



RELATIVE EFFECT OF YOGIC PRACTICE AND PILATES TRAINING ON MOTOR VARIABLES AMONG WOMEN STUDENTS

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Abstract

The study aimed at finding the effect of and combination of yoga and pilates yoga training on selected motor ability. Sample of the students includes 60 college women from Sivanthi arts college for women, udangudi. Stork balance stand test, sit up test, sit and reach test and flexed-arm hang test were used. The results indicate that the Pilates group showed significant improvement on muscular endurance. The group showed significant improvements in flexibility. The control group showed yoga showed no significant improvement on four selected motor ability variables namely muscular endurance, muscular strength, flexibility and balance. Pilates, yoga, combination of yoga and Pilates groups have significant improvement. motor ability variables namely muscular strength, muscular endurance, flexibility and balance, when compared to the control group. Keywords: Yoga Pilates, yoga, Pilates training, motor ability

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Introduction

Physical activity offers a broad range of benefits, including the prevention of obesity, improved self-confidence and an overall sense of well-being. Physical education programs within The school setting can set the stage for how children view physical fitness, activity levels and future health. Physical education programs also include general health and safety information in addition to providing opportunities for players to learn how to cooperate with one another in a

team setting. Pilates is a physical fitness system developed in the early 20th century by the Greek German born Joseph Pilates. Joseph Pilates accompanied his method with a variety of equipment he referred to as apparatus. The Apparatus was designed to help process the stretching, strengthening, body alignment and increased core strength started by the mat work. The best-known and most popular piece today, the Reformer, was originally called the Universal Reformer, aptly named for universally



reforming the body. Eventually a full complement of equipment and accessories was designed by Pilates, including the Cadillac, Wanda Chair, High Electric Chair, Spine Corrector, Ladder Barrel and Pedi-Pole. In common with early twentieth century physical culture, Pilates had an extremely high regard for the Greeks and the physical prowess demonstrated in their Gymnasium.

Students are taught to use their powerhouse throughout life's daily activities. According to Joseph Pilates, the powerhouse is the centre of the body and if strengthened, it offers a solid foundation for any movement. This power engine is a muscular network which provides control over the body and comprises the entire front, lateral and back muscles found between the upper inner thighs and armpits. The Powerhouse is activated effectively by hollowing of the deep abdominals, by drawing the navel back into the spine in a zipping-up motion, from the pubic bone to the breast bone thereby engaging the heels, the back of the inner thighs, the deep, lower-back muscles, and the muscles surrounding the sitting bones and tailbone area without inhibiting the natural function of the diaphragm that is without the practitioner holding their breath either from lifting the chest upwards or contracting the chest.

In the sitting position the power engine elevates the torso and places the center of gravity at its highest and most efficient position; in prone position it elongates the body bidirectional to reduce weight in the upper body; in supine position it elongates the body bidirectional and places the center of gravity again at its highest and most efficient position. Yoga is a form of mind-body fitness that involves a combination of muscular activity and an internally directed mindful focus on awareness of the self, the breath, and energy. Four basic principles underlie the teachings and practices of yoga's healing system. The first principle is the human body is a holistic entity composed of

various interrelated dimensions inseparable from one another and the health or illness of any one dimension affects the other dimensions. The second principle is individuals and their needs are unique and therefore must be approached in a way that acknowledges this individuality and their practice must be. The third principle is tailored accordingly. The third yoga is self-empowering; the student is his or her own healer. Yoga engages the student in the healing process by playing an active role in their journey toward health, the healing comes from within, instead of from an outside source and a greater sense of autonomy is achieved. The fourth principle is that the quality and state of an individual's mind is crucial to healing. When the individual has a positive mind-state healing happens more quickly, whereas if the mind state is negative, healing may be prolonged.

Physical, mental, intellectual and emotional development in a harmonious and integrated fashion to meet the all round challenges of the modern technical era, with its hectic speed. The speciality of the yogic process is that the faculties get sharpened in tune with the spiritual progress of man. One can practice yoga for all sorts of reasons to remain fit; to stay healthy or recover the health; to balance the nervous system; to calm the busy mind and live in a more meaningful way. Motor ability is present acquired and innate ability to perform motor skills of a general fundamental nature, or exclusively of highly specialized sports or gymnastics techniques. Include several items such as strength, endurance, flexibility, balance and power and these traits play a major role in enhancing the performance of any activity. With a good and well efficient combination of all these motor performance traits a player can give all his/her utmost throughout the most strenuous of competitive matches. Motor fitness is to be measured by performance and this performance is based on composition of many factors. The most commonly mentioned factors are power, speed, agility, strength,



endurance, balance and flexibility. Some of these factors.evidently are more dominant than others and thus have relation with motor fitness. Abilities are genetically predetermined characteristics that such as agility, affect movement performance such coordination, strength, and flexibility. Abilities are enduring and as such, difficult to change in adults. Abilities differ from skills in the sense that skills are learned, whereas abilities are a product of both learning and genetic factors.

Hypotheses

1. It was hypothesised that the Pilates practice provides significant improvement in strength and balance. on muscular
2. It was hypothesised that there would be a significant improvement to the flexibility due to yoga practice..

Delimitations

The study was delimited to a total of 60 college women randomly selected from the ladies.sivanthi arts college. Their age group ranged between 18 and the training program 23 years. used in this study The was delimited to 5 days a week for 6 weeks. The study was further delimited to selected yoga asana and selected pranayamas. The study was delimited to selected Pilates exercise emphasising various joints. The selected motor ability components namely flexibility, balance and muscular endurance and muscular strength were included.

Limitations

The difference that exists among subjects due to the social cultural and varied social economic factors cannot be controlled and this is considered as a limitation of this study. Diet and daily routines of the subjects are not taken into consideration.

Methodology

The present study is an experimental study which adopted random group design.

Sample

The study was designed to analyse the effect of yoga Pilates and combination of yoga and pilates training on selected motor ability components of college women. To achieve the purpose of the study, the research research scholar randomly selected 60 college women from Calicut university ladies hostel and they were divided into four groups of 15 each as experimental group I (yoga group), experimental group II (Pilates group), experimental group III (combination of pilates and yoga) and control group. Their age ranged between 18 and 23 years. Tools

Stork Balance Stand Test is used to assess the ability to balance on the ball of the foot.SitUp test measures the endurance of the abdominal and hip-flexor muscles. The sit and reach test is an important functional measure of hip region flexibility, including the lower back and hamstring muscles (the back of the legs). Flexed-Arm Hang Test measures upper body strength and endurance by timing how long they can hang with the chin above the bar.

Procedure

The training program was conducted at the Sivanthi arts college . The program was conducted on a regular basis in morning session and evening session for five days in a week for six weeks. The training program lasts for six weeks. started with light stretching and the duration of the first week started with 40 minutes and at the last week of training the program ended with a duration of 1 hour. During the time of training relational yoga exercises like Sooryanamaskar, Makarasana, Bhujangasana, Dhanurasan, Salabhasan, Vsramasan, Paschimothasan, Januseershasan, Ardhamalsyadrasan, ViparitaKarani, Sarvangasana, and at last Savasan and also specified Pilates exercises. The experimental design used in the study was random group design in which 60 female students were divided into four in groups of fifteen each. The experimental group I undergo yoga in a schedule of weekly five days in 1 hour and

experimental group II under gone Pilates in a schedule of weekly five days in 1 hour, experimental group III under gone yoga and pilates on alternative weeks for periods of six weeks and control group were not given any special training. The training period for this study was six weeks.

The above table related to the analysis of covariance done among the different groups on muscular strength does indicate, the f-ratio is 1.99, which was much less than the tabulated f-value of 2.73. Since the f-ratio was found to be insignificant, the post hoc test was not done.

Discussion

The study hypothesised that there would be a significant improvement on selected motor ability components due to the practise of yoga and pilates. The results of the study revealed that there was a significant improvement on selected motor ability components namely muscular strength and balance. This improvement was due to the effect of six weeks practising pilates. Hence the first hypothesis of the research scholar was accepted at 0.05 level of confidence. In the second hypothesis, it was mentioned that there would be a significance. improvement to flexibility due to the practice of yoga. Results of the study revealed that there was a significant improvement to the flexibility due to six weeks of yoga and training program. Hence the researcher's second hypothesis was accepted at 0.05 level of confidence.

Conclusions

Based on the result of the study the following conclusions were drawn:

The Pilates group showed significant improvement on muscular endurance. The yoga group showed significant improvements on flexibility.

The control group showed no significance. Improvement on four selected motor ability variables namely muscular endurance, muscular strength, flexibility and balance.

Pilates, yoga, combination of yoga and Pilates groups have significant improvement of selected motor ability variables namely muscular strength, muscular endurance, flexibility and balance, when compared to the control group.

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