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Comparison of multidimensional fatigue between exercises and yoga practitioners

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Abstract

Background: Fatigue is a subjective feeling of tiredness which is distinct from weakness, and has a gradual onset. Unlike weakness, fatigue can be alleviated by periods of rest. Fatigue can have physical or mental causes. Physical fatigue is the transient inability of a muscle to maintain optimal physical performance, and is made more severe by intense physical exercise. Mental fatigue is a transient decrease in maximal cognitive performance resulting from prolonged periods of cognitive activity. **Purpose:** The purpose of this study is to measure fatigue of exercises and yoga practitioner. Setting and **Design:** The subjects taken for this study were 40 male students from various colleges of Bharati Vidyapeeth Deemed University and 40 Yoga practitioners from Kaivalyadam. The age ranging from 20-26 years. Questionnaire was used as a tool for this survey. **Methods:** The current study was to study the effect of multidimensional fatigue between exercises and yoga practitioners. The collected data for the study were analysed using Independent t-test. **Statistical Techniques:** Independent t-test was applied to find out the significance difference between the groups in Multidimensional fatigue variable & the level of significance was set at 0.05. **Result:** There is no difference in the selected Multidimensional Fatigue variable. **Conclusion:** The result concludes that there is no significance difference of selected Multidimensional fatigue variable of Yoga and Exercise practitioners.

Key Words: Fatigue, Multidimensional Fatigue, Yoga.

1. Introduction

Fatigue is a subjective feeling of tiredness which is distinct from weakness, and has a gradual onset. Unlike weakness, fatigue can be alleviated by periods of rest. Fatigue can have physical or mental causes. Physical fatigue is the transient inability of a muscle to maintain optimal physical performance, and is made more severe by intense physical exercise. Mental fatigue is a transient decrease in maximal cognitive performance resulting from prolonged periods of cognitive activity. It can manifest as somnolence, lethargy, or directed attention fatigue.

Yoga is beyond religion and it is considered as a significant part of Hindu philosophy. It is primarily concern with mastery of psycho physical phenomena which leads towards “through the excremental stages variously described as the subconscious Supra-Mental and such like by modern writes and philosophers. It can be said that Yoga is recognized as one of the most important and valuable heritage of India for humanity.

1.1 The problem and its social relevance

Yoga may reduce annoyance with others and others' annoyance. If become less irritable, tend to irritate others less and tend to be less irritated by what others do when they present themselves as problems in yoga also may reduce the fatigue problems. Obdurate, demanding, insistent, morose attitudes can make hard to get along with. Diminution of these should make less difficult to deal with. The social effects-upon colleagues and clients, superiors and inferiors, to say nothing of family, public officers and service specialists-could be overwhelming.

1.2 Hypothesis

There may be significant difference between exercises and yoga practitioners on multidimensional fatigue.

2. Methodology

2.1 Subjects

A total number of 80 male, 40 male students from various colleges of Bharati Vidyapeeth Deemed University and 40 Yoga practitioners from Kaivalyadam. The age of the subject ranged from 20-26 years.

2.3 Tool used

Standard questionnaire were used and their reliability and validity were the tools for the present study.

2.4 Procedure

A total number of 80 male, 40 male students from various colleges of Bharati Vidyapeeth Deemed University and 40 Yoga practitioners from Kaivalyadam to conduct the test. The test was conducted through the questionnaire on both groups. They were given the questionnaire separately and thus the data were collected.

3. Results

The statistical analysis of data pertaining to the study were collected on 40 Yoga practitioners from Kaivalyadam Yoga Institute and 40 Exercise practitioners from B.V.D.U. College of Physical Education of Pune city, Maharashtra is presented in this chapter. Researcher selected only one variable is Multidimensional Fatigue. The standard questionnaire was used for the study National Multiple Sclerosis Society (MFIS) Modified Fatigue Impact Scale. Independent t-test was applied to find out the significance difference between the groups in Multidimensional fatigue variable & the level of significance was set at 0.05.

3.1Findings

The statistical results of the comparison between Yoga and Exercise practitioners as measure by Multidimensional fatigue under study are presented in Table-1

Table 01

Computation of t-ratio for Multidimensional Fatigue level of Yoga and Exercise Practitioners (Score in point)

Group	N	Mean	MD	df	Stv.dvt	SEM	t-ratio
Yoga	40	27.55	1.6	78	13.16	2.08	0.60
Exercise	40	29.15			10.33	1.63	

Significant at 0.05 level , Tab.05(78)=1.980

Result of Multidimensional Fatigue level of Yoga and Exercise practitioners:

Table-1 shows the means of Multidimensional fatigue for Yoga practitioners was 27.55 (S.D.=$\pm$13.16) and for Exercise practitioners group was 29.15 (S.D.=$\pm$10.33).

The obtained t-ratio was 0.60 which is less than the table t-ratio 1.980 at 0.5 level with the degree of freedom 78. Hence there is no significant difference Multidimensional fatigue level among Yoga and Exercises practitioners.

3.2 Graphical representation of Multidimensional fatigue among Yoga and Exercise practitioners

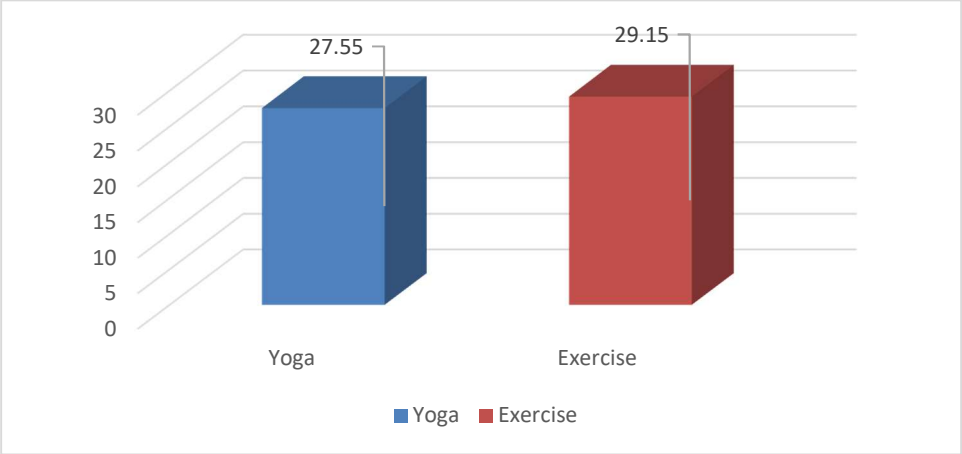

Fig. 01

3.2 Discussion of hypothesis

As the result of the study shows that there is no difference in the selected Multidimensional Fatigue variable. Hence, the hypothesis "Researcher hypothesis that There will be no significance difference of selected Multidimensional fatigue variable of Yoga and Exercise practitioners." Therefore hypothesis stated earlier is accepted.

4. Conclusion of the Study

Following conclusions were drawn in the light of results.

I. It was seen from the table 1, that there was no difference of Multidimensional fatigue among Yoga and Exercise practitioner, with independent t-ratio is 0.60.

II. It is also shown from the table 1, that there was no significant difference of among Yoga and Exercise practitioners, with mean difference is 1.6.

It is clearly stated in the table 1, that there was no difference of Multidimensional fatigue among Yoga and Exercise practitioners, with standard deviation value is 11.99.

Neyam-Johnson, et.al (2012) conducted a study and found "systematic literature review of research on procedure found that the yoga exercise reduced overall fatigue and the interference of fatigue in everyday life for the experimental group participants." Significant reductions were obtained after 4 weeks of intervention participation for those experimental group patients with relatively low starting baseline values (baseline item mean value < 3.31 and 3.22, respectively) and after 8 weeks for most patients (approximately 75%) with moderate starting baseline values (baseline item mean value < 7.30 and 5.34, respectively). The 8-week intervention did not significantly improve the levels of depression ($F = 1.29$, $p > .05$) or anxiety ($F = 2.7$, $p > .05$).

Myrianthefs P, et.al, (1995) evaluated a study "average self-rated mental disturbance, tension-anxiety, anger-hostility, and fatigue scores of the long-term yoga group were lower than those of the control group." There was a trend toward a higher vigor score in the long-term yoga group than that in the control group. There were no significant differences in the scores for depression and confusion in the POMS between the two groups. The urine 8- concentration showed a trend toward to being lower in the long-term yoga group in comparison to the control group. There were no significant differences in the levels of urine biopyrrin or cortisol.

5. References

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