

The Influence of Emerging Technologies on Human Conduct

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Abstract

Not just in India but globally, technology has become the pillar of society. Almost everyone in today's culture spends between three and four hours a day online, whether they are students or full-time employees. Individuals and vocations vary greatly in their dependence on technology. Numerous experts hypothesised that students would be more impacted by the negative impacts of modern technologies on human behaviour than the working population as a whole. According to a recent study, adolescents (those between the ages of 10 to 19) overuse the internet. Adolescents use their phones to play games and play with friends. Mental health practitioners have taken serious note of the disturbing behaviours, psychological disorders, and mental health challenges of the younger generation. Due to their addiction to technology, young people nowadays abuse and overuse online apps built for mobile devices. Numerous studies have shown that internet addiction poses the greatest threat to human life. People from many areas of life may be badly affected by excessive internet use, regardless of age. It muddles the objectives of the next generation. Internet addiction may inhibit personal growth and have detrimental impacts on health and relationships. A person's health and relationships may deteriorate if they spend too much time online.

INTRODUCTION

The problematic and obsessive use of technology is referred to as an addiction. Technology abuse has negative repercussions. Both the level of living and the quality of life

have grown as a result of the many enhancements brought about by technology.

The proliferation of mobile devices, personal computers, and the internet has simplified academic

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responsibilities, allowing us to play our favourite games with friends and family in the comfort of our living rooms and reducing the time and effort required to write and comprehend assignments that previously necessitated a trip to the library.

The quest for comfort may result in psychological captivity or addiction if you have low self-esteem or struggle to cope with the demands of daily life. Ivan Goldberg (1996) coined the term 'internet addiction' to describe obsessive internet use. Young (2008) asserts that 'cyber-sexual and cyber-relational addiction' is on the increase with information overload and dependency on computers and mobile devices for everyday activities.

Additionally, addiction to video games and the usage of electronic gadgets for communication are regarded as mental disorders. The DSM-5, the most recent version of the Diagnostic and Statistical Manual of Mental Disorders, classifies 'gaming' as a life disruption. Damage to your physical health may emerge in a number of ways, including eye strain, head or brain pain, disrupted sleep, etc. Stress, hostility, violence, a sense of inadequacy, and a general lack of ability may all have a bad impact on mental health. This adds to anxiety, irritation, insecurity and depression.

METHOD

In this study, prevalent data analysis approaches are used. Various academic materials, including

papers, internet resources, and print publications, were considered. The study reveals that several perspectives are preferable to a single one when it comes to comprehending the phenomenon of internet addiction in contemporary society. According to the numerous theoretical frameworks at our disposal, internet addiction may be seen from several angles. In its widest sense, research may be said to include almost everything. Following a review of secondary sources, this inquiry employs qualitative and subjective research approaches.

THE INTERNET'S INFLUENCE ON HUMANS

Technology makes life easier. Following revolutionary approaches, mechanical and electrical technologies make surgeries easier, safer, and less daunting. X-rays, Computed Tomography (CT), Positron Emission Tomography (PET), and Magnetic Resonance Imaging (MRI), transformed diagnosis. Now, microwaves and ovens have replaced the usage of sticks to create fire. Technology reduces the severity of pain. Consider cooking on a burner that produces a great deal of smoke, rubbing stones together to create a fire, or doing minor surgery with a hot blade. Who would choose to feel awful instead of suffering? Children that watch a lot of television are unwilling to play outside, collaborate, or lose. Technology has altered our way of thinking. Mobile phones, laptop computers, and the internet

have simplified academic life by allowing us to write and study a project without visiting the library, increased the excitement of daily life by making communication easier, and allowed us to have fun with friends and family while sitting in our lobby and playing a favourite game without them. People who struggle to interact with people may feel empowered and wealthy by having access to the internet, newspaper, friends, and games in their hands. Virtual identity helps shy people to interact easily. In India, Facebook is becoming a popular venue for romance and breakups. Social media is a lifestyle for many. Like alcoholism, internet addiction provides pleasure and stress alleviation.

Utilisation and Misuse of the Internet in Modern Society

If someone uses the internet extensively, they may develop an addiction. The internet has revolutionised the nature of contemporary communication and education. Internet abuse is simple and cheap. It is possible for technologies to foster either adaptive or maladaptive behaviours. A recent study indicated that excessive internet and mobile app use is linked to technology and social network addiction.

Despite its utility, there are several ways in which the internet may be misused. Internet misuse is a serious concern.

Uses of Internet	Misuses of Internet
Easy communication (Internet brings the world closer)	Intrusion into privacy (hackers can create viruses)
Online shopping (e-commerce)	Posting fake advertisements
Financial transactions (business)	E-mail spamming, piracy and privacy problem (cyber-bullying)
Education	Pranksters
Grabbing information regarding anything	Time wastage and addiction (Several hours on internet without any purpose)
Social networking sites	Negative publicity
Unlimited access to information and real-time updates	Wrong information (Anyone can post anything)
Endless entertainment	Pornography (a breeding ground for illegal activity)

Bridging the cultural gap	The world is becoming dependent
Video conferencing	Virtual world and compromises personal information (family communication worsens)

Dependence on Technology in the Present Day

Addiction is a brain condition characterised by compulsive drug use despite adverse effects. Substance misuse becomes the addict’s principal focus. Internet addiction is characterised by compulsive online behaviour that disrupt one’s personal and professional relationships. Internet addiction is a mental disease characterised by a compulsive urge to access the internet continually. Behavioural difficulties may manifest as emotional or social disharmony. Psychological and physiological concerns have been connected to the use of social media and mobile devices.

Psychological Perspective and View

From a psychiatric standpoint, ‘technology addiction’ comprises all types of online reliance. Goldberg coined the term ‘internet addiction’ in 1995 to characterise obsessive internet use (Goldberg, 1996). The five separate categories were identified (Young, 1998 and 2008).

- Internet-based polling, file sharing, and sex transactions
- Social media addiction is in fact associated with relationship turmoil and instability

(visit rooms, interpersonal organisations).

- Internet related gambling, buying, and trading are instances of web-surfing impulses.
- Superfluous investigation, data collection, and database queries
- Computer and mobile device users are trapped by pre-modified games, blogs, messaging and Twitter, among others.

Additional Disorders

Texting addiction is real and should be evaluated alongside other types of computer addiction (Block, 2008). Juhi (name changed), 19-year from Calcutta, was the first case in India, and she was seen at the National Institute of Mental Health and Neurosciences (NIMHANS) on June 18. Despite suffering from aching fingers, a stiff neck, and other symptoms, she continued to text, ‘texting addiction’. Text aphrenia is misinterpreting the emotional tone of communication. Texting at an excessive rate is distracting in the office.

The Bio-Psychosocial-Spiritual Model

Addiction is a complicated illness with roots in the body and mind that affects every part of a person’s life; thus, it

requires a holistic understanding and treatment strategy that takes into consideration its biological, psychological, social, and spiritual modalities. Our sector requires the expertise and confidence to advocate for the safe use of biopsychosocial-spiritual modalities and new technologies. The use of colour theory in the healing process recognises and respects the intricacies of treatment and the inexpressibility of human experience. The metaphors of the world's religions shed light on the mysteries of the spiritual realm. They are handy for challenging inquiries.

SELFIES ADDICTION

Self-dependence narcissism, machiavellianism, and psychopathy have all been linked to an increase in 'selfies'. Selfies may be taken for several purposes, including vanity, communication, documentation and recreation (Kim et al., 2016). Selfies may have good effects on the environment and society by drawing attention, improving mood and enhancing self-esteem. The human desire for social status is not reduced by 'not posting selfies'. As a consequence of this addiction, a British teenager who drank 200 shots a day stayed at home for six months, lost 30 pounds, and dropped out of school. Since he was incapable of snapping the perfect selfie, he unsuccessfully tried suicide (Gemma and Kerry, 2014).

Similar to Obsessive-Compulsive Disorder (OCD), but not yet recognised

as a clinical illness in the Diagnostic and Statistical Manual of Mental Disorders (DSM-V) by the American Psychological Association (APA), the DSM-5 only mentions gaming as a diagnosable illness.

Assessment and Diagnostic Criteria

Due to the absence of internet addiction in DSM-IV, the identification criteria are based on those of other addictions in DSM-IV. Young (1998) states that "confusion of drive control" as described by the DSM-IV, is the most prevalent technique of evaluation owing to its strong association with compulsive gambling and excessive internet use.

Initially, Block (2008) listed four components as critical to the Internal Affairs Division/Project Implementation Unit (IAD/PIU) decision for DSM-V incorporation:

- (i) Negative outcomes include arguing, lying, poor academic or professional achievement, social isolation, and exhaustion;
- (ii) Excessive internet use is often associated with a loss of time or a disregard for fundamental drives; withdrawal includes feelings of outrage, pressure, and sadness when the Personal Computer (PC) is disabled;
- (iii) Tolerance includes the need for better computer equipment, more programming, or longer periods of use; and
- (iv) Using the side effect model, clinics have found that patients

with internet addiction exhibit withdrawal, tolerance, and withdrawal (a rejection of reliance attributed to maniacal issue) when the PC is disabled.

Problematic gaming is characterised by a lack of control over gaming, a preference for gaming over other hobbies and interests, and perseverance despite adverse outcomes (WHO, 2016; ICD-11).

PREVALENCE

Globally, 70 to 90 per cent of individuals aged 13 and over go online at least once every day (Anderson and Jiang, 2018). In 2023, 64.4 per cent of the world's population, or 5.16 billion people, have access to the internet (*Digital 2023: Global Overview Report*).

Surwase et al. (2017) questioned ND college students between the ages of 17 and 25 and discovered that slightly more males than females were hooked to the internet (35 per cent vs. 35 per cent). Internet addiction affects 83.3 per cent of urban kids and 78.0 per cent of rural students in Mangalore, India, who are of school age (Sowndarya and Pattar, 2018). Compared to urban youth, rural kids were less likely to acquire an online addiction (16.6 per cent), while urban youth were more likely to develop a mild, moderate, or severe reliance on the internet (39.3 per cent), or even an addiction (6 per cent). Bagdey et al. (2018) found that in Nagpur city that 30.69 per cent of inhabitants were mildly hooked to the internet,

26.60 per cent were highly addicted, and 0.226 per cent were seriously addicted, with males comprising a somewhat greater proportion (52.09 percent) of the total. The likelihood of poor mental health among addicted students is double than that of their non-affected colleagues.

The Consequences of Electronics Addiction on Society

It is vital that project participants understand that the implementation unit's emphasis is not on how much time individuals spend online but on the negative impacts of doing so. An employee working late to take international calls is an example of proper internet use, as is a child studying or playing games to improve fine-motor skills or a better sense of judgement, decision-making, etc., during leisure time. In an information-rich culture, people can easily locate what they need, develop global connections, perform in-depth research, and digest new information, all of which lead to a higher sense of autonomy and confidence.

Negative Consequences of Technology Addiction

Discomfort in the body, physical manifestations of illness include 'sore eyes, migraine or headache, disrupted sleep patterns, carpal tunnel syndrome, extreme weariness, reduced immunological function, and the like' as well as 'postural fatigue' which manifests as neck and back problems whereas serious problems

include inactivity, poor nutrition, and obesity, as well as a failure to make efforts to remedy these circumstances. (Jeon, 2005; Young, 2004 and 2008)

Students in secondary schools in South Korea who are significantly hooked to the internet have an abnormally high incidence (37 per cent) of experiencing excessive daytime weariness. The prevalence of a sleeping disorder increased the incidence of wheezing, teeth grinding, and terrifying dreams (Choi et al., 2009). Ahan (name changed) was unable to overcome his drug addiction despite taking medication to treat his addiction and its symptoms. Although he had used sleeping pills, they had no influence on his struggle to fall asleep. He was unable to make ends meet and had to cancel arrangements with friends and family. While working on Ahan's sleep problems, his therapist discovered that his obsessional online talk with his girlfriend was controlling him. Therefore, he never went to bed before two in the morning and in order to stay awake he took his medications at twelve o'clock midnight. Ineffective sleep scheduling hampered his efficiency. Here, finding a mate was more important than adjusting his sleep routine or giving up narcotics.

PSYCHOLOGICAL HEALTH HAZARDS

Thus, internet addiction disrupts routines and schedules, which is predicted to 'slow down the speed and process of the primary activity,'

resulting in later pressures to complete target-bound tasks, which can cause 'anxiety and irritation; aggression and hostility; the perception of inferior abilities' and, in some cases, guilt. 'Restlessness, bad mood, low self-esteem, and loneliness' are also potential outcomes. This results in difficulties regulating one's thoughts, emotions, and behaviours (observations in personal cases). According to Ferraro et al. (2006), 'the addicted person felt the compulsive want to be connected to the internet again.'

Co-occurrence of Psychological Disorders

Internet addiction is often accompanied by other mental health conditions, such as depression, generalised or social anxiety, and ADD/Attention-Deficit/Hyperactivity Disorder (ADHD).

Chou et al. (2005) observed an association between social isolation, anxiety, and sadness, as well as future internet addiction, in their research of South Korean men. Twenty research were analysed for their links with Problematic Internet Usage (PIU) and mental health problems: 75 per cent of research discovered correlations between PIU and depression; 57 per cent observed a correlation between PIU and anxiety; 100 per cent of research identified associations between PIU and ADHD symptoms; 60 per cent discovered associations between PIU and excessive habitual side effects, and 66 per cent discovered

associations between PIU and a menacing aura or anger. (Carli et al., 2013). According to a study, those with internet addiction exhibit “abnormal obsessive compulsive measures” (Dong et al., 2011).

Relationship and Behaviour Related Problems

Addicts may have ‘difficulties in interpersonal relationships, time management, and physical health’ and ‘withdraw from social activities because of poor tolerance’. Excessive internet use has been associated with an increase in depression and a decline in self-esteem (Jeon, 2005; Young, 2008), both of which have a detrimental effect on connections with friends and family. Substantial danger to interpersonal connection is posed by shifts in parental behaviour, such as reducing the amount of time spent with and emotional attention provided to children. People’s ‘feelings of isolation, loneliness, or alienation’ and complaints about and from their families, increase when they spend more time with their online friends than with their real-life friends. Isolation results in greater time spent online, which may indicate social problems (Wellman and Gulia, 1999; Shuhail and Bergees, 2006). A person may find himself in a never-ending cycle of solitude, which encourages them to use technology more compulsively.

Problems with time management (Brenner and Scherer, 1997), sleep difficulties and academic

performance (Kubey et al., 2001) are examples of behavioural concerns that may lead individuals to modify their routines such as missing meals in order to spend more time on the internet (Shuhail and Bergees, 2006). If one loses concentration, one’s productivity at work and at school may decrease. The authors highlight that ‘internet usage is motivated by non-work’ (i.e., leisure) interests and that ‘work drive and internet use’ have a negative association (Landers and Lounsbury, 2006).

The Cultural and Social Effects of Technology Dependence

According to Bandura (1999), ‘behaviour’ is the outcome of a two-way interaction between internal human elements, such as cognitive, emotional, and biological events and situations, and the external environment. This applies to all types of addiction and compulsive behaviour, including excessive electronic gadget usage. It is either the individual or their external environment that is deficient.

The structural changes in the prefrontal cortex that have been associated with ‘attention problems’ may have a biological basis. This makes it more difficult to choose what to prioritise. The brain’s reward-oriented regions are also engaged. This chemical imbalance between dopamine and serotonin is associated with a biological pre-disposition. In reaction to addictive behaviours, dopamine is

produced, heightening sensations of pleasure and satisfaction. Alternatively, Problematic Internet Use (PIU) tendency exists.

The main component of the psychological theory known as reinforcement theory is the variable ratio schedule. If you log in often, you will always get a prize. Video game addiction may also be characterised by the need for gamers to always experience something new. However, this does not exclude the potential for addiction in introverts. Their motives might be distinct.

Interpersonal issues include family discontent and recent stressful events (Lam et al., 2009), a lack of social friends, bad relations with instructors and students (Wang et al., 2011), a poor school connection, and drug or alcohol usage (Yen et al., 2009).

Poor self-esteem (Fioravanti et al., 2012; Stieger and Burger, 2010), depression, impulsivity, dissatisfaction with academic accomplishment, being male, and insecure attachment styles or avoidant attachment styles have been associated with IAD (Lin et al., 2011). Therefore, any external or internal factors that lead to anxiety and melancholy are relevant, given that time spent online may temporarily fill the void.

According to Davis's cognitive-behavioural model of Pathological Internet Use (PIU), 'social isolation' is more significant than psychopathology in explaining the behavioural symptoms of PIU. When

victims of fraud lack sufficient social support, they may resort to online gaming as a kind of treatment. As shown by the 'fulfilment theory of the web,' this may lead to an unhealthy preoccupation with gaming and trouble in other areas (Kim et al., 2015). When a youngster is exploited by a friend, playing online games, particularly role-playing games, may help them create new connections and regain their self-esteem, reducing the negative effects of the incident (Morahan-Martin, J., and Schumacher, P. (2003)).

TREATMENT

Pathological drug abusers need therapy since their addiction severely affects not just them but also their loved ones and the community. In a surprising first, a Delhi Public School (DPS) girl informed her friends through Multimedia Messaging Service (MMS) that her boyfriend had dumped her. After becoming the victims of internet trolling, individuals have committed suicide, attempted suicide, and gone into a deep depression (Halder, 2016).

PHARMACOLOGICAL TREATMENT

The cornerstone of therapy for Internet Addiction Disorder (IAD) consists of interventions and procedures presently utilised to treat substance use disorders (IAD). According to research, two months of therapy with experts recently employed for the treatment of ADHD and OCD, equivalent to 'methylphenidate' improved the

youngsters, and this improvement was closely associated with enhanced attention (Han et al., 2009). Escitalopram (Dell'Osso, Altamura, Hadley, Baker and Hollander, 2007) and bupropion, a dopamine and norepinephrine inhibitor, have also been shown to be useful in the treatment of depression (Han et al., 2010).

Utilising a Psychosocial Approach

Present-day treatment research focuses mostly on psychosocial strategies, whereas pharmacological procedures are seldom examined. Eliminating an issue as soon as it arises is best. In some circumstances, it may be important to refrain from using a computer or accessing the internet (Shaw and Black, 2008). A Hong Kong based directing project (Shek et al., 2009) and a 12 to 15 year old 'starting restraint' programme in Austria, Germany, and Italy have been declared effective. Globally, cognitive-behavioural treatment (CBT) has been proven to be effective (Young, 2008; Du, Jiang, and Vance, 2010). The average eight-session programme is adequate to sustain its advantages for up to six months after completion. Under some circumstances, abstinence from computers and the internet may be required (Shaw and Black, 2008). Both the guiding system in Hong Kong (Shek et al., 2009) and the 'initiated restraint' programme for

teenagers aged 12–15 in Austria, Germany, and Italy (Kalke and Rashke, 2004) have been rated effective. Multimodal, school-based group CBT may improve time management skills as well as emotional (regulation), cognitive (clarity of aims and priorities), and behavioural (self-management) competence.

There is an abundance of self-help products, including books and CDs, available online. Here is an uncomplicated, empirically supported strategy that accounts for the phenomenology of technology dependence (Batra, 2014). The reasons for excessive internet usage have been addressed at length before. Considering their interdependence, separate efforts are superfluous. In order to save time on the individually crafted plan, which will include several assessments, analyses, judgements, and goal-setting activities, the following universally applicable programme has been developed. People with strong self-esteem are aware that they have a firm foundation upon which to grow. People's failure to successfully manage their time and energy on their own is often attributed to a lack of 'self-control', which is cultivated via the use of a number of simple approaches for habitual modification. The overuse of technology has a negative impact on society as a whole. Their physical and mental independence, as well as their social and cultural lives, are badly affected.

Cognitive Behavioural Therapy (CBT)

It is considered that an individual's ideas, emotions, and behaviours are interrelated. Emotional states and ideas are capable of influencing one another in both directions.

Dialectical Behaviour Therapy (DBT)

DBT is a talking therapy similar to CBT, but it has been adapted to help individuals with strong emotions that have a detrimental influence on their mental and emotional health. Indicators clearly illustrate the effectiveness of dialectical behaviour therapy and psychological behaviour therapy (Perseius et al., 2007).

Behavioural Therapies (BT)

Adaptation and psychosocial skills training, chance instruction, demonstrating, anxiety reduction and relaxation approaches, self-management strategies, and behaviour practise are common intervention techniques used in behaviour change.

Psychodynamic Therapy (PT)

As part of psychodynamic therapy (PT), patients learn to make connections between key life events and their current emotions in order to make long-lasting adjustments and improvements.

Family Therapy (FT)

Associations with adults, strong family ties, the impression of

standardising control, all things considered, exemplary academic performance, participation in elite social gatherings and positive social activities, an optimistic outlook on school, strict confidence, and volunteer groups are all protective factors in family therapy (FT).

CONCLUSION

Technology has played a crucial role in providing people with new tools to enhance their standard of living. An unhealthy attachment to technology may inhibit innovative problem-solving, personal development, and interpersonal relationships. It has grown into a possibly dangerous means of deflecting attention away from one's own life and that of one's family and friends. In addition, people are increasingly fascinated by and interested in technology. Their over-dependence on and concern with technology are causing addiction. As a result of the independence provided by technology, it has become easier to become reliant on it. Electronic gadget addiction is affecting interpersonal dynamics. Development and technical advancement go hand in hand. It has been included in the technical use methods for online auctions. Addiction to technology impairs thought processes and, ultimately, the goals of information technology and data science. Taking into consideration a number of cognitive and addictive elements increases the user's enjoyment, usefulness, and ease of use attributed to technology.

If a dependence problem arises, it is essential to treat it in its earliest stages. There has been a tremendous overestimation of internet availability and connectivity owing to the quick adoption and growth of the internet throughout the world. The internet has become a fundamental component of our everyday existence. The advent of widespread, cheap and reliable digital

communication has opened up vast opportunities for people everywhere. This study's findings on digital and virtual addiction are concerning on many levels, including at the national and individual levels. More than that, however, we need to figure out how to mitigate the technology's unintended consequences.

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