Comparative Effect on the Influence of Yoga and Aerobics on Memory among South Indian People

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ABSTRACT:

The objective of this study was to assess the effect of yoga, compared to physical activity on the cognitive performance among common people from a socioeconomic disadvantaged background. Yoga is rooted in Indian philosophy and has been a part of traditional Indian spiritual practice for millennia. Yoga remains an investigational treatment, but this study supports further research into its possible uses for this population.

Aim : The research aims for creating awareness among public {South Indian people} for better standard of living in life.

Materials and methods:

A total of 70 people are taken randomly for this survey. The Total number of questions for this survey are 10 and for each question options are given. The survey link was shared to South Indian people (Tamil Nadu, Kerala, Andhra Pradesh) through Whats App, Facebook and through other social media.

Result And Discussion:

Despite an increase in interest pertaining to the benefits of yoga practice, research focusing on the relationship between yoga practice and attention is limited. This study employed a quasi-experimental pre-test, post-test design to measure whether physical activity had an immediate effect on selective attention and mental concentration in young adults, aged 18 to 25.

Conclusion:

This review is the first to compare the effects of yoga with active and inactive controls of aerobics not characterized by a specific clinical condition. Results indicate that yoga interventions improve multiple physical functions.

Keywords: yoga; research focusing; philosophy; quasi-experimental pre-test; physical functions.

INTRODUCTION:

Combined Indian yoga and aerobic exercise reduce mental, physical and vascular stress and can lead to decreased cardiovascular mortality and morbidity ⁽¹⁾. Aerobic exercise is also known as cardiac exercise ⁽²⁾. The dictionary meaning of 'aerobic' is 'relating to or utilizing oxygen', ⁽³⁾. These exercises involve, utilize, or increase oxygen consumption to stimulate the metabolism process in the body ⁽⁴⁾. These exercises strengthen the heart and lungs by making them work hard for several minutes or more ⁽⁵⁾. Aerobic exercises help the person to lose fat. It also provides cardiovascular benefits ⁽⁶⁾. Yoga means union of body and mind ⁽⁷⁾. Yoga does not burn as many calories as aerobics. On comparing the two styles of exercising, we find marked similarities and differences. If your goal is to lose fat, then aerobics is not your style of exercise ⁽⁸⁾. Yoga does not burn as many calories as aerobics does ⁽⁹⁾. On the other hand, you need yoga to build lean muscle mass, which is not something you can do with aerobic exercises ⁽¹⁰⁾.

Cognitive functions (attention and concentration, visuo–spatial abilities, verbal ability, and abstract thinking) were assessed using an Indian adaptation of the Wechsler Intelligence Scale for Children at baseline, after 3 months of intervention, and later at a 3-month follow-up (11). Cognitive deficits are pervasive among people with schizophrenia and treatment options are limited (12). There has been an increased interest in the neurocognitive benefits of exercise, but a

comprehensive evaluation of studies to date is lacking ⁽¹³⁾. Adverse childhood events have a negative effect on later life cognitive performance. 6 Socio-economic conditions of one's early life or childhood are positively correlated with intelligence, academic achievement ⁽¹⁴⁾. Yoga is rooted in Indian philosophy and has been a part of traditional Indian spiritual practice for millennia .Yoga remains an investigational treatment, but this study supports further research into its possible uses for this population. Results from the MotionLoggerActigraph were inconclusive. A growing body of research indicates that physical activity (PA) positively impacts cognitive function in youth. However, not all forms of PA benefit cognition equally. The purpose of this review was to determine the effect of different types of chronic PA interventions on cognition in children and adolescents. Effect sizes were calculated based on means and SDs at the post-test using Hedge's g formula, which includes a correction for small sample bias. Each study was only entered once in each intervention-comparator category ^(15,16).

Yoga is a complex and comprehensive philosophy of transcendental .The power of yoga therapy in relieving stress, enhancing health, improving fitness and managing symptoms of a variety of disorders is remarkable ⁽¹⁷⁾. Yoga is one such technique that is rapidly gaining interest and popularity in the West, mainly being used by millions of people for stress-reduction, according to surveys. The aim of this study is to compare the effects of yoga and aerobics on memory among South Indian people. The main motive is to Compare effect on the influence of yoga and aerobics on memory among south Indian people .This research is for creating awareness among public {South Indian people} for better standard of living in the life.

MATERIALS AND METHODS:

A total of 70 people are taken randomly for this survey. The Total Number of questions for this survey are 10 and for each question options are given. For this survey name and age are noted. The survey link was shared to South Indian people (Tamil Nadu, Kerala, Andhra Pradesh) through WhatsApp, Facebook and through other social media.

RESULTSANDDISCUSSION:

Yoga is also beginning to spark growing interest within the scientific community, and a rapidly increasing number of studies are investigating the effects of yoga on physiological parameters. It is to examine the extent to which advanced meditative practices might alter body metabolism and the electroencephalogram. Majority of participants agreed with dancing- 34.9% (Figure 1). Majority of participants agreed with sanskrit- 47.4% (Figure 2). Majority of the participants agreed with controlled breathing - 44.7% (Figure 3). 28% of people have not tried yoga because they are unsure if it is right for them(Figure 4). 14% feel out of place. 12% feel the body is not right for yoga (Figure 5). 19% have not tried because they don't know how to get started (Figure 6). Majority of the participants agreed with hip hop dancing- 37.9% (Figure 8). Majority of the participants agreed with all of the above- 32.2% (Figure 9). Majority of the participants agreed with good- 38.9% (Figure 10).

The results of the study indicated that there was no significant difference in fatigue, pain severity and psychological status among the three groups prior to the study, but after the study, results show in yoga and exercise groups, fatigue physical function, physical and emotional role which

patients play throughout daily life, social function, energy, mental status and overall hygiene increased, and the pain and fatigue were relieved in the patients patient.

Yoga is an ancient practice and a way of life that originated in India, and includes the practice of postures, regulated breathing and meditation. It is a mode of activity found to have multiple benefits for older adults ⁽¹⁸⁾. Despite evidence of the physiologic impact of trauma, treatments are only beginning to focus on the impact of trauma on the body ⁽¹⁹⁾. Yoga may be a promising treatment for trauma sequelae, given research that supports yoga for general distress. The present study aims to systematically assess and quantitatively synthesize the effectiveness of yoga interventions for psychological symptoms. As yoga has promise for managing psychological symptoms among trauma survivors, this review calls for more rigorous design of future studies to allow definitive conclusions regarding the use of yoga in mental health treatment of trauma survivors. Yoga and aerobic exercise have several health benefits. These include improved mood and well-being, and reduced symptoms of depression and stress ⁽²⁰⁾. Research further suggests that the two modes of exercise have an anxiolytic effect, although these findings are not consistent across the literature. Anxiety and depression were measured in one study.

The review is the 1st to compare the effects of yoga with active and inactive controls of aerobic exercise not characterised by a specific clinical condition. The present age of speed and competition has increased the stresses and strains resulting in an increasing prevalence of lifestyle-related health problems. It has become quite fashionable even for the common man to keep fit. Several studies have reported improvements in cognitive communicative abilities with working memory training and alternative therapeutic methods conducted separately. The present study aimed to investigate the effects of combining yoga and working memory training among healthy middle aged adults.

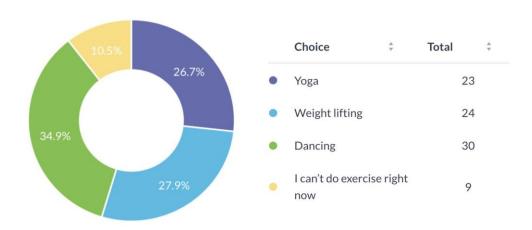


FIGURE 1: Pie chart showing percentage distribution of favourite exercise, where yellow represents can not do exercise (10.5%), green represents dancing (34.9%), violet represents yoga (26.7%), blue represents weight lifting (27.9%). Majority of participants agreed with dancing (34.9%).

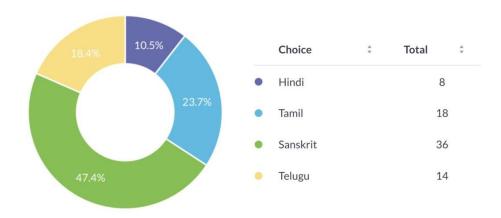


FIGURE 2: Pie chart showing percentage distribution of word yoga comes from, where yellow represents telugu(18.4%), green represents sanskrit (47.4%), violet represents Hindi (10.5%), blue represents Tamil (23.9%). Majority of participants agreed with sanskrit (47.4%)

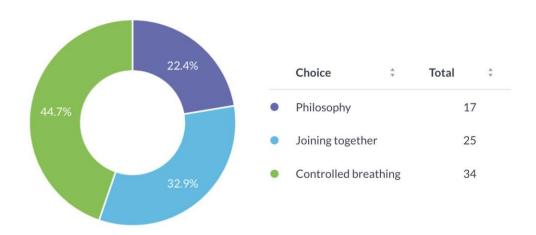


FIGURE 3: Pie chart showing percentage distribution of literal meaning of yoga, where green represents controlled breathing (44.7%), violet represents philosophy (26.7%), blue represents joining together (32.9%). Majority of the participants agreed with controlled breathing (44.7%).

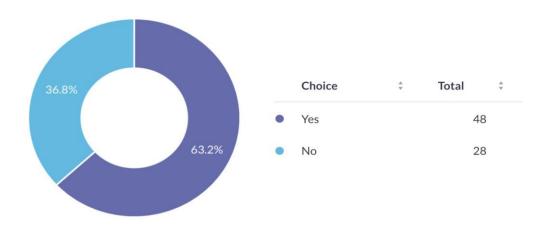


FIGURE 4: Pie chart showing percentage distribution of yoga is an aerobic activity, where violet represents Yes (63.2%), blue represents No (36.9%). Majority of the participants agreed with yes(63.2%).

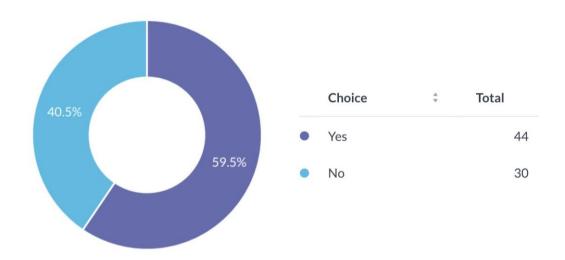


FIGURE 5: Pie chart showing percentage distribution of yoga is better than gym, where violet represents Yes (59.5%), blue represents No (40.5%). Majority of the participants agreed with yes (59.5%).



FIGURE 6: Pie chart showing percentage distribution of yoga burn fat, where violet represents Yes (56%), blue represents No (44%). Majority of the participants agreed with yes (42%).

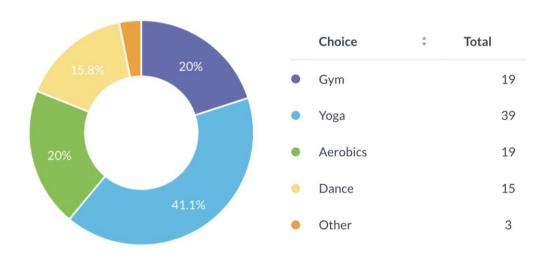


FIGURE 7: Pie chart showing percentage distribution of exercise best for brain, where yellow represents dance (15.8%), green represents aerobics(20%), violet represents gym (20%), orange colour denotes others(7%), blue represents yoga (41.1%). Majority of the participants agreed with yoga (41.1%).

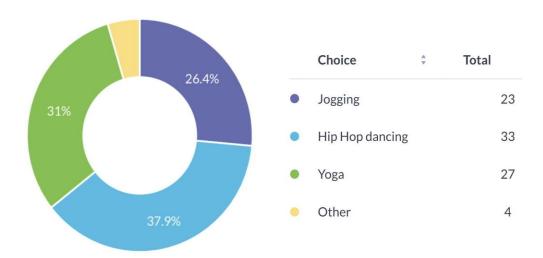


FIGURE 8: Pie chart showing percentage distribution of physical activity not aerobic activity, where yellow represents can others (5%), green represents yoga (31%), violet represents jogging (26.4%), blue represents hip hop dancing (37.9%). Majority of the participants agreed with hip hop dancing (37.9%).

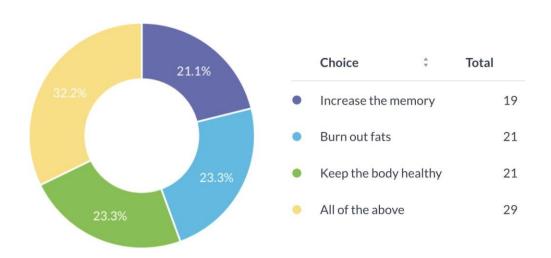


FIGURE 9: Pie chart showing percentage distribution of benefits of yoga, where yellow represents all of the above (32.2%), green represents keeping the body healthy (23.3%), violet represents increase in memory (26.7%), blue represents burn out fats (23.3%). Majority of the participants agreed with all of the above (32.2%).

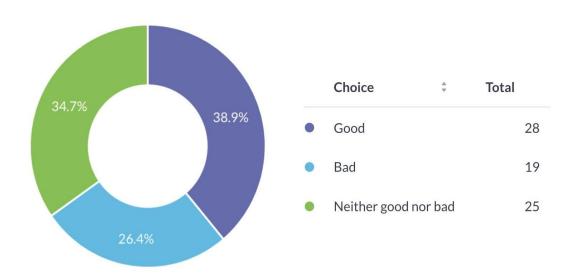


FIGURE 10: Pie chart showing percentage distribution of practising yoga before bed time good or bad, where green represents neither good nor bad (34.7%), violet represents good (38.7%), blue represents bad (26.4%). Majority of the participants agreed with good (38.9%).

CONCLUSION:

This review is the first to compare the effects of yoga with active and inactive controls of aerobics not characterized by a specific clinical condition. Results indicate that yoga interventions improve multiple physical functions. This study provides robust evidence for promoting yoga in physical activity guidelines for All groups of people as a multimodal activity that improves aspects of fitness like strength, balance and flexibility, as well as mental wellbeing. Yoga was as effective as physical activity in improving cognitive performance.

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CONFLICT OF INTEREST: NIL

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