EFFECT OF SELECTED YOGA PRACTICES ON MEAN ARTERIAL PRESSURE AMONG MOBILE PHONE AND MEDIA ADDICTED MIDDLE AGED HOMEMAKERS

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ABSTRACT

This research aims to find out the effect of selected Yoga practices on Mean Arterial Pressure (MAP) among mobile phone and media addicted middle aged homemakers. For the purpose of this study, the investigator has randomly selected 40 middle aged women from Coimbatore, Tamilnadu State in the age group of 35 and 45 years and they have been divided in to two groups of twenty subjects in each group. The subjects were assigned to Experimental (Yoga intervention) and Control Group (No Yoga intervention). Internet Addiction Test Scale developed by Dr. Kimberly Young was utilized to assess the internet addition level. The experimental design used in this study was pre- test and post-test random group design. To determine if there were any statistically significant differences between the pre-test and post-test, the data obtained from the experimental and control groups on MAP was statistically examined using the paired 't' test. Additionally, percentage changes were calculated to determine the change on dependent variable as a result of experimental treatment. The data gathered from the two groups before and after the experiment on chosen dependent variable was statistically evaluated to determine the significant difference, if any, by using the Analysis of Covariance (ANCOVA). The level of confidence for significance was set at 0.05. After participating in a yoga intervention for 12 weeks, mobile phone and media addiction middle aged homemaker's mean arterial pressure (MAP) level was significantly altered.

Key words: *Yoga intervention, Mean arterial pressure*, *Mobile phone and media addiction, Middle aged homemakers*

INTRODUCTION

It is generally defined as problematic, compulsive use of the internet, which results in significant impairment in an individual's function in various aspects of life over a prolonged period of time. Tomczyk and Solecki (2019) found that young individuals are more susceptible to internet addiction disorder. Their case studies revealed that students who spend excessive amounts of time online have a decline in their academic performance. As they stay up further and later to speak online, check for developments on social media, or continue playing a game, some people can suffer health problems from sleep deprivation (Tereshchenko et al., 2021; Wallace, 2014). The topic of Internet addiction disorder is particularly pertinent to young people, as teenagers (12–19 years) and emerging adults (20–29 year) access the Internet more than any other age group and face a higher risk of overusing it (Anderson, Steen & Stavropoulos, 2017).

While excessive internet use has not been classified as a medical condition by the World Health Organization or the Diagnostic and Statistical Manual of Mental Disorders (DSM-5), it has been listed under the related category of recreation disorder in the International Classification of Diseases (ICD-11). Whether the disease is a separate clinical entity or a manifestation of underlying psychological issues is the topic of discussion around the label. There are no widely recognized or agreed-upon definitions for the topic, despite the fact that analysis has approached it from a number of angles. This makes it challenging to provide evidence-based recommendations.

Globally, internet addiction (IA) may pose a serious threat to public health. Only a small number of studies, meanwhile, have looked at the relationship between Hawkeye State and challenging living circumstances as well as psychiatric disorders among young internet users. The internet has become into a vital resource for knowledge, entertainment, and online communication. However, the prevalence of online addiction has been steadily rising as the internet has become more widely used in households, workplaces, schools, and cybercafés. Uncontrolled web use that can cause problems with impulse control is known as web addiction. Because web addiction is associated with a high prevalence of melancholy, violent conduct, neurological issues, and social difficulties, it has long been recognized as a major social concern in many nations.

Similar to drug addiction, internet addiction is an issue of obsessive stimulation. Due to these similarities, research-proven therapeutic approaches that have been shown to be effective in assisting drug addicts in their recovery are modified for use with Internet addicts as necessary. The methods that follow are taken from the well-liked "cognitive-behavioral" therapy school of therapy. Cognitive behavioral therapy has been extensively researched and proven to be effective in treating a wide range of mental and behavioral issues. They are also highly pragmatic, with a specific focus on curbing uncontrollably "addictive" behaviors and averting relapses. Similar to the telephone, the Internet has grown to be a necessary component of contemporary business. It might be very difficult to ask them to use the Internet at all. Therefore, a reduction in overall net use would be an acceptable objective for Internet addiction therapy, rather than abstinence. Therapy strategies can be used to help Internet addicts become more motivated to cut back on their use and more aware of how they end up in trouble with the Internet, since they will by definition find it difficult to moderate their use on their own.

Yoga may be of particular importance to mid-life women as a safe, accessible exercise option to those experiencing the effects of aging such as chronic use injury, movement limitations, and inability to participate in high impact or high intensity activities. Expected benefits may include increased fitness levels in the widely recognized components of flexibility, muscular strength and endurance and cardiovascular health. Health related and psychological benefits include relief from stress, relaxation, an overall feeling of well-being, and sense of "flow" - a sense of immersion and absorption in one's experience. Benefits of particular concern to women include relief from premenstrual syndrome, lower back pain, depression, respiratory disorders, or menopausal symptoms.

Yoga can be considered a remedy for mobile phone and media addiction because it assists pupils with their focus issues. It enhances academic achievement and promotes self-control and emotional equilibrium. Yoga lowers sympathetic nerve activity, which leads to relaxation. When someone experiences a lot of sensory stimulation, their sympathetic nervous system gets stimulated. These days, mobile phone and media addiction is a threat. Yoga may help manage an individual's mobile phone and media addiction. Hence, the present study has been planned to find out the effect of selected Yoga practices on mean arterial pressure among mobile phone and media addicted middle aged homemakers.

METHODOLOGY

Subjects and Variables

This research aims to find out the effect of selected Yoga practices on Mean Arterial Pressure (MAP) among mobile phone and media addicted middle aged homemakers. For the purpose of this study, the investigator has randomly selected 40 middle aged women from Coimbatore, Tamilnadu State in the age group of 35 and 45 years and they have been divided in to two groups of twenty subjects in each group. The subjects were assigned to Experimental (Yoga intervention) and Control Group (No Yoga intervention). Internet Addiction Test Scale developed by Dr. Kimberly Young was utilized to assess the mobile phone and media addition level. The mean arterial pressure was selected as dependent variable and was assessed by using digital blood presser monitor.

Training Schedule

The subjects were assigned to Experimental (select yoga practices) and Control Group (No Yoga intervention). The Yoga intervention programmes were scheduled for one

session a day, each session lasted one hour approximately excluding warming up and warming down. During the training period, the experimental groups underwent yoga training six days a week for twelve weeks. The Yoga intervention programme was conducted fo the experimental group in the morning sessions between 6.00 -7.00 pm. The Yoga intervention programme consisted of Suriya Namaskar, Asanas, Pranayama and meditation respectively.

Statistical Technique

The data collected from the experimental and control groups on MAP was statistically analyzed by paired 't' test to find out the significant differences if any between the pre and post test. Further, percentage of changes was calculated to find out the changes in MAP due to the impact of experimental treatment. In order to nullify the initial mean differences the data collected from the two groups prior to and post experimentation on MAP was statistically analyzed to find out the significant difference if any, by applying the Analysis of Covariance (ANCOVA). Since two groups were involved, whenever the obtained 'F' ratio value was found to be significant for adjusted post test means, the Scheffe's test was applied as post hoc test. In all the cases the level of confidence was fixed at 0.05 level for significance. The data were analyzed by computer using statistical packages.

Results

The obtained results on Mean Arterial Pressure through the application of paired 't' test statistical technique, in order to estimate the effectiveness of Yoga Intervention among mobile phone and media addicted middle aged homemakers are put on view in table-I.

Table – I: Descriptive Analysis and 't' Test Results on Mean Arterial Pressure of Mobile Phone and Media Addicted Middle Aged Homemakers Belongs to Yoga Intervention and Control Groups

Group	Test	Mean	Standard Deviation	Mean Differences	't' ratio	Percentage of Changes
Yoga Intervention	Pre test	94.98	1.21	2.091	6.52	2.23%
	Posttest	92.89	0.68			
Control (CG)	Pre test	93.93	1.27	1.120	4.14	1.09%
	Posttest	94.82	0.96			

*(Table t-ratio at 0.05 level of confidence for 19 (df) =1.73) *Significant*

The pre and post test mean on Mean Arterial Pressure of yoga intervention (YIG) and control groups (CG) vary to a great extent since the yoga intervention group (YIG=6.52) and also control group (CG =4.14) derivative 't' values are better than table value (df 19 =1.73). In

response to selected yoga practices 2.23% decrease in Mean Arterial Pressure level was found among mobile phone and media addicted middle aged homemakers.

By using ANCOVA statistics, mobile phone and media addicted middle aged homemaker's Mean Arterial Pressure level of yoga intervention and control groups (CG) were analyzed and put on view in table –II.

Table-II: ANCOVA Results on Mean Arterial Pressure of Mobile Phone and Media Addicted Middle Aged Homemakers Belong to Yoga Practices and Control Groups

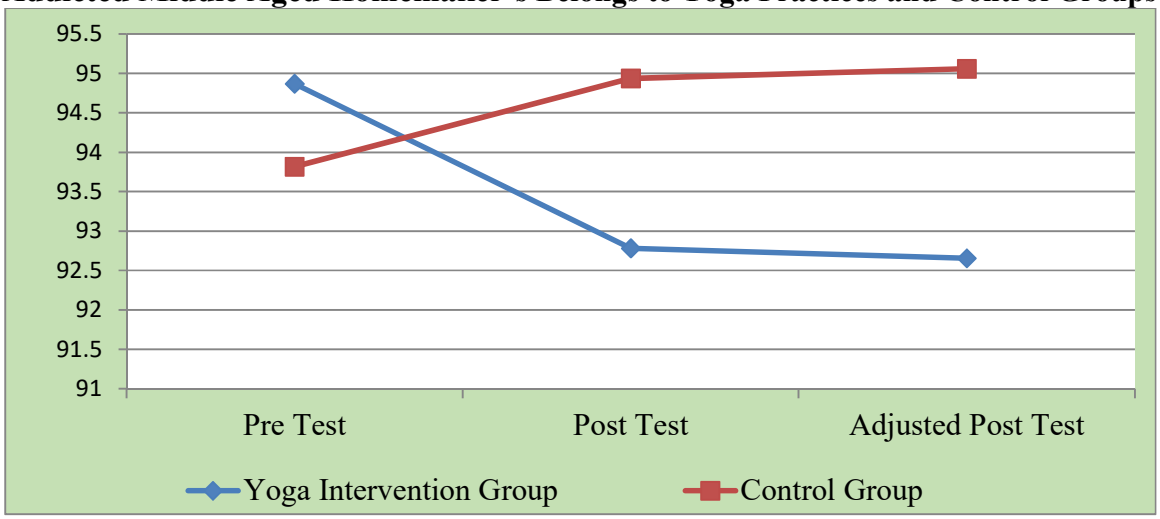
Mean	Yoga Practices Group	Control (CG)	SoV	SS	df	MS	'F' ratio
Adjusted post test	92.76	95.16	B	49.252	1	49.252	93.81*
			W	19.433	37	.525	

*(Table value for df 1 & 37 is 4.12)*Significant (.05 level)*

The derived ANCOVA statistics results established that the selected yoga practices and control groups (CG) adjusted (post-test) mean (92.66 & 95.06) data on Mean Arterial Pressure vary to a great extent because the found 'F' value [F=93.81(df 1&37 =4.12)] is higher. The mobile phone and media addicted middle aged homemaker's Mean Arterial Pressure level was decreased greatly due to regular practices (12 weeks) of selected yogasanas.

The displayed figure-I shows the Mean Arterial Pressure mean scores of yoga practices and control groups.

Figure –I: **Graph Showing the Mean Arterial Pressure of Mobile Phone and Media Addicted Middle Aged Homemaker's Belongs to Yoga Practices and Control Groups**



Discussion

The mobile phone and media addicted middle aged homemaker's Mean Arterial Pressure level was decreased greatly due to regular practices (12 weeks) of selected yogasanas. The positive effect of yoga practices on high blood pressure has been confirmed in various studies. Hagins, States, Selfe and Innes (2013) systematically reviewed the effectiveness of yoga for reducing blood pressure in adults with hypertension and recommended that Yoga can be an effective intervention for reducing blood pressure. Okonta (2012) presented an evidence-based integrative research review that validates yoga therapy as an effective complementary treatment in the management of high blood pressure (BP). Hagberg, Park and Brown (2000) analysed the most recent review of the effects of exercise training on patients with hypertension. These results continue to indicate that exercise training decreases blood pressure (BP) in approximately 75% of individuals with hypertension, with systolic and diastolic BP reductions averaging approximately 11 and 8mm Hg, respectively. Women may reduce BP more with exercise training than men, and middle-aged people with hypertension may obtain greater benefits than young or older people.

Yoga has been found to decrease blood pressure as well as the levels of oxidative stress in patients with hypertension. Hagberg and others (1999) observations are consistent with the possibility that apolipoprotein (apoE), angiotensin-converting enzyme (ACE), and lipoprotein lipase (LPL) genotypes may identify hypertensives who will improve blood pressure, lipoprotein lipids, and cardiovascular disease risk the most with exercise training. In overweight hypertensive patients, a combined exercise and weight-loss intervention has been shown to decrease SBP and DBP by 12.5 and 7.9mm Hg, respectively. There is evidence to suggest that these decreases in BP are associated with improvements in the left ventricular structure and function and the peripheral vascular health (Bacon *et al*., 2004).

Conclusion

After participating in a selected yoga practices for 12 weeks on a regular basis, the mobile phone and media addicted middle aged homemaker's mean arterial pressure, was significantly altered. In response to selected yoga practices 2.23% decrease in Mean Arterial Pressure level was found among mobile phone and media addicted middle aged homemakers.

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