

IMPACT OF SMARTPHONE USES ON ATTENTION LEVEL: A COMPARATIVE STUDY IN YOGA PRACTITIONERS AND NON PRACTITIONERS

***Dr. Kanchan Joshi.**

***Saumya Gangwar.**

***Mohd. Yusuf.**

ABSTRACT

In this modern world, there is rapid increase in use of mobile phones. Everyone knows that mobile phones emit electromagnetic radiation which is harmful for every living being. It adversely affects various brain function of human being and also affects wildlife. Mobile phone was developed in 1940s. From 2000s android phones reached Indian market. From 2013 to 2019 the mobile phone user in India are expected to rise by 730.7 million and the number of Smartphone users are predicted to reach 340 million and could touch the brink of 468 million by 2021. It is the highest estimated growth rate in the world. According to a study, mobile phone users are in the order of the age 25-34>18-24>35-54>55+. The use of smart phone affects attention level and decreases work efficiency. In this modern era, use of mobile phone can not be completely neglected but its use can be decreased or its effect can be reduced by applying some yogic practices (asana, prayanama), cleansing process, and meditation and proper diet. We get better results from yogic practices which increases work efficiency. This should be proved that through yogic practice and yogic lifestyle we will increase the attention level.

Key Words; Electromagnetic radiation, Mobile phones, Smartphone, Brain functioning, Attention level, Yogic practice, Cleansing process, Meditation, Proper diet.

INTRODUCTION

A common sign of over use of smart phone is withdrawal symptoms. They may include- Restlessness, irritability, difficulty in concentrating; sleep problems, craving to access your smart phone or other device. The overuse is also defined as a "**dependence syndrome**", which is the term used by the WHO Expert Committee (1964) to replace *addiction* or *habituation*. This is categorized either as substance abuse, such as from psychoactive drugs, alcohol and tobacco under ICD-10, or a behavioural addiction, such as a mobile phone addiction.

The constant stream of messages and information from a smart phone can negatively affect the brain and make it impossible to focus on any one thing for more than a few minutes.

Attention is behavioural and cognitive process of selectively concentrating on a discrete aspect of information, whether deemed subjective or objective, while ignoring other perceivable information. It is a state of arousal. It is taking possession by the mind in clear and vivid form of one out of what seem several simultaneous objects or trains of thought. Focalization is the concentration of consciousness, is of its essence. Attention has also been described as the allocation of limited cognitive processing resources.

Attention remains a major area of investigation within education, psychology, neuroscience, cognitive neuroscience, and neuropsychology. Areas of active investigation involve determining the source of the sensory cues and signals that generate attention, the effects of these sensory cues and signals on the tuning properties of sensory neurons, and the relationship between attention and other behavioral and cognitive processes like working memory and psychological vigilance.

LITERATURE REVIEW

- 1- This research was conducted by Jung- Yeon Mok, Sam-wook Choi, Dai-Jim Kim, Jung-Seok Choi, Jaewon Lee, Heejune Ahn, Eun-Jeung Choi and Won-Young Song on **Latent class analysis on internet and smartphone addiction in college students**. This study aimed to classify distinct subgroups of people who use both smartphone and the internet based on addiction severity levels. Additionally, how the classified groups differed in terms of sex and psychosocial traits was examined. A total of 448 university students (178 males and 270 females) in Korea participated. The participants were given a set of questionnaires examining the severity of their internet and smartphone addictions, their mood, their anxiety, and their personality. Latent class analysis and ANOVA (analysis of variance) were the statistical methods used. Significant differences between males and females were found for most of the variables (all $P < 0.05$). Specifically, in terms of internet usage, males were more addicted than females ($P < 0.05$); however, regarding smartphone, this pattern was reversed ($P < 0.001$). Due to these observed differences, classifications of the subjects into subgroups based on internet and smartphone addiction were performed separately for each sex. Each sex showed clear patterns with the three-class model based on likelihood level of internet and smartphone addiction ($P < 0.001$). A common trend for psychosocial trait factors was found for both sexes: anxiety levels and neurotic personality traits increased with addiction severity levels (all $P < 0.001$). However, Lie dimension was inversely related to the addiction severity levels (all $P < 0.01$). Through the latent classification process, this study identified three distinct internet and smartphone user groups in each sex. Moreover, psychosocial traits that differed in terms of addiction severity levels were also examined. It is expected that these results should aid the understanding of traits of internet and smartphone addiction and facilitate further study in this field.

- 2- The research was conducted on the topic **Relationships among smartphone addiction, stress, academic performance, and satisfaction with life** by the researchers MayaSamahaNazir S Hawi Results of several studies have suggested that smartphone addiction has negative effects on mental health and well-being. To contribute to knowledge on this topic, our study had two aims. One was to investigate the relationship between risk of smartphone addiction and satisfaction with life mediated by stress and academic performance. The other aim was to explore whether satisfaction with life mediated by stress and academic performance facilitates smartphone addiction. To identify test subjects, systematic random sampling was implemented. A total of 300 university students completed an online survey questionnaire that was posted to the student information system. The survey questionnaire collected demographic information and responses to scales including the Smartphone Addiction Scale - Short Version, the Perceived Stress Scale, and the Satisfaction with Life Scale. Data analyses included Pearson correlations between the main variables and multivariate analysis of variances. The results showed that smartphone addiction risk was positively related to perceived stress, but the latter was negatively related to satisfaction with life. Additionally, a smartphone addiction risk was negatively related to academic performance, but the latter was positively related to satisfaction with life.

METHODOLOGY

The statement of the problem

According to Kerlinger a problem is an interrogative sentence or statements that ask what relation exists between two or more variables. The present study target to find out is yoga plays any role in attention level on the basis of usage of smart phone.

Aims and objective of the study

- To know the effect of smart phone on attention level on the basis of usage of smart phone between yoga and non yoga girls.

Hypothesis

- a) There is a significant difference in the level of attention level between yoga and non yoga girls.

Variables:

Variables are also shown in below mentioned table.

Independent variables	Dependent variables
Yoga experience	Attention Level
Smartphone Addiction	

Sample and sample structure:

The selection of sample was done through purpose random sampling. The present study consisted of participants in which 200 girls

100 GIRLS	100 GIRLS
WITHOUT YOGA EXPERIANCE	WITH YOGA EXPERIANCE

Material used:

The present study was focus on effect of comparison of yoga and non-yoga girls by six letter cancellation test. This data was obtained from patanjali university of haridwar both yoga girls and non-yoga girls. The following standardized tool is used to measure the variable in the proposed study.

Tool: SIX LETTER CANCELLATION TEST, STOP WATCH

Structure: 200 items

Time limit: 90 seconds in six letter cancellation test

Gender: Female

Yoga experience: 100girls

Non Yoga experience: 100 girls

Data: onetime assessment .

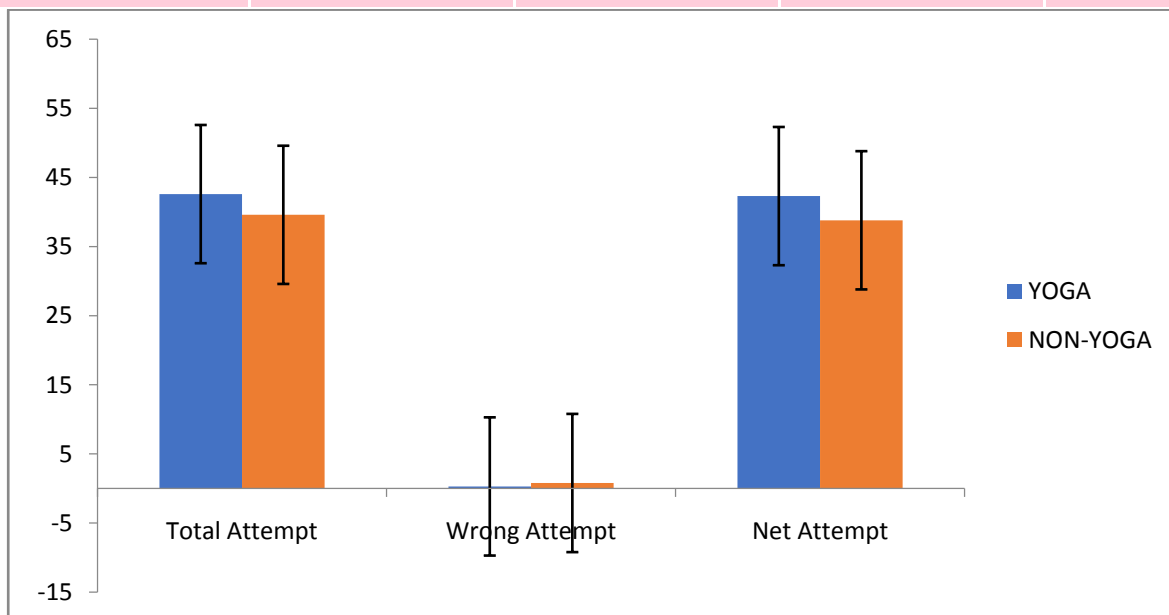
Validity: validity of the scale has been calculated by one methods. For the content validity because the item of scale has been collected through expert opinions. So we can say that test is valid for age group 18-30years.

Data collection:

Data collection was done on 200 participants. The college going students in the age group of 18-30 years were selected from patanjali university haridwar. Out of the 200 participants 100 girls from yoga background and 100 girls from non yoga background data analysis was done with suitable statistical techniques. Mean and standard deviation are calculated. This study is based on T-test form the T-test also used to find out the significant change in the role of yoga in Smartphone addiction level, Attention Level, Satisfaction level, Quality of sleep, Adjustment and, Attitude towards carrier in yoga experience students. Moreover, the results are also interpreted with the help of graphical representations.

RESULTS

GROUP	VARIABLE	MEAN	S.D.	P VALUE
YOGA NON YOGA	T.A.	42.59 39.59	8.665611824 8.019036694	0.005911123
YOGA NON YOGA	W.A.	0.29 0.79	1.066429898 1.742487482	0.007628889
YOGA NON YOGA	N.A.	42.3 38.8	8.645078006 7.768103652	0.00146961



DISCUSSION AND CONCLUSION

HYOTHESIS

There is a significant and a significant in the level of attention level between yoga and non yoga girls.

In this study we found that there is a positive and a significant change in the attention level.

- Total attempt($p > .0059$)
- Wrong attempt($p > .00762$)
- Net attempt($p > .0014$)

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