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Original Research Paper



Effect of Yoga on the Mental State of People

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ABSTRACT

Background: Yoga is considered to be effective in overcoming various physical and mental health problems. Effect of yoga on promoting mental health has been reported. Aim: This study was undertaken to analyze the effect of yoga on mental state of people, which indicates the psychological condition of the mind. Research Design: Survey method was adopted under the study. Sample: Consisted of 100 randomly selected yoga practitioners. Tools used: Used an interview schedule containing questions on how much yoga has contributed to improvement in their "mental state" through yoga, and what period of time were they able to experience the improvement in the mental state. They were given five point responses, which were scored from 5 to 1. The interview schedule also asked the respondents about the diseases / medical problems which have reduced through the practice of yoga, when compared to taking treatment alone (which was scored based on the percentage of reported diseases which have reduced), the number of years of yoga practice and the average number of days of yoga practice per week. The data was analyzed through correlation, regression and t test. Results: While about 45 % of women report maximum improvement in their mental state through the practice of yoga, only about 21% of men report maximum improvement. While 34% of women experience improvement in mental state for 75 to 90% of the time, only 18.6 % of men experience improvement for this period of time. The score for the level of improvement in mental state through yoga for women and men are 4.23 and 3.78 respectively, with statistically significant difference between them. Regression analysis indicates that 77% of the variation in the level of mental state improvement through the practice of yoga is explained by the parameters, namely, reduction in diseases / medical problems due to the practice of yoga, number of years of yoga practice, number of days of yoga practice and the time period of mental state improvement through the practice of yoga. Among these, number of days of yoga practice and time period of mental state improvement through yoga exerts more influence on the level of mental state improvement. There also exists good correlation between various parameters considered in the study. Conclusion: The study establishes the effect of yoga in maintaining good mental state among the

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practitioners. Hence, practice of yoga will ultimately help in reducing various psycho-somatic disorders also due to improvement in the mental state of people

Keywords: Mental state improvement, Yoga

Yoga is considered to be effective in overcoming various physical and mental health problems of people. Yoga is also found to contribute to significant reduction in stress. Gururaja et al (2011) report that for both senior and young people, yoga resulted in decrease of anxiety scores, thus improving their mental health.

Yoga moves people from the sympathetic to the parasympathetic nervous system, through which they enter a more relaxed state of mind. It also helps us to recognize qualities in ourselves we are not aware of, thus helping us to be more mindful (Accessed from www.yogajournal.com/lifestyle on 13 June 2017). Amdt Bussing et al (2012) report that several randomized control trials of relatively high quality indicate the beneficial effects of yoga for mental health.

Objective

1. This study was undertaken to analyze the effect of yoga on mental state of people

METHODOLOGY

The study was carried out through the survey method using an interview schedule among a random sample of 100 yoga practitioners under the Patanjali Yoga Research Centre, Kozhikode, Kerala State, India. The schedule contained questions on how much yoga has contributed to improvement in their "mental state" (which indicates the psychological condition of the mind) through the practice of voga and what period of time (on an average) were they able to experience the improvement in the mental state. Each of these questions was given five point responses, which were scored from 5 to 1. The interview schedule also asked the respondents about the diseases / medical problems which have reduced through the practice of yoga when compared to taking treatment alone (which was scored based on the percentage of reported diseases which have reduced), the number of years of yoga practice and the average number of days of yoga practice per week.

The data has been presented in percentages and scores. Correlation, regression and t test were carried out for data analysis

RESULTS

Table 1 shows the level of improvement in the mental state of people through the practice of yoga. Table 2 shows the time period of improvement in mental state of the yoga practitioners.

Table 1. Level of improvement in the mental state of people through the practice of yoga

| Level of improvement in the | % of people reporting | | |
|-----------------------------|-----------------------|-------|--|
| mental state of people | Men | Women | |
| through practice of yoga | | | |
| Maximum improvement | 20.9 | 45.2 | |
| Good improvement | 41.9 | 34.0 | |
| Slight improvement | 34.9 | 18.9 | |
| Not much improvement | 2.3 | 1.9 | |
| Total | 100 | 100 | |

Table 2. Time period for which improvement in mental state is experienced through the practice of yoga

| Time period for which | % of people reporting | | |
|-----------------------------|-----------------------|-------|--|
| improvement in mental state | Men | Women | |
| is experienced through | | | |
| practice of yoga | | | |
| > 90 % of the time | 16.3 | 15.0 | |
| 75 – 90% of the time | 18.6 | 34.0 | |
| 50 - 75% of the time | 39.5 | 32.1 | |
| 25 - 50% of the time | 20.9 | 18.9 | |
| <25 % of the time | 4.7 | nil | |
| Total | 100 | 100 | |

Table 3 shows the mean score obtained by men and women for their level of improvement in mental state through the practice of yoga. Table 4 gives the mean score of men and women for the time period of improvement in the mental state through practice of yoga

Table 3. Score of men and women for the level of improvement in mental state through the practice of yoga

| Mean score for improvement in the mental state through practice of yoga | | | | |
|---|-----------|--|--|--|
| For Men | For Women | | | |
| 3.78 | 4.23 | | | |
| t = 2.607 (Statistically significant at 0.01) | | | | |

Table 4. Score of men and women for time period of improvement in mental state through the practice of yoga

| Mean score for time period of improvement in the mental state through practice of yoga | | | | |
|--|-----------|--|--|--|
| For Men | For Women | | | |
| 3.21 | 3.44 | | | |
| t test is not statistically significant | | | | |

The Regression equation worked out under this study is as follows:

$$Y = 5.383 + -0.206 X_1 + 0.073 X_2 + -0.663 X_3 + 0.659 X_4$$

 $R^2 = 0.77$ (Significant at p < 0.10)

Where Y is the score for the level of mental state improvement of yoga practitioners, X_1 is the score for reduction in diseases / medical problems through yoga practice, X2 is the number of years of yoga practice, X₃ is the number of days of yoga practice per week and X₄ is the score for time period of improvement in mental state through yoga practice. Table 5 shows the correlation between various parameters considered in this study.

Table 5. Correlation between parameters

| Parameter | Parameter | | | | | |
|---|--|------------------------------|-----------------------------|--|---|--|
| | Correlation value (r) | | | | | |
| | Diseases reduced through yoga (% of total diseases) | Years of yoga practice | Days of yoga practice | Time period of improvement in mental state through yoga | Level of improvement in mental state through yoga | |
| Diseases reduced through yoga (% of total diseases) | 1 | | | | | |
| Years of yoga practice | 0.326 | 1 | | | | |
| Days of yoga practice | 0.179 | 0.718 | 1 | | | |
| Time period of improvement in mental state through yoga | 0.186 | 0.864 | 0.726 | 1 | | |
| Level of improvement in mental state through yoga | 0.057 | 0.585 | 0.065 | 0.617 | 1 | |

DISCUSSION

It can be made out from Table 1 that, while about 45 % of women report maximum improvement in their mental state through the practice of yoga, only about 21% of men report maximum improvement. Most of the men (about 42%) are reporting good improvement in mental state only. It may be noted from Table 1 that, in addition to maximum improvement reported by a good proportion of women, 34% of them also report good improvement in their mental state through practice of yoga. It is also evident from Table 1 that about 35% of male yoga practitioners have experienced only slight improvement in their mental state. However, in the case of women, only about 19% report that they have got slight improvement only

It can be seen from Table 2 that, while 34% of women experience improvement in their mental state for 75 to 90% of time, only 18.6 % of men experience improvement for this period of time. 39.5 % of men report improvement in mental state for 50 to 75% of time only

(Table 2), while, the proportion of women reporting improvement for such a smaller period of time is comparatively less (32.1 %)

The score for the level of improvement in mental state through the practice of yoga for women is 4.23, while for men, it is only 3.78. Also, there exists statistically significant difference between the mean score of women and men (Table 3).

From the above discussion, it may be inferred that, when compared to men, women are able to achieve better improvement in their mental state through the practice of yoga. Women could be more disposed to worries and tension in their day to day lives due to factors such as more responsibilities at home / towards bringing up their children, involvement in routine household activities which may become monotonous and boring after some time, lack of adequate time and space for social interaction with family members / friends, discomfort during menstrual periods etc. All these factors can make women more physically and psychologically disadvantaged than men. Under such situations, mind-body relaxation techniques such as yoga could probably have more effect on women than men

It is evident from Table 4 that there is no statistically significant difference in the mean score of men and women for the time period of improvement in mental state through the practice of yoga. The scores also do not differ much numerically.

The Regression equation indicates that 77% of the variation in the level of mental state improvement through the practice of yoga is explained by the parameters, namely, reduction in diseases / medical problems due to the practice of yoga, number of years of yoga practice, number of days of yoga practice and the time period of mental state improvement through the practice of yoga. Among these, number of days of yoga practice and time period of mental state improvement through yoga exerts more influence on the level of mental state improvement (since the regression coefficients of these two parameters are high)

From Table 5 it can be made out that there exists good correlation between the following parameters:

- i. Years of yoga practice and days of yoga practice
- ii. Years of yoga practice and time period of improvement in mental state through yoga practice
- iii. Years of yoga practice and level of improvement in mental state through yoga practice
- iv. Days of yoga practice and time period of improvement in mental state
- v. Level of improvement in mental state and time period of improvement in mental state through yoga practice

CONCLUSIONS

Practice of yoga is found to exert more influence on women than men with regard to the level of improvement as well as the time period of improvement in their mental state, which indicates the psychological condition of the mind. This could be probably because of the better effect of mind-body relaxation techniques such as yoga on women, who operate under

comparatively more physically and psychologically disadvantaged conditions than men due to various pre-disposing factors. 77% of the variation in the level of mental state improvement through the practice of voga is explained by the parameters, namely, reduction in diseases / medical problems due to the practice of yoga, number of years of yoga practice, number of days of yoga practice and the time period of mental state improvement through the practice of yoga. Among these, number of days of yoga practice and time period of mental state improvement through yoga exerts more influence on the level of mental state improvement. There also exists good correlation between various parameters considered in this study. Practice of yoga will ultimately help in reducing various psycho-somatic disorders also due to improvement in the mental state of people.

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