between the age of 16-17 years and 26-59 years were collected. The responses were analysed through thematic analysis to inductively describe the impact of excessive technological use on young adults.

The results indicated that excessive use of gadget impacts 4 dimensions of individual functioning namely changes in Daily Routine Activity, Physical Impact, Psychological Impact which includes Behavioural and Emotional Changes and Social Impact. The results also indicated that there is a specific path of movement of these effects as an onset sign and symptom for technological addiction. These results provide a referral framework to understand the impact of excessive technological gadget use, it can be used for self-evaluation by the excessive users and aid the therapists in planning intervention.

# **Key Words: - Effects, Technological Use and Overuse, Young adults**

#### INTRODUCTION

Technological addiction is a new area in the psychological research. The present study aimed to identify the effects and behaviour manifestations exhibited due excessive use of technological gadgets among young adults. In purview with the research objective the study aims to answer

- 1. Whether addictive behaviours form due to the excessive technological gadget use?
- What aspects of individual self is impacted due to the excessive use of technological gadgets?

## Addiction

American society of addiction medicine defines addiction as a "A treatable, chronic medical disease involving complex interactions among brain circuits, genetics, the environment, and an individual's life experiences". People with addiction use substances or engage in behaviours that become compulsive and often continue despite harmful consequences. Manifestation of addictions are either physical or behavioural.

Technology addiction is studies under behavioural addiction also called impulse control disorder of treatable forms and is defined as loss of control in one's action and compulsive engagement in behaviours resulting in temporary satisfaction and happiness. These forms of addiction create dependence on the temporary pleasure and create a compulsion to repeat the same. It is a compulsion to engage in a rewarding non-drug-related behaviour. It is commonly called a Natural reward despite any negative consequence to an individual's wellbeing of any form (physical, mental, social, or financial). (Cuzen.N, Stein.D, Behavioural Addictions, 2014).

#### Technological Addictions

Technological Addictions are defined as – 'Human machine interaction (active/passive) containing an inducing and reinforcing features contributing to the promotion of addictive tendencies' (Griffiths, 1995). Common types are computer addiction, social media addiction, video game addiction, internet addiction disorder, and mobile phone overuse, pornography, online shopping, internet surfing and infobesity, texting/email addiction and work-related digital addiction.

Technological addictions are considered new world disorders with no specific criteria for diagnosis in classification manuals except for internet addiction but is considered highly pathological as it affects individual functioning. The signs and symptoms observed in excessive users are preoccupied technological thoughts, increased urge engagement, withdrawal symptoms after reduced use, high tolerance for usage, increased neglectful behaviours, under performance in work/ daily altered social life and disturbed activities, relationships, impaired cognitive abilities, increased disturbances, altered concept emotional gratification or pleasure. Researchers' claim that overuse of technology is a symptom of mood disorders or personality disorders and now is a standalone problem and need to be added to the DSM and ICD.

# What makes technology addictive?

Research claim that there is no single trigger or cause for the excessive use but factors like communication, information, entertainment, work, boredom. avoidance of discomfort, overtime with increased use and eventually become addictive. it fulfils the need for stimulation, interaction, reduce boredom, stress, rejection, and sadness. In addition, it impacts the pleasure centres in the brain. As a technological medium internet, smart phones, tablets, computers, social media, internet games, Skype are used and its user-friendly design, easy access to enormous information in a very less time frame, it also creates an experience of autonomy, competency and control which makes it addictive.

# Technology and young adults

The transition during young adulthood is filled with exploration, inquisitiveness which spread across positive and negative aspects, increasing the vulnerability of the risky behaviours either online or offline. Digitization is creating an online slavery and among young adults the world of internet and technological gadgets is creating unnecessary curiosity, superficial social life and relationships, comfortable communication, escape from reality and sense of control, it is making them closed down to the world outside and lead a virtual life inside the gadget creates dependency on the technological world.

# Research gap.

Technology and technological usage among young adults in India at the present are very high and still budding domain in research. Therefore, a deficiency in research on its negative effects on behaviours from the

Indian context can be observed. The available literature on the effects of technology on individual functioning only indicate that excessive use leads to psychological, physical, and social disturbances with signs and emotional and cognitive, temperamental issues, problems of posture and vision. The earlier research doesn't specify the categorical effects and thus creating the need for the current study, this study is one of the pioneer studies in this domain and lay a way for further development of research.

#### Rationale.

The data obtained from this study could prove its importance in understanding the addiction spectrum on large and curtail certain deviance in behaviours due to use and overuse of technology thereby aiding the intervention and therapies. It also provides valuable insight to the technology users about their own deviant behaviours or disturbances due to overuse and thereby act in accordance to make the human-machine relation healthier.

#### **METHOD**

The study aims to understand the impact of excessive gadget use among young adults and for this purpose the study adopts qualitative research method to inductively describe and interpret the data regarding the themes of technological overuse and disturbed behaviours.

# Sample

Using Purposive sampling method a total of 407 sample who are aware off and use gadgets are selected, The sample distribution and characters are as follows: 341samples are between the age range of 18-25years who are studying the undergraduate, post graduate, professional programmes or doing the skill based training trough internships and the remaining 64 samples are the stalk holders between the age range of 16-17years who are younger siblings and studying in pre-university and 26-59years who are the elder siblings, parents and teachers to young adults.

#### Measures

Technological addiction is relatively new area of behavioural research and thus no standardized tool is available to identify the effects of excessive use, thus for the current study the questionnaire which includes consent form, demographics, questions on technological awareness, usage and effects was developed by the researcher and it was face validated by the expert panel and the obtained inter rater reliability value was 0.775 i.e. 77.5% agreement amongst the panellist on the questions formulated to perform its intended function adequately on the samples chosen and thus indicate a high reliability. The data required was collected through focus group discussion method on the sections of technological awareness, usage and effects and using Thematic

Analysis the impact of excessive technological usage was inductively described.

# DISCUSSION

The results analysed focused on the impacts of excessive use of technological gadgets and 4 broad impact dimensions were identified namely Daily Routine Activity, Physical Impact, Psychological Impact which includes Behavioural and Emotional Changes and Social Impact. The path of these dimensions is depicted in the figure below.

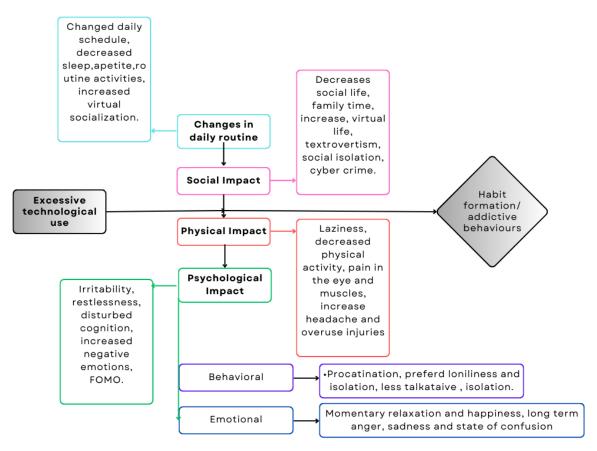


Figure 1: PATTERN OF IMPACT DUE TO EXCESSIVE USE OF TECHNOLOGY

The impact pattern begins with changes in daily routines, leading to social impacts and further affects the physical and psychological functioning. Disturbances or dysfunction in daily routines include changes in schedules, decreased sleep and appetite, reduced engagement in routine activities, increased virtual socialization.

These changes can result in decreased social interactions, less family time, and inclined towards virtual interactions, they constantly try to meet unrealistic social media standards as part of social

changes. When these efforts fail, individuals may isolate themselves socially and become more active in the virtual world and are prone to become victims of breaches of data security, cybercrime, and online radicalization.

The physical impacts of these changes can manifest as laziness, decreased physical activity, eye and muscle strain, increased headaches, and overuse injuries. And the psychological impacts include irritability, restlessness, changes in thought processes, increased

anxiety and depression, and a fear of missing out when away from gadgets.

Additionally, there are two subareas of psychological impact: behavioural changes and emotional changes. Where in behavioural changes includes procrastination, a preference for solitude, reduced talkativeness, and avoidance of social events in favour of the virtual world. And emotional changes include experience of temporary state of happiness and relaxation to long-term experiences of sadness, anger, and confusion about one's emotions.

In addition, young adults also experience insecurity, fear of missing out, body image issues, and low confidence, often engaging in constant comparison and experiencing jealousy. It's important to note that daily routine changes and social impacts are immediate, while psychological and physical impacts are often long-term.

## **CONCLUSION**

The study concludes that excessive use of technology can lead to habit formation which in turn gets converted to addictive behaviours. The pattern of impact formation is first observed on daily living, followed by social, physical, and psychological effects. While the findings have significant relevance in the current world, the study's limitations include a lack of specificity regarding the criteria, type, or level of technological addiction among young adults. Additionally, gender and socio-economic factors were not considered as variables of interest, suggesting that future research should include these aspects for a more comprehensive understanding.

The implications analysis highlights that technological addiction is still a developing research area in the Indian context. This study can contribute to the knowledge base for research on technology and human behaviours in India. The researcher also identified a gap in variables such as technological addiction related to smartphones, internet usage, and overall behaviour modification. The results of this study could provide a foundation for further research in these areas.

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