

**INTERNET ADDICTION IN INDIAN POPULATION - A CREEPING CONCERN****\*<sup>1</sup>Reeta Verma Katiyar, <sup>2</sup>Dr. Sharique Ahmad, <sup>3</sup>Shivani Singh, <sup>4</sup>Adnan Saeed Shamsi**<sup>1</sup>Research Scholar, Department of Clinical Psychology, Era's Lucknow Medical College and Hospital, Era University, Lucknow, Uttar Pradesh. India -226003.<sup>2</sup>Professor, Department of Pathology, Era's Lucknow Medical College and Hospital, Era University, Lucknow, Uttar Pradesh. India-226003.<sup>3</sup>Research Assistant, Department of Pathology, Era's Lucknow Medical College and Hospital, Era University, Lucknow, Uttar Pradesh. India -226003.<sup>4</sup>Undergraduate Student, Era's Lucknow Medical College and Hospital, Era University, Lucknow, Uttar Pradesh. India -226003.**\*Corresponding Author: Reeta Verma Katiyar**

Research Scholar, Department of Clinical Psychology, Era's Lucknow Medical College and Hospital, Era University, Lucknow, Uttar Pradesh. India -226003.

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**ABSTRACT**

Technological era or Technological slave? The great myth of our time is that technology is communication" India stands second, internationally with about millions of Internet users and frequent enhancements in technology had increased the access of internet among all the age groups exceedingly in past years leap up the threat to various people but mainly population of adolescents age get afflicted with this addiction. However, internet addiction formally had not been identified as a different behaviour defect till now but in conditions of swiftly development of internet utilization also internet addiction is being identified as anti- international subject of concern. This appears to be essentially involved in few incredible aspects of prevention and management in internet addiction. The database management system supported in a way that supports multiple data models and its treatment had become internet addiction appears optimistic however attention needs to furthermore be on prevention. People ought to be made privy to the terrible effects of flippant utilization of internet. Accomplishing a harmony between providing the appropriate internet facilities and protecting people from risk of internet use which became a challenging task for policy makers. Though mental well-being professionals must be privy with regards of internet addiction functions towards execution of diagnosis, prevention and remedy techniques. Youth are investing maximum time in online activities gaming, pornography, excessive chatting, cyber crimes and so forth. As India is the country with the mostly young population. However, we have to obligate and implant the legal conduct amongst subsequent technology. This would not let our youngster lose their potential in scarcely perusing online and would spent their more time in actual world as against to digital one.

**KEYWORDS:** Internet addiction, social, network prevalence, Problematic internet use, treatment, risk factor.**INTRODUCTION**

The time frame of Internet Addiction (IA) turns out to be first included in 1996 by Goldberg, he associated it with substance dependence. This addiction could also be said as the abnormal way of internet utilization, which invests lot of time and prompts medical significance disability or distress. Predominantly, this could lead to objectifying the behaviour control difficulty. The manifestation of this internet addiction comprises imbalance, tolerance, worsen, spending more of the time on internet. It usually incorporates four factors specifically, immoderate use, withdrawal, antisocial repercussions tolerance. Inordinate utilization is associated with negligence of primary drives while utilization of computer through elimination is identified from feeling of outrage tension, depression and frustration whilst the internet is non-

accessible. Tolerance alludes the requirement of further advance software and higher battery backup for extended time of utilization on the other side antisocial repercussions encompasses negative emotions which incorporates stress and depression.<sup>[1-3]</sup> The positive correlation may be visible among emotional behaviour difficulties and seriousness of internet addiction. The issues encompass extended social anxiety, raised peevishness, accelerated hyperactivity, indiscretion, aggression, extended to ability correct judgment about traits and states, elevated problems in forming and retaining friendships and reduced in self -dignity.<sup>[4]</sup> Instantly utilized alterable expressions on disburse immoderate quantity of online time are addiction of computer, issues of internet utilization disorder, dependence of internet and internet addiction and

utilization of internet on cost of different components in lives. The Problematic Internet Use (PIU) which means immoderate utilization of internet portrayed with aid of using immoderate or not good control on behaviour concerning the usage of computer and access of internet, which results in distress. The other component problematic internet use (PIU) involves elevation in online activities (games, social media etc.). Despite of this mental burden risk factors associated with PIU is yet not clear.. Consecutive studies have upheld the position of emotional dysfunction in broad assortment of clinical defects and problems in utilization of internet.<sup>[5]</sup>

In view of recent reports of All India Institute of Medical Sciences (AIIMS) on internet addiction in India (2018) revealed that complain of people about this addiction had been multiplies from the time of launch of advanced amenity in technology in 2 years ago.<sup>[6]</sup> This is not simplest approximately the internet however is the symptomatic expression of distinct mental health issues inclusive of anger, less self-esteem, depression and isolation.<sup>[7]</sup> On other side, world Health Organization in June 2018 had classed the gaming defects as mental health condition, hence setting up priority for technology-align generation on persons.

### Prevalence of Internet Addiction

As India's mobile statistic intake is simply 1/10<sup>th</sup> of with inside US and diverse prevalent nations. This ultimately results to easy and affordable access towards smart phone, tablet and Wi-Fi. Mainly India is observing the excessive utilization of internet, in particular amongst teenager and kids. As indicated by an investigation, this issue in India is the genuine and as a minimum 24.6 percent of teenagers had PIU or IAD.<sup>[8]</sup> Though, in this matter ICMR had financed overview various individuals from Bengaluru aged from 18-65 years. This observation revealed 1.3% of individual were internet addicted, 4.1% with mobiles, 3.5 social networking websites, pornography 2%, 4% online shopping and 1.2% to gaming.<sup>[9]</sup> Besides this few of the research were performed on restricted to precise towns discovered moderate level of internet addiction of 23-24% in subjects and average addiction at anywhere between 7-24%.<sup>[10-12]</sup> In preceding years utilization of internet had sped up at large intensity and scale in India also there are threats in various people in particularly youngster, might be laid low with addiction of internet.

### Social factors

Social issues,<sup>[13]</sup> contemplation and poverty, face to face correspondence skills,<sup>[14]</sup> absence of social assist and loneliness.<sup>[15,16]</sup> less parental involvement,<sup>[17]</sup> adverse relationships of parents and their off-springs.<sup>[18,19]</sup> now no longer dwelling with mother.<sup>[20]</sup> and terrible companion relationships.<sup>[21]</sup> were situated to be associated with IA.<sup>[22]</sup>

### Psychological factors

Earlier compilation or mental health history.<sup>[21,23]</sup> previous or co- bleak mental issues like recessions and perturbation.<sup>[24,25]</sup> attention deficit hyperactivity disorder (ADHD),<sup>[26]</sup> fear of facing people socially.<sup>[27]</sup> are articulated for being connected with this internet addiction disorder. This disorder could also lead to habitual utilization of online pornography because of the easy access affordability and objectivity.<sup>[28]</sup> Egocentric components are also stated to be associated with sped up of taking selfies conduct and then importing it to social networking sites.<sup>[29]</sup>

### Demographic risk factors

These hazard components comprise of male gender,<sup>[30]</sup> metropolitan residing area,<sup>[31]</sup> staying in places with more noteworthy traffic which consumes times, contamination and non-satisfactory with their life in widespread,<sup>[32]</sup> juvenile and adolescent age.<sup>[33]</sup> The level of education of parents, age in beginning utilization of internet and recurrence of usage of social networking and gaming sites are amongst various components which are determined to be emphatically identified issue in using Internet.<sup>[34,35]</sup>

### Negative Health Effects of Internet Addiction

The usage of internet is without any doubt beneficial in many areas and aspects of life however additionally proposed to various negative aspects to the health psychological, physical, social, scholastic, work and financial outcomes it utilized recklessly.<sup>[36]</sup>

### Psychological health effects

Albeit the result are not generally steady, addiction of internet have been said to identified from alcohol abuse,<sup>[37]</sup> depression,<sup>[21,38,39,40]</sup> anxiety and stress.<sup>[38]</sup> The longitudinal study was performed in a student of high school grade was seen with modest to critical risk of internet addiction which trends to form depressive symptoms.<sup>[41]</sup> Problematic Internet Use (PIU) is likewise proposed for identifying the diminished welfare.<sup>[42,43]</sup> Which reduces the way of seeing life constructively.<sup>[42,44,45]</sup> and insane experiences.<sup>[46]</sup> Additionally, internet addiction contrarily impacts memory, attention and overall scholastic presentation of students.<sup>[89,90]</sup> Various studies had also established decrease in brain grey matter density (GMD) with inside components of left brain<sup>[47]</sup> and elevated level of decrease in sleeping, immoderate lethargy in daytime, insomnia, wheezing, granulation of teeth and nightmares in internet addiction in comparison to non addicted ones.<sup>[48]</sup>

### Physical health effects

Heftiness and inability of vision are significant well being impact of immoderate internet utilization in people who invests lot of time searching on the computer screen.<sup>[49,50]</sup> Extreme utilization of internet also can have an effect on development and exploration, mainly in teenagers and young ones.<sup>[51,52]</sup> Mental stress and

isolation related to deficiency of time interact with internet addicted people could harm them physically and cause numerous problems related to health.<sup>[53]</sup>

### Social health effects

Internet addicts invest an excessive amount of time online in mingling thus they don't have spare time to impart to genuine loved ones. The Online gambling and trading could lead to financial misfortune, deprivation of status and work. Contorted relationship of with family, martial, scholastic and occupation associated issues and due to the fact children, partners, and bosses are not prepared to acknowledge this kind of behaviours.<sup>[54,55,56]</sup>

### Psychological and complementary treatments of internet addiction

Verbatim treatment is the blanketed in standard psychological treatment like intellectual behavioural therapy, motivational evaluation and degenerative prevention, which permits innovative and demonstrative methods to manage the problem.<sup>[57]</sup>

### Cognitive Behavioural Treatment

This is remedy for inclination of an extensive range of behavioural, emotional and mental health issues from 1970s, while it turned into utilization with inside the scientific literature. Afterwards, its utilization had been analysed for ton of problems comprising of addiction, anxiety attacks, depression, delusional disorders and eating disorders. Additionally, internet disorders, cognitive behavioural treatment (CBT) accommodate those people in perceiving emotions for improper utilization of computers to address with their requirement. The five straightforward helps in providing improvement in their behaviour time to time. They are:

**Pre-contemplation:** It is level of therapists or expert cognizance for intruding contradiction that critical trouble with a computer utilization consist.

**Contemplation:** It is the level, individual identifies the requirement of expel, however, inclination for substitution probably won't be significant and the emotion of being deluge may be found.

**Preparation:** This stage shows that individual is getting prepared to set up an arrangement to manage with the hassle.

**Maintenance:** This stage starts whilst the feeling of individual have command on utilization of computer and giving least energy for leading changes in the behaviour.

**Termination:** This stage provides prevention from the relapse.

These all strategies are not best in every case around making unique and recognized adjustment to thoughts and behaviours however additionally making customer their therapists, which permit to utilize general understanding in their life.<sup>[58]</sup> As by and large perceived, meditation is the portion of cognitive behavioural therapy that is essentially founded absolutely on worldwide implementations which in the long run result

in expanded focus, more prominent existence and greater intellectual sight on self. Large scale researches on this therapy are executed via way of means of scientists to look its impact. Likewise, Peters *et al.*<sup>[59]</sup> expressed a significant impact in motivational counselling and cognitive behavioural therapy in people suffering from social apprehension difficulties. This could not associate to the impact of this addiction to apprehension difficulties which happens on account of the involvement of an individual with internet in any form and now no longer associated in social world. Another research had been done by Barry TJ *et al.*<sup>[60]</sup> for this apprehension problem in identifying the effect of age group on CBT and culminating significant results in people suffering from apprehension disorders. The evaluation of significant results showed fluctuations in distinct age groups. Various researches upheld the impact of CBT at the individual's behaviour. The study led by Khazaei *et al.*<sup>[61]</sup> articulated impact of psychology positively for this addicted patients and presumed that it now at this point don't just enables in diminishing the utilization of internet, however additionally also social well-being was seen to be improves in individual. Though, different conducted researches gave a positive result on the internet addiction. Medication is also a component of CBT, provides positive relation with remedy of internet addiction. Research previously done have affirmed that medication might also additionally play role as beneficial adjunct in mental health treatment issues like mood and anxiety disorder.<sup>[62,63,64]</sup> While in sync with confirmation primarily associated with preceding research also this had been additionally cautioned that medication is useful for the individual suffering with hypertension,<sup>[65]</sup> restlessness,<sup>[66]</sup> abdominal problems,<sup>[67]</sup> epilepsy, problems occurs before menses, menopause.<sup>[62]</sup> Originating the exploration executed through assorted scientists entire world, it became observed that internet addiction set off adverse health effects on teenagers, young and adults.

They were attacked by more than one different mental disorders, it may be advantageous handled through meditation or could say that internet addiction could be healed with aid of using the practice of meditation. In between biomarkers which are doubtlessly tormented through medication practice are telomeres and its enzyme, expression of genes associated with telomeres. They are basically nucleoprotein complexes found in terminals of eukaryotic chromosomes which shields DNA from destruction and instability and is sign of cell ageing and mental distress. Medication method enhances the adaptive emotional and mental functioning and upgraded telomere maintenance.<sup>[68]</sup> The observation through Elder and co-worker.<sup>[69]</sup> in 2014 expressed medication practice enhances in proportion of stress perception, depression, exhaustion symptoms as an, outcome demonstrating that it could be helpful in greater pressure and stress environment like workplace. The advantageous utilization of meditation practices in internet addiction is upheld through immense fascination

of its utilization for several outcomes on mental and physical health function entire groups, with those of anxiety and depression to the individuals managing from stress or persistent affliction. The wellbeing of medication to the normal functioning of the body consist bringing down blood pressure, diminishing cortisol level and enhancing attentiveness, emotional aspects in cortex and influencing the parasympathetic nervous system which stimulates the relax mode resulting to adjustments in normal function of body and biochemical also. Additionally, medication will elevate cognitive activity, reduction in emotional reactivity and increases executive mechanism, this might also additionally assist individuals suffering from depression and anxiety.<sup>[70,71]</sup> The neuroimaging research had verified the physiological modifications and demonstrated increase in network productivity and connection of anterior limbic cortex to the encephalon involves in autonomous regulation.<sup>[72,73]</sup> Medication either clinical or non-clinical setting display reduction in apprehension, sorrow and manifestation involved with mental distress.<sup>[74]</sup> Awareness of meditation' involves individuals to relocate from negative state of mind and sad mood. It is made in "mindfulness behavioural cognitive treatment", that could save you from deterioration in patients with more than 3 events of depression. This likewise identified as mindfulness associated deterioration prevention wherein educational interference collaborates traditional cognitive behaviour deterioration obstruction plan with medication and mindfulness. This is taken into consideration the individual addicted works mindlessly without or minute attention of cues. This method enables patients to allow unbearable condition of difficult emotions and craving.<sup>[75-76]</sup> Heartfelt cleaning is the likewise a dynamic mechanism wherein "determination" is utilized. This could be a completely especial heart-based framework with main practice like cleaning and medication assist through yogic transformation. Various studies had tested the valuable results on all physical, psychological, emotional intelligence, sleep also on extent of length of telomere through the study of Arya NK,<sup>[77]</sup> this got to be demonstrated that heartfulness strategies of medication cleaning had beneficial impact on sympathovagal stability. The heart rate modifies for determining remarkable diminish at the time of cleaning and medication, while Blood Pressure (BP) reduced considerably through medication, indicating entirely beneficial effect of cleaning and medication.<sup>[77-80]</sup>

### Art and Music Therapy

This is so charming that approach inventiveness of the artwork could initiate individuals thought and utilized in therapeutic science as remedy. The art therapy makes use of expressive arts in a healing surrounding with skilled specialists. This imagination leads to the aid of using only visualisation. This use capacity and persuade to depict the prominent images and symbols, additionally involves lively all together. This may be taken into consideration as self- contemplation mechanism or approach. While this technique, communication expertise

increases in order that one express and mediates emotions in a long way higher manner. This approach lets in and persuades the individual to evolve more and result of elaboration of one's construction. The American Art Therapy Association explains this as a way of therapy which could allow person to form self-respect preserve psychic regulation and decrease apprehension. This achieve in forming someone emotionally, cognitively and social possibilities. The sort of art typically comprises of music, painting, and sculpting, dancing, drawing. Art therapy may be formed relevant in various ways among them few are:

**Gestalt Method:** In this method people suffering from mental stress are helped in a way so that they express their thoughts and feeling from any kind of artwork, hence this method underwent in depth communicative among patients and therapy.

**Active Imagination:** The line of selection in diseased individual, it may be advocated for assuming and creating the artwork based on it and the therapist notices what's being formed and correlates it to the patient's mental health.

**Third Hand:** In this therapist accommodates from art of creation and diseased person creation.<sup>[81-83]</sup>

**Music:** It is a supreme estimate in many of us life, as it miles these days getting utilized as a cure or emotional problem like anxiety and mental distress, compulsive behaviours and alcohol intake.<sup>[84]</sup> This therapy is one of the prominent way of treating mental distress. As defined by various association of music therapy, evidenced and clinical utilization of music interference for completing individual aims of therapeutic involvement by authorized persons who had done a complete and approved music program. Experts and licensed therapist take a look at its outcome both physiologically and psychologically formed techniques for efficiently using it for achievement of individual's aims. This therapy offers customers a path of expression which may assist them nicely and communicate those on matters that results in difficulty to them and also stimulates, self analysis and psychological calmness, hence entire mental health. Also clinics and rehabilitation centres, utilises music at any given time.<sup>[84]</sup> Music consists of beating venture which plays a very prominent role as supporting plan for addiction treatment. As the work performed in 1980 by Mendel revealed that beating drum offers relax mode stimulation healing experiences and complements hypnotic susceptibility. This activity of beating and different throbbing auditory stimulations provides a riding way for brain, mainly in theta and alpha ranges.<sup>[58]</sup>

### Motivational Interviewing

In elaboration patient-centred address to emphasizes personal preference and obligation. These are essentially for individuals not prepared for extruding their behaviour by itself, accordingly contradict their issues

and now no longer in seeking rehabilitation.<sup>[85]</sup> Many internet addiction threat elements associates to parents and family environment and their influence is important for socialisation of adults.<sup>[86]</sup> The prospective study performed in 2015, Chih-Hung Ko, they showed that family members play an important predictive and influential element for internet addiction amongst adults. This turned into defined hypothesis that social control additionally declares bent closer to deviation and demonstrates whilst the connection between the person and society is weakened. However, relationships with family have an exceedingly important role in behavioural issues of adults.<sup>[87]</sup>

### Internet Fasting

The current technology superior generation, persons are beneath the constrain of android phones and are use to of look over it every second for all kinds of works or any information or mails social networking sites. People become associate in internet and are becoming addicted increasingly, consequently also they got fallowed the Internet fasting with the aid of intentionally contributing time offline . Internet fasting may be described amend of any one lifestyle for knowing suitable ways of internet utilization through the space from smart technology rich life. Tomohiko Yoneda, 41, , encouraged the frequent internet phenomenon while also seen it for a month and earlier, became set up at the internet for many hours per day. Afterwards, found out that he turned to be incapable of reading book all due to low health and was on bed as not able to concentrate and intense thinking has been dwindled.

Further, making guidelines on utilization of internet with imposing restriction of time in all the activities of internet whether spending time on social media or checking mails. This resulted in increase of time spending in real word and enhanced concentration and good felling of mental health. Japan, had both medical and addiction centre which are concerned with plans of government on internet fasting. Also there are few organizations which had formed the internet fasting practice as proportion of its curriculum like Ohyama Inc.<sup>[88]</sup>

### Cosmic Medicine

The converting time had lead to emergence of “Cosmic medicine”. Dr. Avadhoot Shivanand is creator main medic of cosmic science and also father of cosmic medicine. He had inaugurated Shiv Yog for helping individual who are mentally ill, on other side modern medicine function on disease level. As, for now we understands the modern medicine, it do not contain incurable disease as grouped. The medical technology based on experience and observation had come round for believing that human well being enclosed components which may be estimated commonly. It is partially due to the fact that now we have apparatus to detect which formerly was not there previously. Neuroimaging is prominent method in this aspect; progressively

sophisticated technique for screening the brain and their function at molecular level had shown physical link between thoughts, feeling and health status of organism. A top instance for the process is the throbbing feelings cause identical components for brain as physical pain. The largest causation aspect at the back of entire prevalent disease is Pineal Gland associated calcification. This is sarcastic that we have involved our lives in sense less, blunt mind, countless watching on television, infinite smart-phone staring and intake of addictive components and lastly attempt of search for peace. Initially we blunt ourselves after which we want silence, serenity and stillness. Primarily we do anything for calcifying and harden our Pineal Gland and afterwards we need pillar to post for decalcify. Shivanand Ji had presented an exceptional view for this modern medicine and that is there is not any incurable illness only incurable people and thoughts are there. He defined the way through which Shiv Yog healing activate the inside healing mechanism in regards to the patient’s receptivity towards medicines. So instead of being dependent on medicines, it is best to consider them as a minute support system for curing faster. This could happen simply from Shiv Yog whilst routinely in every way you are waken and alert, though such medicines will be a side help and medicine will not hold any value in your life.

### India’s internet de-addiction centre

The internet de-addiction centre has been made in National Institute of Mental Health and Neurosciences (NIMHANS), India and named as ‘shut down’ for suitable and healthy utilization of technology. Also in AIIMS, Delhi, behaviour addiction clinic is started. Few of the identical centres had been started up in distinct places. However, India requires many more these type of centres throughout the country in view that millions of Indians could be prevented from this addiction.

### CONCLUSION

With always growing vogue of social media, adolescents are depriving significant time on social networking websites and are susceptible of getting addicted to this form of online social interaction. From the last decade social networks explosion had been witnessed including facebook, a brand new social networking site. There had been speedy arrival of online interaction between groups of individuals who have similar interest though they may be assembling in absolute space. There are various websites have been carried out vigorous social contents where in hassle-free online groups may be constructed and encourage through the assistance of social connections and communications among users. These network form people, communities and groups (with common interests) to stay connected pathological utilization of Internet and social networking sites in particularly also initiated being identified as mental disease globally. While the primary aim of researchers in psychiatry invading to internet in last decade in 20<sup>th</sup> century was addicted towards internet is now transferred to hassle associated with the use of social websites in the

21<sup>st</sup> century. Adults especially teens protected to be ignorant of the way plenty of time truly consumed on social networking websites, and how impact of this could had on its academic presentation and social connection. These additionally have been stated by researches that there could be correlation among less self value, sense of social deficiency and social network addiction. Through, academic procrastination to social inability as far as actual physical interactions are issue, faded fecundity at work and physical issues related to inactive lifestyle this appear to be more than enough problems associated with internet and social network addictions to offer researchers enough work on for coming decades.

Evidence of this trend may be visible with the aid of using industrial reviews from agencies that keep under surveillance of online users' activities. In year 2009, it turned into mentioned that an average social-network user globally gives more than 5½ hrs per month on social networking sites, which was more than double time consumed on online activities. As from April 2008 to 2009 the total time consumed on facebook in U.S had expended from 1.7 billion to 13.9 billion minutes. Beside these figures research studies displayed that internet sociability have interaction through forms, online games and blogs. This results to excessive immoderate quantity of time people spend on Internet. In different words, the current exposure of the new social media sites had changed the internet concept and its utilization. The findings from earlier researches on internet dependence, immoderate utilization of addictions might not be legitimate this new situation. Thus, there may be quirement to analyse the concept of technique dependency under this new situation.

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