

# Internet addiction and Integrated-Yoga therapies: A review

## Research Article

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## Abstract

In the past few decades internet has drastically influenced human behaviour with its mixed positive and negative effects. It is emerging as a fast-paced medium to communicate and connect to people. It has a worldwide reach in urban as well as in remote areas. Consequently, its excessive use is leading to serious health hazards and leads to internet addiction too. Noticeably, Cognitive-behavioural therapy has been considered as an effective treatment for internet addiction. A few scientific researches in the past few years have proven that yoga intervention can be used as an effective tool to successfully combat the mental health disorders which arise due to Internet addiction. Aim: This report summarizes the current evidences of the varied integrated therapies and interventions which help fight Internet addiction and the serious health issues which are the outcomes of internet addiction. We focussed on the evidences described in review articles. Results: Collectively, these reviews suggest several areas where cognitive behavioural therapy and integrated yoga therapy are beneficial. Conclusion: Especially I-Yoga therapies require more intensive researches, so that its benefits can be firmly established. And how much useful it is in long terms and its impact on treating the health hazards caused due to internet addiction is still unclear. Yoga may be suggested as a supportive and effective aide to combat health issues arising due to internet addiction, yet it has not been proven as a stand-alone tool to fight the ill-effects of internet addiction.

**Keywords:** Internet, Addiction, Yoga, Therapy.

## Introduction

Technology is evolving at a rapid rate, becoming more autonomous and simplifying life. The rising reliance and frequent use of smartphones has led to modifications in psychosocial behavioural elements. Internet addiction has a negative impact on one's physical and mental well-being and is emerging as a major contributing factor to psychosocial disorders.

With millions of Internet users worldwide, India comes stands at second place when it comes to internet usage. Recent technological advancements have made it possible for people of all ages to access the internet, which has increased access to the internet and posed a threat to a number of people, but the majority of those affected are adolescents (1).

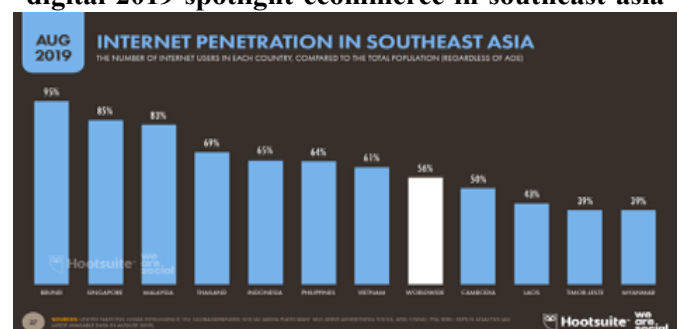
They use internet for academic references, social media, and online classrooms.

In the year 1996, Dr. Kimberley Young first time proposed the concept of Internet addiction in her seminal paper. In her opinion internet addiction is as

much harmful as drug addiction and shows that digital devices deteriorate the brain in a very similar way as the harmful drugs do (2).

Internet is becoming an integral part of our daily lives- be it work, leisure or school activities. It has taken a significant place in everyone's life especially post- pandemic. A study done in South-East Asia showed the Internet Penetration Rate (IPR) which is defined as the percentage of total population who use internet. The Internet Penetration was the highest in Brunei-95% in the year 2019 (3). Many countries like South Korea and China have accepted Internet addiction as a serious health hazard and have started taking strict actions when it comes to its education, research and treatment (4,5).

**Figure 1: Source: <https://datareportal.com/reports/digital-2019-spotlight-e-commerce-in-southeast-asia>**



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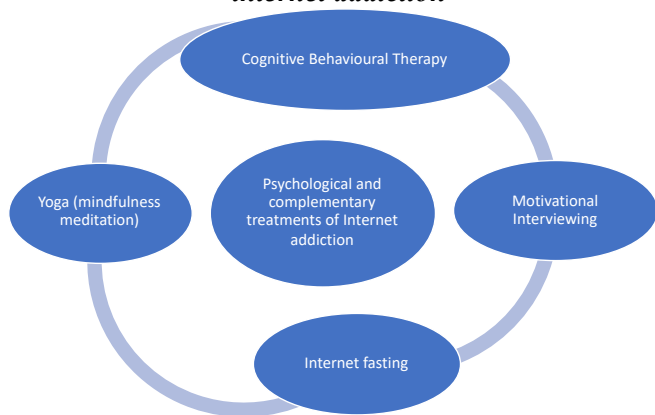
### Integrated Therapies

Many kinds of Integrated therapies have recently been studied which deal with the health hazards which arise due to internet addiction.

Integrated yoga therapies have been found useful in the treatment of health hazards which are aggravated due to internet addiction. The review tries to highlight those integrated yoga therapies. The objective of this review is to compile a collection of the scientific studies done for dealing with the internet addiction and related health issues through integrated therapies in a systematic way.

Internet Addiction Disorder is associated with greater risks for hostility, depression, anxiety, interpersonal sensitivity, and psychoticism (6).

**Fig 2: Suggestive integrated therapies for treatment of internet addiction**



Social networking sites create negative health impact as well as the academic performances of students were also affected. So, the students get addicted to the networking sites and the young users socialize on the sites and are unfortunately unaware of the risks involved in it and indirectly they are hurting their privacy. A study held amongst the Asia Pacific University Scholars revealed the negative impact of social networking sites such as Facebook (7).

A study was done on Iranian University students which revealed that excess usage of internet lead to anxiety, depression, and mental health issues and ultimately affected their academic performance (8).

Internet addiction is also associated with poor dietary habits, sleep problems, and fatigue issues. A study done on Turkish students revealed these issues (9).

In terms of the IPR as of January 2020, the Southeast Asia region was ranked 9th (66.0%), with the first being Northern Europe (95.0%), followed by Western Europe (92.0%), and Northern America (88.0%) (10).

### Methodology

Google scholar database was used to search the relevant studies done in the past. A set of criteria were pre-decided for this review. Studies done in languages other than English were excluded from this study. We as researchers have avoided taking reviews, opinion articles, and meta-analysis in this study. Many books have been written on Integrated therapies on Internet addiction, we have not included them in this review.

**Table 1: Studies on the integrated yoga therapies given for internet addicts**

Table: Summary of Results								
S. No.	Reference	Year	Type of study	No. of subjects	Duration	Intervention	Parameters	Findings
1	Tadpatrikar A & Manoj K Sharma et al (11)	Jun-23	Pre-post changes	4 cases	12 weeks	Physical postures (Asana), breathing practices (Pranayama), and meditation (Nadanusandhana), Integrated Y-CBT intervention	Internet addiction test (s-IAT), Smartphone Addiction Scale-Short Version, Kessler's Psychological distress scale for baseline, and follow-up assessment after completion of the program	Reduced internet and mobile phone use, psychological stress, Sleep quality improved
2	Rudra B. Bhandari et al. (12)	May-18	Pre-post changes	154 UG-PG students of Patanjali University, Haridwar	3-month yoga program	Yoga lifestyle prescription(YLP) for preventing and mitigating IA + Ayurvedic Swasthavritta(Ushapan+ Medicated oil application (Shadvindu Taila) into nostrils by fingers+ Medicated oil (Ksheera Bala tail) massage over the body	IAT is the 5-point Likert scale with 20 items to be rated as 0, 1, 2, 3, 4, and 5 if the given behaviour is applicable, rarely applicable, occasionally applicable, frequently applicable, often applicable, and always applicable in the user's life.	YLP is an effective therapy for treatment of addictive behaviours and they have significant impact on the psychological, behavioural and physical components. Significantly improved their body pain, sleep, appetite, communication, and outside recreational activities

3	Sharma, M. K., & Bhargav, H. et al. (13)	2016	Pre-post changes	45 Internet addicts	3 months	The integrated yoga program involved: Joint loosening practices with breath synchronization for 10 min (moving head forward and backward as well as clockwise and anticlockwise ten times each), blinking of eyes (twenty times), stretching of hand/legs and moving the wrist/legs clockwise and anticlockwise (ten times each) followed by Kapalabhati Kriya (skull shining breath) at 100 strokes/min for 2 min, Nadi-shuddhi pranayama (alternate nostril breathing) for 5 min, and Bhramari (humming breath) pranayama for 5 min. Subjects were also offered yogic counseling based on the principles of mind management from Bhagavad Gita. These practices were demonstrated to them and supervised during sessions		Yoga practices brought positive lifestyle changes in the form of regulated sleep, improved appetite, enhanced communication with others, and increased recreational activities outside the home. Due to these positive lifestyle changes and reduced physical symptoms such as neck strain and body pain, they reported 30–40% reduction in their technology use at the end of 3rd month
4	Dadhore, Sadhna et al. (14)	2019	Randomized Control Trial	600 school students in a Bhopal school (15-18 years)		Yoga package schedule for Internet gaming Disorder	Internet Gaming Disorder(IGD), General Health Questionnaire- 12 item scale(GHQ) for screening of students	Yoga is found to be an effective tool and also reasonably good health improvement. The outcome of the studies suggests that there is a decrease of 35.77% with IGD cases with 8 set of yoga practices while GHQ study suggests that there is a 46.99% general health improvement
5	Eun-Hi Choi et al. (15)	2020	Pretest-posttest design	49 high school sophomores	Session was given twice a week, for 20 minutes\session- total of 12 weeks.	Mind-subtraction meditation+ lectures	Korean Smartphone Addiction Proneness scale, Self-control scale, Stress scale to assess emotional stress levels.	Experimental group saw a decrease in stress levels, changes in self-control and stress coping strategies.
6	Anurag Tripathi (16)	2017	Pretest-posttest design	24 adults + 8 adolescents with ADHD	Participants started meditating for 5 min at a time, which was gradually increased to 30 min. Each session comprised 2.5 h and was supplemented with daily home practice	Mindfulness training\ MT\ Mindful meditation	Brain activation checks using fMRI.	30% reduction in Attention Deficit Hyperactivity disorder (ADHD).

Internet addiction can have severe effects on mental, physical and emotional health of an individual. Cognitive skills are hampered; social involvements are

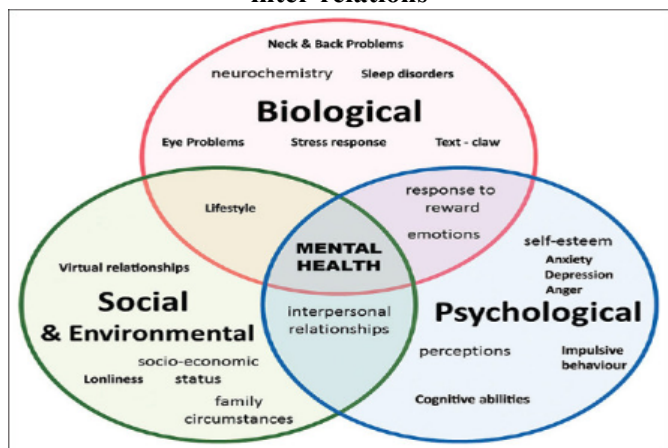
put on stake when a person gets indulged in this kind of addiction.

### Internet addiction- affecting various aspects of personality

Internet addiction can be cured through psychological and complementary treatments. Cognitive Behavioural Therapy- CBT is one of the most effective treatments used in modern world for Internet addiction (17). In fact, since the 1970s the Cognitive Behavioural Therapy has been used to deal with addiction, anxiety, depression and eating disorders (18).

Many alternative and integrated therapies are being scientifically studied these days. They are an effective treatment for the health hazards which are an outcome of Internet addiction.

**Figure 3: Mental, physical, psychosocial health: inter-relations**



**Bio psychosocial perspective of smartphone addiction**  
(Putchavayala et al., 2022)

### Discussion

Surprisingly, the rate of smartphone use in most Asian countries is almost 41-84 % which is more when compared to the United States. Countries like South Korea, Japan and China have significantly high ownership of smartphones, probably because they have strong infrastructures in the field of telecommunication (20).

Yoga and meditation has been a part of ancient India and scientific researchers have proven that people practicing meditation have better mental health (21).

Extensive scientific researches are being done which give evidences that yoga and meditation can be an effective to fight mental health issues, anxiety, depression as well it helps in improving metabolic and vascular functions of the human body (22).

Internet addiction effects school going children, aged people. Adolescents are specifically affected by this problem, which can further lead to many mental health issues like anxiety, anger, depression. Internet addicts also face physical health issues like backpain, frozen shoulders, cervical spondylitis. Emotional health hazards like eating disorders, Post-traumatic disorders, depression, schizophrenia can also be faced by the Internet addicts.

Nowadays, many corporate offices are also introducing yogic practices as a part of their routines. These programs are helping the employees to cope up with the stress, anxiety, depression, sleep disorders and

many more such health issues which can be an outcome of internet addiction and increased screen time.

### Conclusion

So, the conclusion can be drawn that mindfulness meditation programmes could be an innovative way for adolescents to meet their challenging academic, psychosocial, behavioural, and mental health demands. These kind of treatments can be explored scientifically, as they don't have side-effects and have a reflective impact on holistic well-being of a person in this fast-paced era of technology. As these kind of therapies inculcate good practices in all age-groups, so they can be introduced widely as a part of the school curriculum and office routines. It can make a significant and positive impact on the mental health of people. Apart from adolescents, the children under the age of 15 are also having high exposure to mobile phones and internet, the Covid-19 pandemic forced the children to have unexpectedly heavy exposure to the social media and online gaming. Also the over-aged people also have good amount of internet exposure. To maintain healthy well-being of adolescents, children, old-aged, middle-aged- they should be made aware of the various mindfulness meditation techniques, internet fasting and a yogic lifestyle.

The Preksha Meditation technique of mediation, which was formulated by Acharya MahaPragya in the 20<sup>th</sup> century, based on the philosophy and teachings of Lord Mahaveera. It is said that Lord Mahaveera attained enlightenment through Preksha Dhyana. This simple spiritual practice of meditation is based on ancient Jain scriptures and is directed toward purification of the Self, transformation of consciousness and behaviour modification (Acharya Tulsi, 1994; Sadhvi Vishrut Vibha, 2009). So, it is suggestive to incorporate this meditation technique which has a comparatively young history, to combat the addiction issues in all age groups.

***“The Internet has been a boon and a curse for teenagers” - JK Rowling***

“According to experts the perception of psychic centers can modify the synthesis of endocrine output and weaken the intensity of impulses and urges (23), thus making them controllable by human mind. The perception of psychic centers is the most important stage of Preksha Dhyana with respect to emotional well-being. Because the perception of psychic centers is believed to have the capacity of regulating the urges and distortions, the libido can be put to creative activity.”

Apart from mindfulness yogic practices today's youth should be exposed to moral values, should have connected family atmosphere, they should be given plenty of time to listen to their adolescent queries. In the tender adolescent age, their body and mind undergo many hormonal changes; they have lots of unanswered queries in their mind. And in that scenario if they do not get good company of healthy informative talks, guidance of their parents and good, healthy lifestyle tips there are very much chances that they go in wrong direction. So, proper taking care of physical, mental, and emotional health is a big priority. And yoga and

meditation can be an effective tool to combat the hormonal changes in body and take care of one's health.

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